

# Doi Chaang Coffee: More than Quality is Corporate Social Responsibility

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## Abstract

Doi Chaang Coffee is a brand to represents the world-class coffee brand in terms of the best Arabica coffee which came from the only one origin, Baan Doi Chang village, Chaiang Rai province in Thailand based on 8,000 acres of growing area. The premium quality Arabica coffee under this brand emerged from the managing of the whole processing such as planting, harvesting, containing, packing, distributing, and retailing to maintain the signature and quality of Arabica coffee from upstream to downstream.

Corporate social responsibility (CSR) is the significant issue that Doi Chaang Coffee is concerned more than the quality of coffee. For instance, building the strength and unity in the community among coffee growers of Doi Chaang based on maintaining a higher than market buying price for coffee cherries. Returning the benefits from performing business to improve the livelihood and general well-being among the farmers or coffee growers in Baan Doi Chang village. Encourage the coffee growers in terms of their knowledge of high-quality cultivation. Obviously, Doi Chaang Coffee has been recognized by several national and international organization which related to the corporate social responsibility such as EU Organic farming, USDA ORGANIC, and Fairtrade.

Over 15 years that several customers trusted and recognized this brand not only in the local market but also in the international market. If the success of this business is based on CSR activities rather than quality. What does the factors or forces behind the CSR activities to drive this brand worldwide?

**Keywords:** Doi Chaang Coffee, Corporate Social Responsibility, Arabica Coffee

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## การเผยแพร่ช้าง : เห็นอกว่าคุณภาพคือความรับผิดชอบต่อสังคมของธุรกิจ

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### บทคัดย่อ

การเผยแพร่ช้างเป็นตราสินค้าที่เป็นการสืบสานตราสินค้าของการแฟร์ดับล็อกในเรื่องของการแฟร์ อะราบิกาที่มาจากแหล่งกำเนิดเพียงหนึ่งเดียวที่หมู่บ้านดอยช้างจังหวัดเชียงรายในประเทศไทยที่ใช้พื้นที่เพาะปลูกบนพื้นที่กว่า 8,000 ไร่ คุณภาพกาแฟอะราบิกาการดับพรีเมี่ยมภายใต้ตราสินค้าี้ เกิดจากการจัดการทั้งกระบวนการตั้งแต่ การปลูก การเก็บเกี่ยว การเก็บรักษา การบรรจุ การกระจายสินค้า และการค้าปลีกที่คงความเป็นเอกลักษณ์เฉพาะตัวและคุณภาพของการแฟร์อะราบิกาตั้งแต่ต้นน้ำจนถึงปลายน้ำ

ความรับผิดชอบต่อสังคมของธุรกิจเป็นอีกหนึ่งประเด็นที่สำคัญที่การเผยแพร่ช้างให้ความสำคัญมากกว่าเรื่องคุณภาพของการแฟร์ เช่น การสร้างความเข้มแข็งและความร่วมมือร่วมใจกันในชุมชนของเกษตรกรโดยการรักษาภาระด้วยการซื้อเมล็ดกาแฟให้สูงกว่าราคากลาง ต่อมาเป็นเรื่องของการประกอบธุรกิจเพื่อคืนกำไรให้แก่ชุมชนเพื่อพัฒนาชีวิตและความเป็นอยู่ของเกษตรกร และการส่งเสริมองค์ความรู้ในเรื่องของการปลูกกาแฟคุณภาพระดับสูงให้แก่คนในชุมชน สิ่งที่เห็นได้ชัดเจนในเรื่อง คือเครื่องหมายที่ได้รับการรับรองจากหลากหลายหน่วยงานทั้งในและต่างประเทศ อาทิ มาตรฐานเกษตรอินทรีย์สภาพยูโรป ตราธงคุณภาพที่ส่งเสริมและช่วยเหลือการท่าเกษตรเชิงอินทรีย์ และตราธงของจากองค์กรอิสระสากลที่มุ่งหวังที่ช่วยเหลือให้ผู้ผลิตหรือเกษตรกรได้รับค่าตอบแทนของผลผลิตที่เหมาะสมและเป็นธรรม

กว่า 15 ปีที่ลูกค้าทั้งตลาดในและต่างประเทศมีความเชื่อถือและให้การยอมรับ หากความสำเร็จของธุรกิจที่เกิดขึ้นให้เกิดจากความสำคัญในเรื่องของความรับผิดชอบต่อสังคมของธุรกิจมากกว่าเรื่องของคุณภาพ แล้วอะไรเป็นปัจจัยหรือแรงผลักดันเบื้องหลังในการขับเคลื่อนที่ทำให้ตราสินค้าอยู่ในระดับโลก

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## Current Company Overview

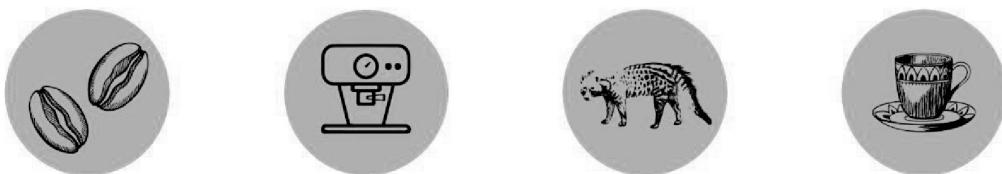
Doi Chaang Coffee is a brand to represent the world-class coffee brand in terms of the best Arabica coffee based on Doi Chaang Coffee Original Co., Ltd. This company involved and performed their business from planting, harvesting, containing, packing, distributing, and retailing to maintain the signature and quality of Arabica coffee from upstream to downstream. The unique concept of this company was presenting the best Arabica coffee which came from the only one origin, Baan Doi Chang village, Chiang Rai province in Thailand based on 8,000 acres of growing area and deliver this value to national and international market over than 15 years. The four founders of this company including 1. Mr. Pikor Phisailert as a person who provided the vision of Doi Chaang Coffee, a co-founder and logo man, 2. Mr. Wicha Phaomyong a president in 2003-2014 and co-founder, 3. Mr. Panachai Phisailert a managing director and co-founder, and 4. Mr. Phitsanuchai Kaewphichai a business advisor and advisory chairman (Figure 1).



Figure 1: Founders of Company (Doi Chaang Coffee, 2020).

The product of Doi Chaang Coffee Original Co., Ltd. is categorized into four categories (Figure 2). Firstly, the coffee bean, this company continuously improved and developed the signature of Doi Chaang Coffee and extended to the international market to deliver the value and serve a variety of products to several tastes of customers based on nine types of product. For instance, Doi Chaang Coffee DRIP-Peaberry Classic, Organic Signature, Espresso Supreme, Premium Classic. Secondly, the coffee machine, this category not only focused on business to business (B2B)

market but also business to customer (B2C) market. Such as Fiorenzato-Lido Energy (2 GR) a commercial machine that contains a net weight equal to 62 kg provided for a coffee marker for business while Perfect Shot-Multi Capsule Coffee Maker contains 3 kg of net weight for coffee makers in the office or end-user. Thirdly, Doi Chaang-Wild Civet Coffee is a premium coffee bean that contains natural enzymes and authentic flavored from natural civets. Lastly, Macadamia nuts and T-shirt of Doi Chaang Coffee includes seven types and seven styles.



**Figure 2:** Four Categories of Product (Doi Chaang, 2020)

Recently, Doi Chaang Coffee extended the business via the franchise system called “Doi Chaang Caffè” to provide their know-how and support franchisees in terms of operating and managing the business under the brand of Doi Chaang Coffee in Thai and overseas market (see Table 1). A franchisor can select the types of Doi Chaang Caffè depends on the location and size of the Caffè such as the coffee venue required at least 30 square meters for the interior area while the stand-alone required at least 60 square meters for the outer area excluded garden and parking lot. 43 Doi Chaang Caffè located in Thailand while 4 companies collaborated as the master franchise such as Doi Chaang Coffee Singapore, Doi Chaang Coffee Malaysia Doi Chaang Coffee South Korea, and Doi Chaang Coffee Canada. Under the brand of Doi Chaang Coffee also contains the four companies to drive this brand includes Doi Chaang Coffee Original Co., Ltd. focused on the full process of coffee, Thai-Ital Tech & Services Co., Ltd. concentrated on coffee machine and production, Doi Chaang Holding Corporation Co., Ltd. responded in the marketing and collaborating in Thailand and oversea market, and Doi Chaang Franchise Management Co., Ltd. supported the franchise system and activities.

Category	Investment Cost in Thailand (Baht)	Investment Cost in Overseas (USD)
Franchise fees	300,000	20,000
Brand deposit costs	100,000	10,000
Design fee 1,370 / SQM.	41,100-137,000	
Coffee Machine, Freezer, cake display, POS	800,000	Technical/ Set Up / Pre-Opening Cost
Selling equipment and initial stock costs	50,000	10,000 USD. / Project (Estimated) Option
Miscellaneous costs	30,000	
Coffee Venue 30-100 SQM. (Start)	400,000-1,500,000	
Stand Alone 60-130 SQM. (Start)	1,000,000-2,000,000	
Royalty Fees (Monthly fee)	-	Small (S) 320 USD. Medium (M) 480 USD Large (L) 680USD
Marketing Fees		3% of net sale
Contract duration	5 years	5 years

\*\* The cost of decoration will depend on design, space, decoration and materials used. (excluding garden)

Note: Doi Chaang Caffè franchise outlets from Doi Chaang Coffee (2020)

## Business Goals

Doi Chaang Coffee purposed the three main business objective as follows:

1. To build strength and unity in the community and among coffee growers of Doi Chaang, by maintaining a higher than market buying price for coffee cherries. Over than 15 years that Doi Chaang Coffee buy coffee cherries from farmers or coffee growers in Baan Doi Chang village higher than 20-30% from market buying price or set the price floor was equal to 18-20 baht per kilogram while the equilibrium price was lower than 18 baht per kilogram.

2. Assisting coffee growers in furthering their knowledge and development in sustainable and high-quality cultivation. “From earth to cup” was the concept that represented the processing to produce the best Arabica in the world of Doi Chaang Coffee has been asked the farmers or coffee growers and local peoples in Baan

Doi Chang village to involve and share the knowledge in every process as well. For instance, the process of washing and density sorting included the process of harvesting the fresh coffee cherries. The process of green bean production, although Doi Chaang Coffee employed the high efficiency to produce the best Arabica in the world but the final stage of grading the coffee bean is based on hand sorting. Doi Chaang Coffee also had the place to provide and share in-depth knowledge of the whole process of Arabica coffee called “Doi Chaang Coffee Academy of Coffee”.

3. Returning benefits from company operations to improve the livelihood of growers through the Doi Chaang Coffee Foundation. The purpose of the foundation to improve the healthcare issue, quality of their lives, and encouraging the preservation of the local culture of external stakeholders especially for Baan Doi Chang village and nearby area. For instance, providing scholarships to students, supporting several activities related to encourage the local culture and community (Figure 3).



**Figure 3:** Doi Chaang Coffee Foundation (Doi Chaang Coffee, 2020)

4. To produce and distribute the highest quality coffee in various markets locally and abroad. Although, Doi Chaang Coffee was operated, managed, and extended via franchise system more than 43 shops in Thailand and overseas market but the source of coffee bean which contains the uniqueness of aroma with balanced acidity and low caffeine came from only one place that perfectly grows condition, Baan Doi Chang village, Chiang Rai province in Thailand based on 8,000 acres of growing area.

## Significant Recognition

The six certifications that Doi Chaang Coffee obtained by national and international organizations as follows:



Figure 4: FAIRTRADE (2020)

1. FAIRTRADE. The FAIRTRADE is the mark that refers to protect a fair or better deal for workers and farmers (Figure 4). Fairtrade Foundation (2020) also reported that in the UK context, 83% of customers trust and decided whether this product was produced from ethical activities and 93% were recognized.



Figure 5: European Commission (2020a)

2. EU Organic farming. European Commission (2020a) mentions the purpose of organic farming of this mark to respond and utilize the natural resources and energy efficiently, maintains the quality of water, soil, biodiversity, and preserving the regional ecological balances to declare the organic product sold in the European Union (EU) (Figure 5).



**Figure 6:** United States Department of Agriculture (2020)

3. United States Department of Agriculture or (USDA) as a logo to represent the three perspective of a standard that business must achieve includes the organic crop production, livestock and poultry standards, and handling standards. For instance, USDA (2020) stated “Land must have had no prohibited substances applied to it for at least 3 years before the harvest of an organic crop” and “Operations must use organic seeds and other planting stock when available” (Figure 6).



**Figure 7:** European Commission (2020b)

4. This logo refers to identify a product as originating in the territory of a particular country, region, or locality where its quality and the reputation or other characteristic was related to the geographical origin (Figure 7).



Figure 8: Department of Intellectual Property (2016)

5. Geographical Indication (GI) refers to the production of a product based on a specific geographical location or origin with the uniqueness of quality or special characteristic which certified by the Department of Intellectual Property (DIP) in Thailand (Figure 8).



Figure 9: Specialty Coffee Association (2020)

6. The purpose of the Specialty Coffee Association (SCA) to create a global coffee community and promote activity-based concept of sustainability of the value chain as well as to share the knowledge of thousands of coffee professionals from producers to baristas around the world (Figure 9).

## What Does the Factors or Forces behind the CSR Activities to Drive this Brand Worldwide?

Over 15 years of Doi Chaang Coffee had proved the quality of product and claimed as one of the world-class coffee brands in terms of the best Arabica coffee which came from the only one origin. Furthermore, this brand is not only recognized and trusted by the national market but also the international market. Although the quality of Arabica coffee of Doi Chaang Coffee was good enough to drive this brand globally, Doi Chaang Coffee has been concerned about several activities of corporate social responsibility (CSR). The appropriate question would be “what do the factors or forces behind the CSR activities drive this brand worldwide rather than why do people around the world recognize the Doi Chaang Coffee? ”.

### Teaching Note

#### 1. Learning objective

- 1.1 Identify the factors or forces behind the CSR activities of Doi Chaang Coffee.
- 1.2 Suggest the further CSR activities of Doi Chaang Coffee.

#### 2. Pedagogy

2.1 Audience of the case: This case study was appropriated to undergraduate and graduate students who educated in the fields of business administration or tourism and hospitality program.

2.2 Prerequisites: Principle of Management, Organization and Management, Strategic Management.

#### 3. Case Analysis

This case analysis is concentrated on the five driving forces behind CSR to identify the five major trends behind the CSR phenomenon to prove the concept of more than quality is corporate social responsibility.

## References

Department of Intellectual Property. (2016). *Thai Geographical Indication*. Retrieved 10, 2020 from <http://www.ipthailand.go.th/th/gi-002.html>

Doi Chaang Coffee. (2020). *Doi Chaang Coffee*. Retrieved May 1, 2020, from <https://doichaangcoffee.co.th/en>

European Commission. (2020a). *Organics at a glance*. Retrieved 4, 2020, from [https://ec.europa.eu/info/food-farming-fisheries/farming/organic-farming/organics-glance\\_en](https://ec.europa.eu/info/food-farming-fisheries/farming/organic-farming/organics-glance_en)

European Commission. (2020b). *Geographical indications*. Retrieved 5, 2020, from [https://ec.europa.eu/europe/business/running-business/intellectual-property/geographical-indications/index\\_en.htm](https://ec.europa.eu/europe/business/running-business/intellectual-property/geographical-indications/index_en.htm)

FAIRTRADE. (2020). *The Core Fairtrade Mark*. Retrieved 7, 2020, from <https://www.fairtrade.org.uk/What-is-Fairtrade/Using-the-FAIRTRADE-Mark>

Specialty Coffee Association. (2020). *Who We Are*. Retrieved 6, 2020, from <https://sca-coffee.org/>

United States Department of Agriculture. (2020). *Organic Standards*. Retrieved 3, 2020, from <https://www.ams.usda.gov/grades-standards/organic-standards>

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4. The case studies will be rigorously reviewed by the editorial board and at least two reviewers, who are knowledgeable in the field, with double-blinded process. A decision by the Editorial board is considered final.
5. The case studies must be written in English.
6. The case studies should follow the tentative guidelines provided. However, different formats and frames for case study are welcome as long as the required contents are available. The case study should consist of:
  - 6.1 The teaching or learning objectives of the case;
  - 6.2 The synopsis of the focal situation or a brief summary of the main point;
  - 6.3 The outline of the case includes
    - an opening section: Explaining tentatively “Who What When Where Why and How” of the case,

- main body of case,
- closing section, and
- an addendum of exhibits: providing support information such as tables, figures, graphs, etc.

6.4 Information requirements: Offering sufficient and relevant information for the case; and

6.5 Citations and sources of information.

7. The case studies must contain the following:

- Title both in English and in Thai
- Names of all authors both in English and in Thai
- Abstract of 150-250 words both in English and in Thai
- Keywords of 3-5 words both in English and in Thai

8. The text must be printed with single space on one-side of A4 paper with margins of 2.5 cm for top and left sides, and 2 cm for bottom and right sides, and not be longer than 25 pages.

9. The title must be printed in *English* in Time New Roman 14 pts, bold, and in *Thai* in Angsana New 20 pts, bold.

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11. References must abide by the APA Style system and must be alphabetically shown. For Thai references, reference list must be added by translating Thai references into English. The details and examples of references are highlighted as follows:

## Book

Name of the author. (Year of publication). *Title*. Number of edition. Place of publication: Publisher.

Davis, Keith. (1967). *Human Relation at Work: The Dynamic of Organization Behavior*. New York: McGraw-Hill

Munkam, S. & Munkam, O. (2001). *The Curriculum Integration and Student-Centered Teaching*. Bangkok: Phapphim.

## Article in Journal

Name of the author. (Year of publication). *Name of article*. Name of journal. Year (month): Page number.

Egloff, G. & Fitzpatrick, A. (1997). Vocationally Oriented Language Learning. *Learning Teaching Journal*. 30 (July): 226: 242.

Thaitakoo, D. (2001). Landscape as residence in a landscape ecological perspective. *Journal of Faculty of Architecture*, Chulalongkorn University, 2, #3.

## Website

Bureau of Environmental Health. (2009). *The hygienic station campaign, preventing an outbreak of a new strain of Influenza A H1N1*. Retrieved August 8, 2009, from [http://203.157.64.26/ewtadmin/ewt/env/ewt\\_news.php?nid=82&filename=index](http://203.157.64.26/ewtadmin/ewt/env/ewt_news.php?nid=82&filename=index)

Lynch, T. (1996). *DS9 trials and tribble-actions review*. Retrieved October 8, 1997, from Psi Phi: Bradley's Science Fiction Club Website <http://www.bradley.edu/campusorg/psiphi/DS9/ep/503r.html>

Mershon, D.H. (1998, November-December). *Star Trek on the brain: Alien minds, human minds*. *American Scientist*, 86, 585. Retrieved July 29, 1999, from Expanded Academic ASAP database.

## Other Sources

Agrawal, A. (2008, March 5-6). *The role of local institutions in adaptation to climate change*. Paper presented at the Social Dimentions of Climate Change, Social Development Department, The World Bank, Washington, DC.

Central Statistics Office of Republic of Botswana. (2008). *Gross domestic product per capita 06/01/1994 to 06/01/2008* [Statistics]. Available from CEIC Data database.

Supakorndej, S. (2003). *The process of recycling bank on Ban Thai Samakee community in Ban Pong, Ratchaburi*. Unpublished Master's thesis, Mahidol University.

Wilfley, D.E. (1989). *Interpersonal analysis of bulimia*. Doctoral dissertation, University of Missouri, Columbia.

## Examples of References

Prachason, Sajin. (2009). *The Development of Food Security Indicators*. Sustainable Agriculture Foundation (Thailand).

Office of Agricultural Economics (2005). *Level of Thailand's Food Insecurity*. Bangkok: Office of Agricultural Economics.

Agricultural Land Reform Office, Maha Sarakham. (2009). *Annual Report*. Maha Sarakham: Apichart Press.

Babatunde, R.O., & Qaim, M. (2010). Impact of Off-Farm Income on Food Security and Nutrition in Nigeria. *Food Policy*, 35(4), 303-311.

Ebel, R.L., & Frisbie, D.A. (1986). *Essentials of Educational Measurement* (4<sup>th</sup> ed.). New Jersey: Prentice-Hall.

Nunnally, J. (1978). *Psychometric theory*. New York: MacGraw-Hill.

Radermacher, H., Feldman, S., & Bird, S. (2010). Food security in older Australians from different cultural backgrounds. *Journal of Nutrition, Education and Behavior*, 42(5), 328-336.

## Examples of Translated Thai References

Prachason, Sajin. (2009). *The Development of Food Security Indicators*. Sustainable Agriculture Foundation (Thailand).

Agricultural Land Reform Office. (2009). *Annual Report*. Maha Sarakham: Apichart Press.

Ministry of Agriculture and Cooperatives. (2005). *The Results of the Thailand Analysis*. Retrieved October 10, 2008, from Website <http://www.asiafivims.net/thailand/fivims/analysis.htm>

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โดยผู้ที่สนใจสามารถสั่งซื้อหรือขอผลิตเอกสารนี้โดยติดต่อที่ สำนักวิจัย สถาบันบัณฑิตพัฒนบริหารศาสตร์ (นิด้า) ได้ที่ หมายเลขโทรศัพท์ 0-2727-3022 หรือ [journal@nida.ac.th](mailto:journal@nida.ac.th), [journal\\_nida@hotmail.com](mailto:journal_nida@hotmail.com) โดยห้ามมิให้เผยแพร่เอกสารนี้หรือเก็บไว้ในรูปแบบอิเล็กทรอนิกส์ ที่จะสามารถส่งผ่านต่อไปยังบุคคลอื่นได้ด้วยวิธีใด ๆ โดยที่ไม่ได้รับอนุญาตจากเจ้าของลิขสิทธิ์