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Analysis of the Dong Ding Oolong Tea Value Chain in Taiwan

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Abstract

Dong Ding Oolong Tea is one of the most important local industries in the Lugu Region of Taiwan. It had been the most iconic of the Taiwan specialty teas until the 'high-mountain' tea replaced its status. A SWOT analysis of the value chain of Dong Ding Oolong Tea is made to evaluate its performance. The main constraints are discovered to be the small scale of tea production, and the yet-to-be-decided balance between responsiveness and differentiation. Despite the small scale of production there are very good information flows between producers and the producer organisations, but the information flow to the downstream actors is quite fragmented. Solutions for overcoming the constraints are suggested.

Key words: Dong Ding Oolong Tea, value chain, Taiwan specialty tea

Introduction

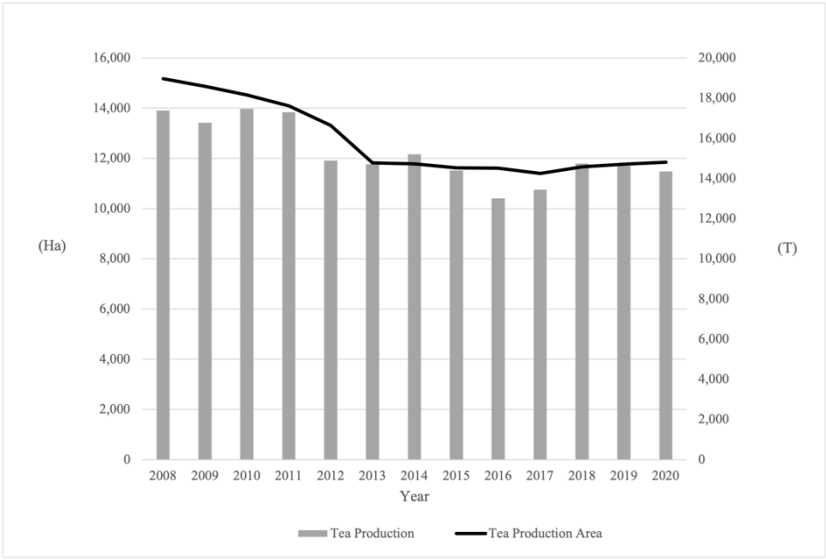
Tea production has been an important industry in Taiwan for many years, but both tea production area and tea production in Taiwan are declining (Figure 1). On the other hand, the annual tea consumption of the Taiwanese population increased nearly six times from 1976 to 2017 to 1.5kg per person, in response to economic growth and changes in consumer preferences. Consequently, there has been a growing requirement for imports of tea (Figure 2). In 2020, Taiwan produced approximately 14,000 tonnes of tea, exported 8,000 tonnes, and imported around 31,000 tonnes. However, in the most recent decade, Taiwan tea exports have been on an upward trend and the total value of exports has now exceeded the total value of imports, indicating Taiwanese tea has a greater unit price compared to imported tea. The average price of imported tea was US$2.5/kg while the export price was US$12.5/kg in 2020 (Customs Administration, 2022). Due to the increased price of both labour and land, Taiwanese tea farmers have transformed their businesses to cultivate specialty tea in order to stay competitive in the market.

The major form of tea consumption in Taiwan is commercial tea or commodity tea which is made into bottled tea sold at retail stores or beverages sold at bubble-tea shops. This form of consumption accounted for 57 per cent of total tea circulation in Taiwan in 2003; however, locally grown Taiwanese tea only accounted for 9 per cent of the tea ingredient used in the commercial tea sector (Huang & Wang & Jian, 2015). Imported tea with a lower cost has dominated this 'small profit and quick return' sector while Taiwanese tea emphasises its special characteristics of quality and flavour.

Due to the different environmental conditions of the tea production regions in Taiwan, there is a wide range of specialty teas, tea tree cultivation methods and levels of fermentation. Lugu Dong Ding Oolong Tea is one of the specialty teas in Taiwan. The production of Dong Ding Oolong Tea makes up

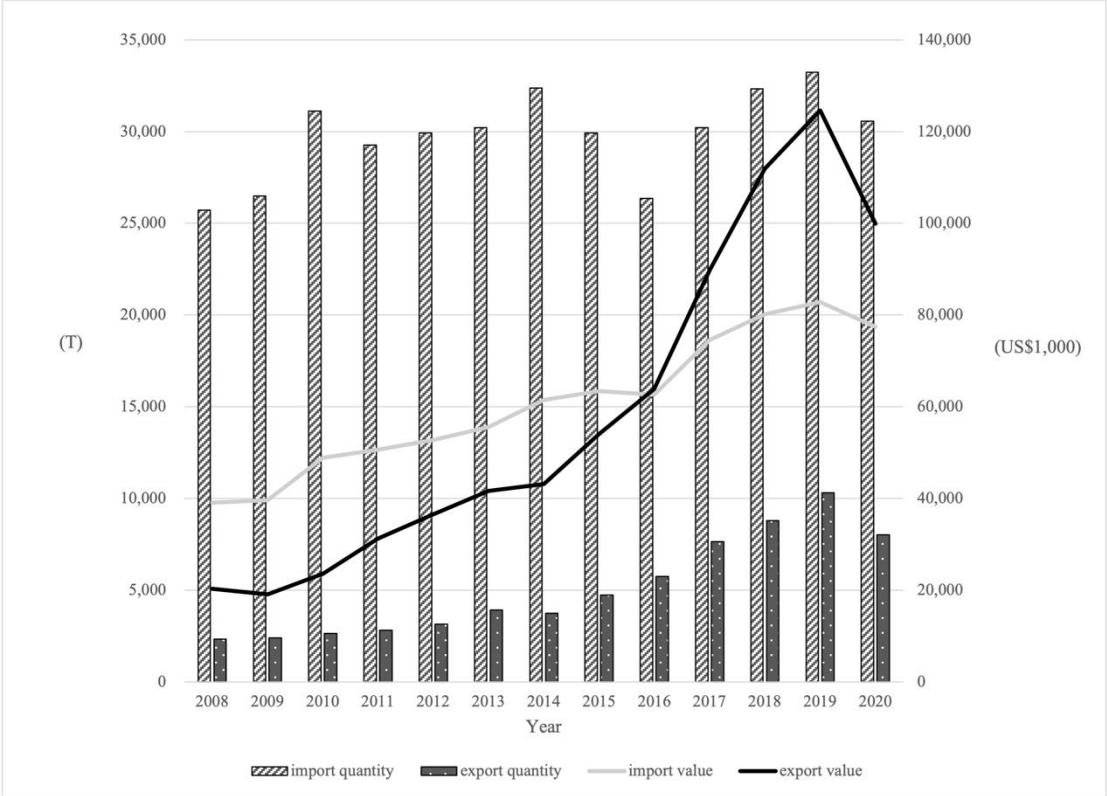
less than 9 per cent of the total production of Taiwan tea. It had been the most representative specialty tea until the rapid growth of 'high-mountain' tea in the 1980s (Yu, 2013). However, it is still very well-known because the origin of this tea, Lugu Township, has been holding the largest tea-quality competition in Taiwan since 1976.

Figure 1. Production and area of tea in Taiwan from 2008 to 2020



Source: Council of Agriculture (n.d.)

Figure 2. Imports and exports of tea in Taiwan from 2008 to 2020



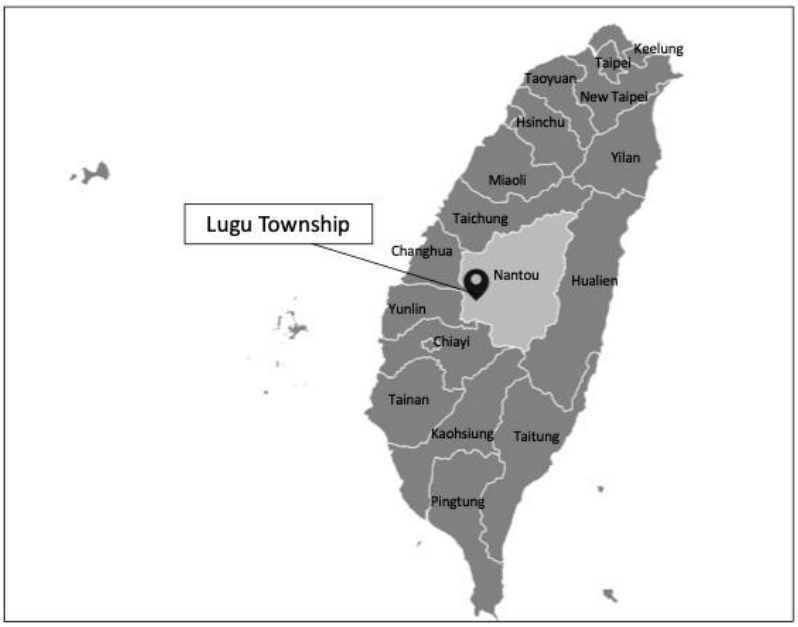
Source: Customs Administration (2022)

The tea competition in Lugu Township has played an important role in the tea industry in that region. Participating in the competition is said to be the indicator of Lugu Township's culture, economics and spirits (Lin, 2004, p.83). Having a competition playing a crucial role in a value chain is rare. Therefore, this study discusses the industry of Dong Ding Oolong tea, particularly in Lugu Township, from the perspective of value chain analysis.

Geography and Climate Conditions

Lugu Township is located in Nantou County which is in the centre of Taiwan (Figure 3).

Figure 3. Location of Lugu Township in Taiwan



Source: Nantou County Government (2015)

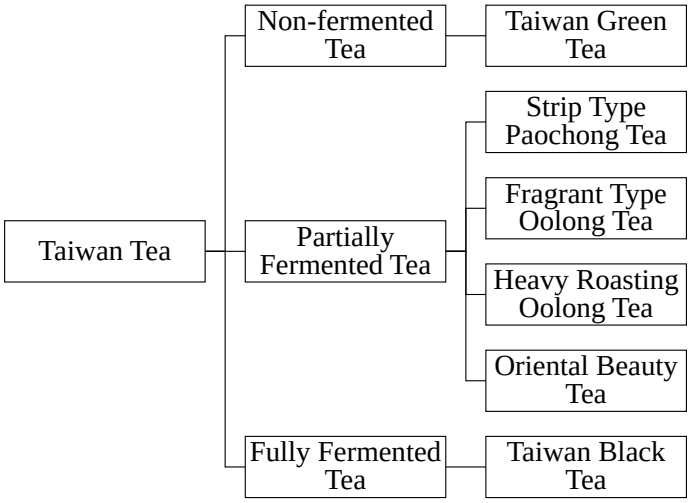
It is between 23.39-23.49 degrees north latitude and 120.42-120.49 degrees west longitude. It has a length of about 9 kms, a width of around 16 kms and a total area of 141.89 square kms. Lugu has a wide range of elevations with the highest point being 2,025 m above sea level while the lowest point is 200 m above sea level (Shieh, 2003). The tea plantations are distributed at an altitude range of 250-750 m in the region (Lin, 2004, p.8).

Being in a sub-tropical latitude, Lugu is warm throughout the year with an average temperature of 23º C. It also possesses red soil which has good drainage and is suitable for planting tea (Liu, 2005). Moreover, it rains and is normally foggy all year round (Shieh, 2003). All these natural conditions facilitate Lugu being an excellent tea production region.

Dong Ding Oolong Tea

According to the Tea Research and Extension Station (TRES) (n.d.), there are six types of Taiwan specialty tea as shown in Figure 4. Dong Ding Oolong tea belongs to the heavy-roasting Oolong tea type which is in the partially fermented tea category. There are many different stories about the origin of the name Dong Ding; however, most of them concur that the tea made in the Lugu region is called Dong Ding Oolong Tea.

Figure 4. The six major specialty tea types in Taiwan



Source: Tea Research and Extension Station (n.d.)

The particular tea cultivar used to make Dong Ding Oolong Tea is called Chin-Shin Oolong. Dong Ding Oolong Tea is famous for its aftertaste in the throat which is mellow and long-lasting. The appearance of its tea leaves is ball-shaped with an oily dark green color. The liquor color is golden and bright while the fragrance is rich with roasting aroma (Tea Research and Extension Station, n.d.). All these features of Dong Ding Oolong Tea are attributed to the unique tea-making process (Figure 5).

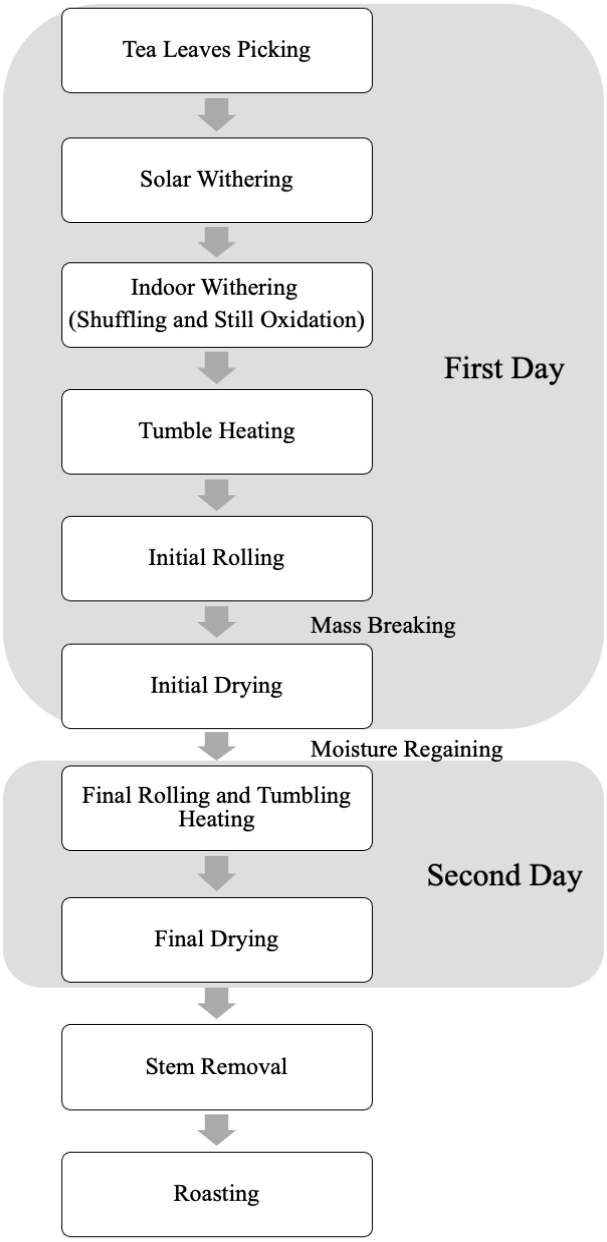
The instruction for each step in the process is as outlined below (Hu & Lin, 2017; Lin, 2004; Lugu Farmer's Association, n.d):

1. Tea leaves picking: When the tea leaves of Chin-Shin Oolong reach their maturity, they will be hand-picked in the form of one tip with two or three leaves. The process of picking and holding the leaves needs to be properly controlled to prevent the leaves from being damaged.
2. Solar withering: Freshly picked leaves are placed under sunlight in order to reduce the water content of the leaves and accelerate cellular oxidation and fermentation in the leaves. The ideal temperature of the leaf surface is between 30º-40º C at this step.
3. Indoor withering: The leaves are moved indoors for further withering. This step includes shuffling and still oxidation. Shuffling the leaves breaks the cells at the leaf edge and enables air to enter the mesophyll cells to enhance the fermentation. Still oxidation allows the advanced chemical reaction which is the key process that creates the unique fragrance and flavor of Dong Ding Oolong Tea.
4. Tumbling heat: The leaves are heated at 180º C to discontinue the fermentation within them. At this step, the water content of the leaves keeps reducing, the texture of the leaves becomes softer and the greenish colour of the leaves will be removed.
5. Initial rolling: Rolling the leaves gently dwindles their size, breaks their structure and squeezes the sap out to their surface. This step keeps the tea essence on the surface of tea leaves and makes them easier to dissolve in the tea liquor.
6. Mass breaking: This step is to break apart the masses of leaves created in the rolling process. The main purpose is to ensure the even tightness of leaves and prevent unexpected fermentation.
7. Initial drying: The leaves are dried until the surface of the leaves is free of moisture while the leaves are still slightly wet.
8. Moisture regaining: After the initial drying, the leaves will rest for a few hours. During this period, the leaves will absorb the moisture in the air and their texture will become softer.
9. Final rolling and tumbling heat: This is the key step when the ball shape and the special flavour of Dong Ding Oolong Tea is formed. The leaves are wrapped tightly in a cloth and rolled with controlled

heat and pressure. The leaves are gradually dehydrated while they are rolled.

10. Final drying: At this step, the leaves are dried until their water content reduces to 3-5 per cent. The heat at this process step will damage the enzymes in the leaves, ceases the fermentation and thus stabilizes the quality of the tea leaves.

Figure 5. The process of making Dong Ding Oolong Tea



Source: Adapted from Lin (2004), Lugu Farmer's Association (n.d.)

The tea leaves processed until the step of final drying are considered products of an 'unrefined state' (Lugu Farmer's Association, n.d.), and they can be transported and sold as such. However, traditional Dong Ding Oolong Tea processing, as well as qualifying for entry into the Dong Ding Oolong Tea competition, requires two more steps:

11. Stem removal: Stems have different shapes and densities from leaves. Therefore, removing stems will unify the quality of the tea and the tea will be processed more evenly at the next step.

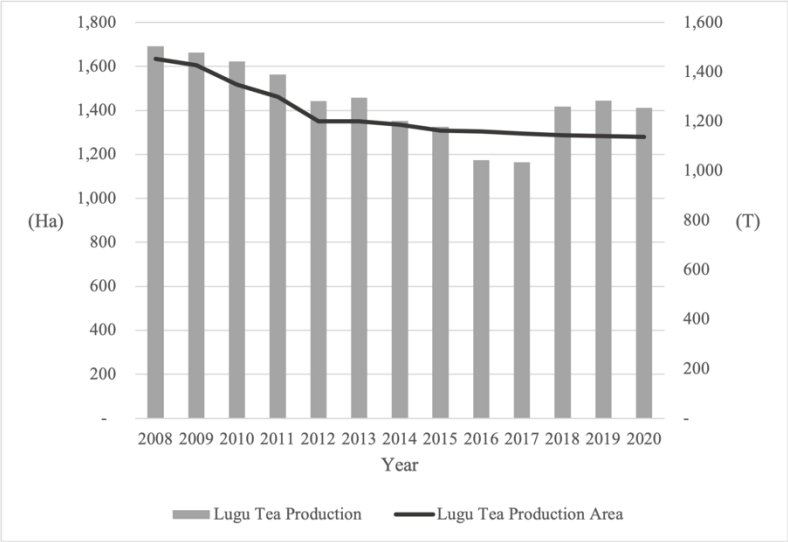
12. Roasting: This is the final step of making authentic Dong Ding Oolong Tea. The leaves without

stems are roasted under 110º-120º C. It is this step that determines the unique roasting fragrance and the flavour of the tea.

The flavour of Dong Ding Oolong Tea has changed a lot throughout the decades. The shift of consumers' preference toward high-mountain tea and the fact that teas with lighter fragrances tend to win in the tea competition have prompted tea farmers to adapt their way of making tea. One of the obvious changes is that the level of fermentation of Dong Ding Oolong Tea has decreased from 40 per cent in 1970 to just 20 per cent in 2013 (Yu, 2013).

A serious issue with Lugu Dong Ding Oolong Tea is that data reveal a decrease in the tea production area of Lugu, although the volume of production has not decreased as much (Figure 6). A lot of the tea farms were transformed to grow other types of crops due to the rise of high-mountain tea (Su, 2019). This is not a good sign in terms of the economic scale and the sustainability of the tea industry in the region.

Figure 6. Production and area of Lugu tea from 2008 to 2020



Source: Public Agri Data Exchange (2008-2020)

Tea Competitions

There are three main tea competitions which take place in the Lugu region. These are held by the Lugu Farmers' Association, the Dong Ding Tea Leaf Production Cooperative Agency, and the Lugu Yonrong and Fenghuang Community, respectively.

The tea competition held by the Lugu Farmers' Association is the most iconic and of the largest scale. The first Lugu Farmer's Association Dong Ding Oolong Tea competition started in 1976 and it is held twice a year for spring and winter terms. The number of contestants has grown substantially over the years from 104 participants in 1976 (Lin, 2004) to 4,976 in the spring term of 2022.

According to the latest implementation measures of the Lugu Farmers' Association 2022 Spring Premium Dong Ding Oolong Tea Exhibition (2022), only members and sponsoring members (joining before 2009) of the Lugu Farmers' Association are qualified to participate in the competition. When contestants hand in their specified 13.4 kg of tea samples, they must enclose the QR code of the Taiwan Agriculture and Food Traceability System. To ensure the food safety and the origin of the tea samples, the Lugu Farmers' Association randomly select some tea samples for pesticide residue testing and for analysing the origin by DNA identification technology and elemental analysis techniques.

During the evaluation, all the tea samples are brewed in a standard way and the assessors grade the samples based on the evaluation criteria which are 50 per cent aroma, 20 per cent appearance, 10 per cent leaf base and 20 per cent tea liquor color.

The gradings in the tea competition correspond to the rankings. There are prize grades and shortlisted grades. The prize grades include the Grand Prize, First Prizes (including the top 10 rankings), Second Prizes and Third Prizes. The number of prize places is approximately 16 per cent of the total number of contestants (First Prize 2 per cent; Second Prize 6 per cent; and Third Prize 8 per cent). Other shortlisted teas may be graded as 'three-plum-flower' (4^{th} grade) and 'two-plum-flower' (5^{th} grade).

After the evaluation, the graded tea is packed with exclusive packaging and a unique seal according to their grades and returned to the contestants while the rest of the samples are returned without being packed.

The Lugu Farmers' Association offers a guaranteed purchase price for tea that wins a prize. For example, recent prices have been NT$3,800 (approximately US$126.6) per 600 grams for the Second Prize, and NT$1,700 (approximately US$56.6) per 600 grams for the two-plum-flower grade. In addition, Lugu Farmers' Association will purchase 800 grams of each of the graded teas at the price of NT$2,200 (approximately US$73.3). The price mechanism is to ensure and stabilise the price of Dong Ding Oolong Tea. The prices of the winning tea normally increase with the rising demand of consumers. It is reported that the Grand Prize of the 2015 winter term was sold at the price of NT$300,000 (approximately US$10,000) per 600 grams (Nantou County Government, 2015).

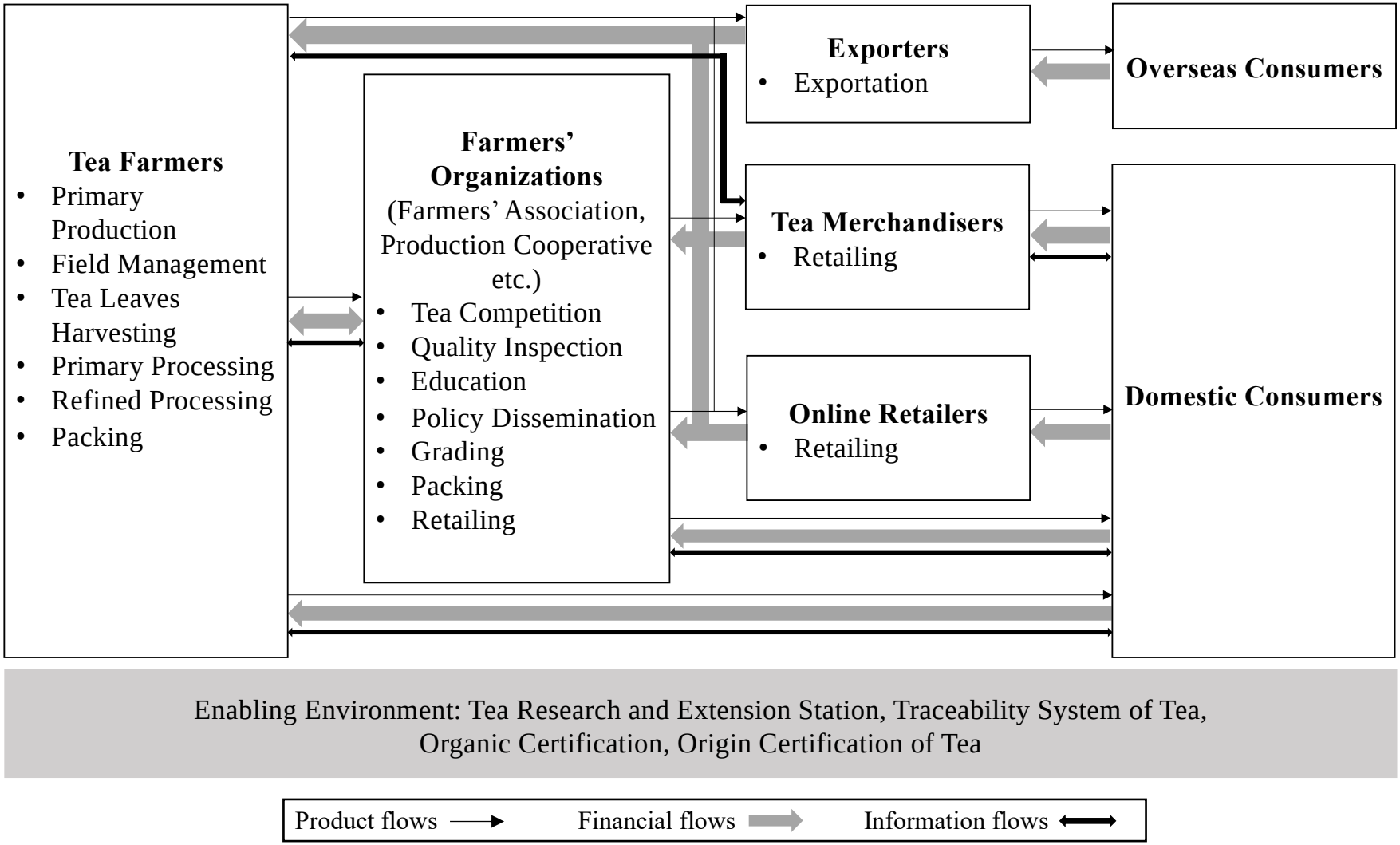
The Value Chain of Dong Ding Oolong Tea

Food and agricultural product value chains have been well defined in the literature (FAO, n.d.; Currey & Niceti, 2021; Chopra & Meindl, 2013). Figure 7 depicts the value chain of Dong Ding Oolong Tea. The actors in the Dong Ding Oolong Tea value chain are the tea farmers, the farmers' organisations, the exporters, the tea merchandisers, the online retailers and the consumers.

The abolition of the regulation 'Rules for the Administration of Taiwan's Tea Industry' in 1982 legalised selling by tea farmers (Chung et al., 2013). Since then, the form of specialty tea processing has changed from large scale industrialisation and standardisation to family operation and delicate production (Su, 2013). Tea farmers have extended their activities from just farm work to nearly all the tasks within the value chain. That is, farmers grow tea, harvest tea, process tea and sell tea on their own. In 2020, the tea production in Lugu was approximately 1,200 tonnes. While the Lugu Farmers' Association purchases about 24 tonnes of local tea annually, most tea is distributed to the downstream retailers or directly to the end consumers by the tea farmers themselves. The relationships between tea farmers and the retailers or the end consumers are mostly built on long-term trust relationships (Liang, 2014).

Farmers' organisations like the Lugu Farmers' Association or the Dong Ding Tea Leaf Production Cooperative Agency have played very important roles in the value chain. One major reason, as mentioned above, is that they hold tea competitions that have a great impact on the value of Dong Ding Oolong Tea. The initial appeal of the tea competitions was to simply enhance the quality of tea by improving the techniques of tea farmers and the management of tea farms. Along with the development of higher quality and the promotion of the tea competition, the packing and grading system has meant that consumers are able to buy tea with more credibility and a quality guarantee.

Figure 7. The value chain of Dong Ding Oolong Tea



The guaranteed purchase price for tea of the Second Prize and the two-plum-flower also sets a market price baseline and thus stabilises the price of Dong Ding Oolong Tea (Lin, 2004). Tea farmers certainly benefit from the tea competitions; however, some have taken advantage of this institution. One of the problems was that imported tea was found in the tea competition in previous years. Fortunately, the Lugu Farmers' Association seem to have solved the issue by adopting DNA identification technology, that analyses the origin of the tea, and by setting rules to make public the violator's name. In the 2022 tea competition spring session, none of the 4,976 contestants was found to break the rule (Hsieh, 2022).

Besides holding tea competitions, the Lugu Farmers' Association undertakes other functions. It educates tea farmers with the knowledge about improving tea quality and food safety; it actively executes the inspection of pesticide residues; and it disseminates policies to tea farmers (Chuang, 2012). Moreover, it grades and packs the tea that wins the prizes and gets shortlisted. It also purchases tea from tea farmers and sells the tea at its own store (30 per cent) or to downstream retailers (online 30 per cent; specialty tea center 30 per cent; or exporter 10 per cent) (Liang, 2014).

The remaining actors in the chain besides the end consumers are the exporters, the tea merchandisers and the online retailers. The roles they play in the chain are mainly as distributors and retailers, which expands the chain to those end consumers that the tea farmers or the farmer organisations are not able to reach directly.

The enabling environment of the value chain includes the Tea and Research Extension Station (TRES), the Traceability System of Tea, Organic Certification bodies and the Origin Certification of Tea system. TRES is a unit affiliated with the Council of Agriculture and it supports the Dong Ding Oolong value chain mainly with its research functions about breeding, farm management, pest control, manufacturing techniques, etc. (TRES, n.d.). TRES is also in charge of the marketing of tea. It rolled out the Taiwan Specialty Teas Flavor Wheels (Figure 8) in 2020 which provides a systemic method for communication within the value chain, especially to the end consumers, and overcomes the barriers of Taiwan Specialty Tea in entering the international market by linking the internationally-shared taste memory to Taiwan Specialty Tea.

The Traceability System of Tea with Good Agriculture Practice (GAP) aims to ensure the quality of tea and to reduce the risk of pesticide residue; at the same time, it decreases the tea production cost through reasonable usage of pesticides and fertilisers (Liu, 2015). Tea registered in the traceability system comes with a QR code on its package. The QR code links to the complete records of tea cultivation. A Traceable Agricultural Product label can be put on products that have been certified by a third certification body (Figure 9). The label provides consumers with a simple and guaranteed way to identify tea of safety and quality.

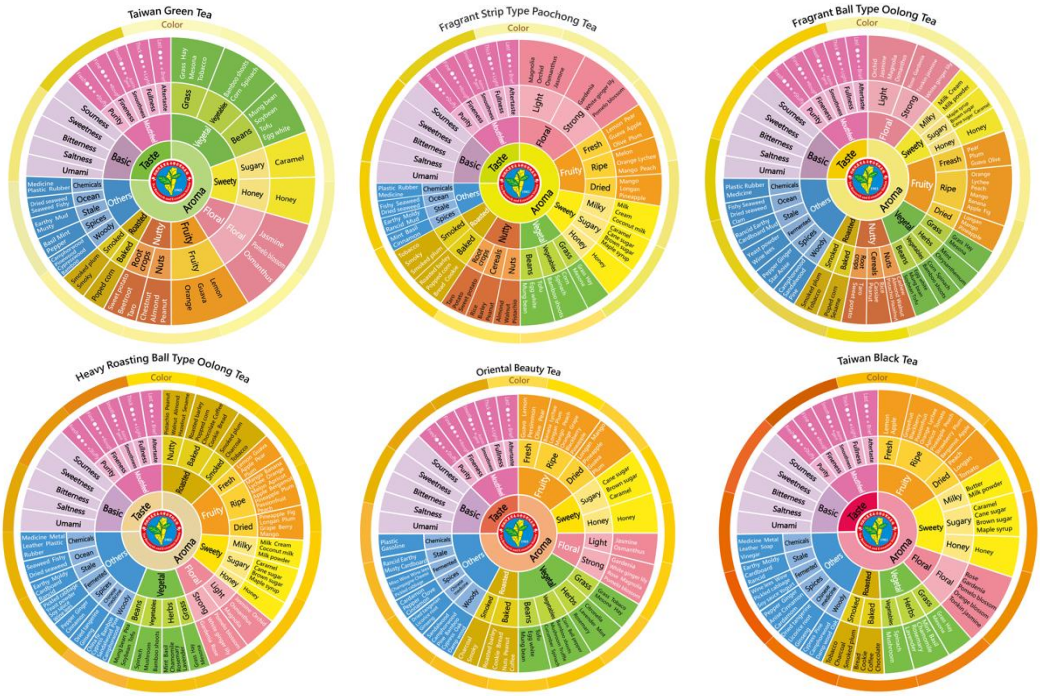
Organic Certification (Figure 10) is issued by certification bodies to the product that has complied with the provisions of the *Organic Agriculture Promotion Act*. Geographic data and production reports are fundamental bases of Organic Certification. The certificate helps consumers to identify organic products from others and assures the quality by verifying the production process. It also reveals the origin of the products.

The Taiwanese government has made registration on the governmental traceability system mandatory since 2023 for tea which has no Traceable Agricultural Product label or Organic Certification. The new regulations are aiming to prevent speculators from claiming lower cost imported tea to be Taiwanese tea and selling it at a higher price.

The Origin Certification of Tea has been developed to protect the tea by the label of its origin. The

label (Figure 11) differentiates tea produced in Lugu from similar products from other places to retain its uniqueness and rights (TRES, n.d.). Motivations for tea farmers to adopt the origin certification are their own consciousness of the land and the demand of tea merchandisers or consumers (Liang, 2014).

Figure 8. Taiwan specialty tea flavour wheels



Source: TRES (n.d.)

Figure 9. The label of the traceability system



Source: TRES (n.d.)

Figure 10. Organic certification label



Source: Organic Center, National I-Lan University (2018)

Figure 11. Origin certification label of Lugu Dong Ding Oolong Tea



Source: TRES (n.d.).

The product flows start from the producers which are the tea farmers and ends at the consumers. In most circumstances, there will be middlemen involved in the chain. Most of the products go through tea merchandisers as they are the main channels of distribution.

The financial flows are consistent with the product flows, but in the opposite direction. Only the financial flows between the tea farmers and Lugu Farmers' Association are bidirectional. The flow toward tea farmers indicates the income of the tea transaction while the flow toward Lugu Farmers' Association is the membership fee as well as the registry fee of the tea competition that keeps the organisation running.

The information flows more easily in relationships that have more face-to-face contact. Sufficient information is circulated between the tea farmers and Lugu Farmers' Association as there are a lot of interdependent activities between them; the tea competition is an obvious example. The other information flows occur in the process of tea tasting before purchasing or during the exhibition after the tea competition. In addition, the enabling environment facilitates the information flows by transparent information that is accessible to the public.

Drivers of the Value Chain

The value chain performance is conditional on the interactions between the six drivers in the chain (Chopra & Meindl, 2013). With limited comparative data, performance is evaluated through a SWOT analysis.

Facilities

Facilities are the places where the actors in the chain actually produce and process the products (Chopra & Meindl, 2013). As Dong Ding Oolong Tea is named after the region and is well known for its origin, the tea farmers and the farmer organisations all operate in the Lugu region. Tea farmers have their tea factories near the tea farm due to the limited time they have for transporting fresh leaves. The distributors and the retailers aim to supply consumers that the producers are not able to reach; therefore, they are located where the consumers have easy access and they are normally in the city. Exporters are mostly situated at the place near the port for further transportation or the place where inventory costs are lower.

Inventory

Tea leaves are processed very soon after they are picked. Inventory of raw materials in the chain is not required. After the new tea of the season is available, the products will be soon transported to where the consumer can purchase them. That is, small volumes of inventory are often held by the actors that deliver the product to the end consumers.

Transportation

Most transportation in the chain is done by the next actor that processes the tea. Tea tasting is the main reason. Tea tasting comes along with tea transactions and it requires the distributors and the retailers to physically visit the tea farmers. When the distributors and the retailers have done their tea tasting, they carry the tea products back to where they sell them on their own. The end consumer has a similar scenario.

Information

Information flows sufficiently between some actors, like the tea farmers and Lugu Farmers' Association. The tea competition has held a special place in the chain in terms of information. It stimulates the information flows within the chain and increases the volume of Dong Ding Oolong Tea purchased. However, there is an information gap between the end consumers and the other actors in the chain. Although the tea competition is well-known, little other information about Dong Ding Oolong flows to the end consumers.

Sourcing

Sourcing is about deciding who will perform the activities within the chain (Chopra & Meindl, 2013). As mentioned, the tea farmers and Lugu Farmers' Association are the major actors that perform almost all the activities along the chain while the others only deal with the distribution and retailing or the transportation tasks.

Pricing

The pricing mechanism is established by the tea competitions such as that run by the Lugu Farmers' Association. A guaranteed price is set for different grades of tea and the market price is formed accordingly.

SWOT Analysis

Strengths

The facilities and inventory show the efficiency of the chain. Tea processing takes place near the tea farm which reduces the cost of deterioration of the raw materials. Tea retailers visit the tea farmers for tea tasting and at the same time transport the products they purchase to where the end consumers are mostly located which reduces the cost of transportation.

Lugu has the most iconic and largest-scaled tea competition in Taiwan and Dong Ding Oolong Tea has its uniqueness that other types of tea cannot perfectly replicate. They are advantages for Dong Ding Oolong as it already has a great reputation. The tea competition symbolises quality and it is a good sign that the Lugu Farmers' Association has been constantly adjusting the regulation of the competition so that it is able to rule out speculators. The current actors and functions in the value chain are able to differentiate Dong Ding Oolong from other competitors.

The Traceability System, Organic Certificate and Origin Certification facilitate the chain with a credible mechanism of quality measurement that is recognisable to the end consumers. These certification mechanisms will become even more comprehensive when new regulations come into force during 2023.

Weaknesses

Tea trees are perennial plants. Therefore, the flexibility of the supply chain is limited due to its natural growing conditions. Some farmers adapted their traditional tea-making procedure to meet the consumers' taste which led to the controversy of losing traditions. Some transferred to different crops and, as a result, the tea production area in Lugu has been in a downtrend.

The value chain seems to perform quite well in many respects, but the main problem in the chain is scale. While most tea farmers are small farmers, the information flows within this group of actors and with the producer organisations are quite good. However, information flows to downstream actors, especially final consumers, are very fragmented. This will result in too many brands emerging in the market. When there is no effective control, the quality of Dong Ding Oolong Tea will be uneven (Chung et al., 2013). As the tea production area in Lugu declines, a shrinking of the whole value chain is also predicted.

Opportunities

Adopting a preorder system may enhance the efficiency of the chain. However, it is only feasible on a trust base when the end consumers believe the tea products will be what they expect. The preorder system will provide farmers with the demand and the destination of their products before harvesting. And thus, they will be able to allocate their resources more efficiently in terms of processing and transportation in advance.

Threats

Consumers in Taiwan have been afraid of food safety issues. The credibility mechanisms of the chain will be easily questioned if there is any scandal related to Dong Ding Oolong Tea. The implementation of the supporting regulations plays a very crucial role because speculators not only benefit from the reputation of Dong Ding Oolong Tea; they are also putting it at risk of deficient quality and food safety issues.

Other threats are the changes in consumers' preferences. High-mountain tea has taken Dong Ding Oolong Tea's preeminent place due to the changing preference of consumers. It is unpredictable what other varieties of tea may emerge in the future and thus it is important for the chain to be responsive in order to keep its competitiveness in the market.

Suggestions for Improvement

Reaching sustainability is the solution to the constraints of scale and the changing consumers' preferences in the value chain of Dong Ding Oolong Tea. In order to achieve sustainability, a number of suggestions can be offered.

Firstly, the adoption of new technologies is needed, especially in farm management and tea processing. Some other tea production areas in Taiwan have introduced the 'smart-agri' management system to their tea farms. The system is established by the government that aims to assist tea farmers in decision-making with climate information, production forecasts, cultivation advice and so on (Taiwan Agricultural Research Institute, n.d.; Lee et al., 2019). The system enables tea farmers to upload their data on their tea farms and a production module is then built accordingly. It will be an ideal platform for tea farmers in Lugu to share their data and collaborate with others and thus develop a kind of 'club good' from which all the actors in the value chain may benefit. Moreover, the system can be a way for the tea farmers to disseminate their specialised tea-growing knowledge to successors which may increase the willingness of young people to enter this industry.

Second, education is essential in terms of sustainability. Elementary schools in the Lugu Region have been delivering tea-related courses to their students. This shall be continued in order to convey the culture of Dong Ding Oolong to the children in this region and make them realise its uniqueness and origin. Hopefully, the youngsters may have a sense of pride in their home town and its Dong Ding

Oolong culture.

The last suggestion is to conduct 'experience promotion'. Experience promotion provides tea tasting and creates a scenario to share the culture (Chang, 2020) of Dong Ding Oolong Tea. It can convey the value of Dong Ding Oolong Tea directly to consumers and allow the differentiation of different grades and locations to be identified. Meanwhile, it can also provide feedback from the consumers. With more educated consumers and more information flow between different actors, the value chain would become more sustainable into the future.

Conclusion

The value chain of Dong Ding Oolong seems to be well-functioning with its mature development. Its responsiveness to the change in consumer preference has brought it to the dilemma of the tradeoff between responsiveness and differentiation. The scale of the value chain is found to be the major constraint to further development. Suggestions, including the adoption of new technologies, the continued education of regional youngsters about tea and the implementation of experience promotion, are made to overcome the perceived value chain constraints and make it more sustainable into the future.

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