



Market Preparedness for Policy Interventions Towards Domestic Sustainable Markets: A Study on Thai Rice Supply Chain

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Abstract

Climate change is a critical global issue affecting environments, economies, and societies. Sustainable development, which meets current needs without compromising future generation emerged in the 1987 Brundtland Report, requiring transformation across sectors, including business, where sustainability must be central. Integrating sustainability into market strategies allows businesses to attract environmentally conscious consumers, differentiate in a competitive market, and contribute to a sustainable future. This paper examines the Thai rice supply chain using Fairtrade as a voluntary sustainability standard, exploring consumer awareness, factors influencing sustainable market practices, and market readiness for sustainable products in the Global South. Based on the research project conducted in Thailand by engaging university students by Fairtrade International, it uses desk and field methods to assess the Thai rice supply chain, Thai rice market, and Thai customers. The study is indicative of the market readiness for sustainable products and recommends that state policies are synonymous with established private sustainable standards to strengthen domestic sustainable market ecosystem.

Keywords: fairtrade; state actor; stakeholders; thai rice; voluntary sustainability standards

1. Introduction

Climate change affects environment, economies, and societies on a global scale and highlights the need for sustainable development as a balanced response. The term sustainability emerged in the Brundtland Report, 1987 named “Our Common Future” defined as development that meets the needs of current generations without compromising the ability of future generations to meet their own needs (WCED, 1987). Sustainability extends beyond environment issues to include social and economic issues (Obermiller, Burke, & Atwood, 2008). In the business world it translates into “triple bottom line” responsibility, which means that evaluating business results should consider not only economic performance but also the environmental and social impacts (Sheth, Sethia, & Srinivas, 2011). Thus, the need for

sustainable marketing practices is crucial to address not only the environmental impact of products and services but also to promote transparency, ethical behavior, and long-term value creation (Belz & Peattie, 2009). Studies show that consumers worldwide are becoming conscious of sustainability, compelling the market to cater to their needs, and thereby shift towards sustainability marketing (Pooja, Shirin, & Sujata, 2022).

In this regard, private or voluntary sustainability standards (VSS) play a vital role in the advancement of sustainable marketing practices across the globe as it integrates activists, environmental NGOs, and business actors. Fairtrade is one such VSS having its network over 100 countries ensuring a minimum price and premium for various products with over 1.9 million Fairtrade-certified farmers (Kemper, et al., 2023). According to United Nations Conference on Trade and Development (UNCTAD), VSS are private standards that require products to meet specific economic, social and environmental metrics. Fairtrade covers the three major components of the sustainability standards which is environment, social and governance. It was also chosen as the private standard because the study supporting this paper was made possible by Fairtrade International.

2. Research Objectives

The research objectives and the corresponding research questions can be summarized as below:

1. To understand the Thai Rice Supply Chain to study the level of awareness of consumers about sustainable sourcing (through Fairtrade) and the factors that influence the sustainable market practices
 - a. To assess consumer awareness of sustainable sourcing practices in the Thai rice supply chain, specifically through Fairtrade certification.
Goal: Measure the percentage of consumers aware of Fairtrade in rice sourcing.
Research Question: What proportion of Thai consumers are aware of Fairtrade-certified rice, and how do they perceive its benefits?
 - b. To identify key factors influencing sustainable buying practices among Thai rice consumers.
Goal: Rank factors such as price sensitivity, environmental consciousness, and product availability based on their influence.
Research Question: What are the primary drivers and barriers for consumers in adopting sustainably sourced rice?
2. To understand the current market preparedness to host sustainable products and the policy requirements to strengthen domestic sustainable market ecosystem in the global south.
 - a. To evaluate market preparedness for sustainably sourced rice in Thailand.
Goal: Assess the availability, pricing, and distribution of sustainably sourced rice in major Thai markets.
Research Question: How ready is the Thai market to integrate and promote sustainably sourced rice?
 - b. To analyze policy requirements for strengthening the domestic sustainable market ecosystem in Thailand.
Goal: Identify gaps in current policy frameworks and propose actionable recommendations.
Research Question: What policy measures are needed to support the sustainable sourcing of rice in Thailand, and how can they align with global sustainability standards?

3. Area and methodology of research

The paper is based on research project conducted in Thailand focusing on the Thai rice market engaging four Master students from Erasmus University, Rotterdam by Fairtrade International and Fairtrade NAPP. Using both desk and field research methods, it explores the social, economic and cultural characteristic of Thai market, consumers and identifies opportunities to boost demand for sustainable products. Data collection was carried out for two categories – Small Producer Organizations (SPOs) and farmers, and consumers in tourist hotspot. Farmers and SPOs were identified through snowball sampling, where Fairtrade certified SPOs were identified first, and farmers within these SPOs were then contacted. For the consumer sample, random sampling was employed, targeting foreign tourists in the tourist hotspots. The study involved three of the eleven Fairtrade-certified rice SPOs and 227 consumers across four regions – Bangkok, Ubon Ratchathani, Hua Hin, and Phuket, ensuring representation across urban and rural areas, rich and poor, older and younger, as well as inclusion of tourists. Data collection involved structured surveys and interviews, focusing on participants personal information, awareness of certified sustainable products (Fairtrade), rice consumption patterns, and interest in Fairtrade. Interviews followed a semi-structured format focusing on sustainability perceptions. Efforts were made to include a diverse sample from urban and rural regions, but limitations such as language barriers and time constraints may have introduced bias. Awareness levels were measured using a Likert scale to evaluate familiarity with Fairtrade and sustainable sourcing. Further demographic factors (age, income, education) were analyzed that correlate with higher awareness levels. Survey data were analyzed using SPSS for descriptive statistics and regression to determine correlations between consumer demographics and awareness of Fairtrade. Interview data were coded thematically using NVivo to identify recurring themes related to policy implications and market perceptions.

The study incorporated secondary data analysis to evaluate the retail, catering, and tourism sectors, as well as a PESTEL (Political, Economic, Sociocultural, Technological, Environmental, and Legal) analysis. Secondary data were sourced from industry reports, academic literature, government publications, and market research databases. This approach provided insights into market dynamics, consumer behavior, and external regulatory influences, enabling a comprehensive understanding of the Thai rice supply chain's preparedness for sustainable sourcing. The data were analyzed to identify trends, challenges, and opportunities in aligning domestic practices with global sustainability standards.

4. Literature Review

Sustainable market practice and consumer awareness is crucial in contributing to addressing environmental challenges. Formulating cohesive environmental policies remains a complex task, in the face of competing national interests, sovereignty, and varying levels of economic development, which creates a tension between national priorities and global environment goals (Falkner, 2013). The global environmental crisis has exposed a deeper crisis in sovereign statehood, as globalization and the shift of power to private actors weaken the nation-state's regulatory authority (Jessica, 1997) (Strange, 1999). As a part of literature review, we examine the *inside-out* and *outside-in* frameworks in shaping foreign policy and how international system play a role in shaping states identity and behavior, respectively (Falkner, 2013).

In the *inside-out* category, there is an increasing influence of domestic factors such as activists, environmental NGOs, state actors and businesses in shaping environmental foreign policy. Since the 1980s, businesses have increasingly embraced their responsibility for environmental protection to establish a global level playing field or to secure a first mover

advantage (Falkner, 2013). In the Thai study, we examine how young people respond to call for sustainable practices and become advocates for sustainable practices based on their awareness. Similarly, state actors may implement regulations, such as pricing mechanisms, to protect environmentally development goals, which may either encourage or deter major businesses from establishing themselves.

The *outside-in* view is rooted in concepts of power and hegemony, where unions of nations, such as the European Union, establishes regulations and other states are compelled to follow. Hegemons may not be able to impose environmental accords but their leadership can help foster international consensus on certain regulatory solutions (Young, 1989). The EU has increasingly been credited with exercising global environment leadership. Its economic power as the world's largest import market has given it clout to push for higher international environmental standards, whether through multilateral negotiations or by setting de facto standards based on the "trading up" mechanism (Vogel, 1997) (Falkner, 2007) (Kelemen & Vogel, 2010). The rise and acceptance of private environmental governance schemes has enabled corporate actors to influence governance decisions, sometimes even replacing state regulations. We will explore how policy interventions using such private sustainability standards can be applied to the Thai rice market and domestic sustainable marketing practices.

5. Understanding the Thai Rice Supply Chain and the factors influencing sustainable marketing practices

Rice is essential to Thai cuisine, each variety having nutritional value. Commonly used rule - the darker and more intact the rice grain, the more nutritious it is. The most popular and well-known rice include, jasmine rice or Hom Mali, glutinous rice or Khao Neow.

5.1. Thai rice supply chain

The Thai rice supply chain is a complex system that involves various stages and stakeholders - Farmers/Cooperation (SPO), Collectors, Millers, Wholesalers, and Retailers (Figure 1). "Paddy rice" market and "mill rice" market refer to types of rice market. Paddy rice or rough rice, is the harvested crop with the outer husk intact, appearing brown and not directly consumable. Mill rice is the processed rice with the husk, bran, and germ layers removed through hulling and polishing, resulting in ready-to-eat rice grains.

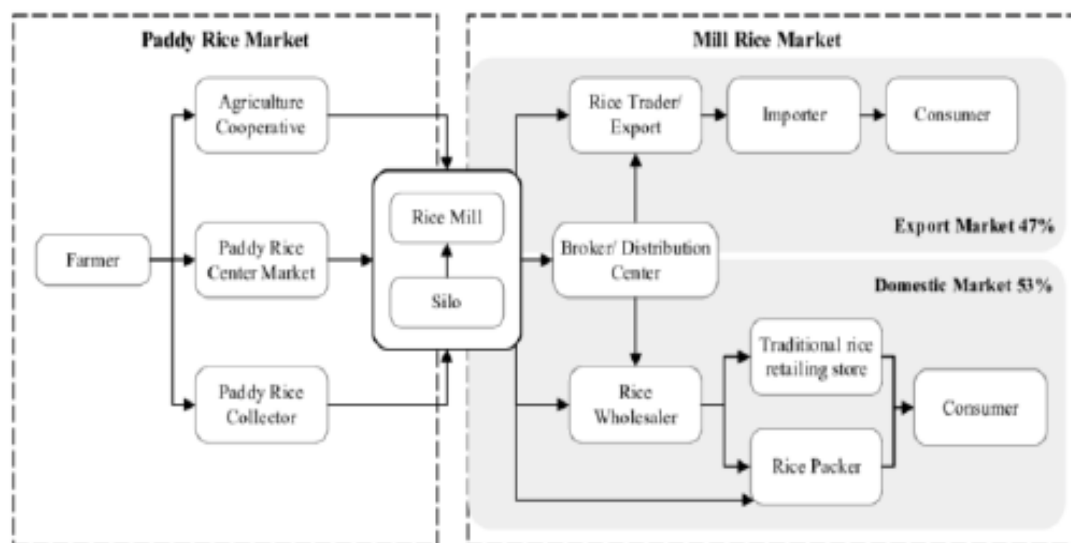


Figure 1: Thai Rice Supply Chain (Tansurat, Suriyankietkaew, Petison, & Nimsai, 2022)

Paddy rice is bought directly from farmers by rice millers or through the Thai governments rice mortgage scheme. Farmers growing rice for personal use often use small or local mills with a capacity of 1-12 tons per 24 hours. Medium to large farms use medium mills (30-60 tons per 24 hours) and large mills (100 tons per 24 hours) to process rice, which is then refined and packed for domestic customers by retailers and for international customers by exporters. Milled rice may also go to distributors who manage storage before distributing it to retailers or exporters, ensuring domestic demand is met through retail channels. The international demand is fulfilled by passing rice through exporters who then sell it to international customers (Thongrattana & Perera, 2010).

5.2. Factors influencing sustainable marketing practices

With Fairtrade as the VSS, we look at the factors that influence sustainable marketing practices. Based on the interviews with the farmers and producer organizations, Fairtrade premium and Fairtrade minimum price were identified as the two most critical factors contributing to their development, as it furthered the promotion of both ethical and financial responsibility within farmers' organizations. Whereas for the consumers, factors such as income, age, gender, geographic segmentation, comes into play.

Farmer organizations: Higher prices, knowledge resources, access to European markets, and fair income through minimum price guarantees and premiums encourage farmers to participate in sustainable markets. Fairtrade also supports ethical standards, decent working conditions, and sustainable farming practices that strengthen supply chains. However, challenges such as complex certification processes, language barriers, high product prices, certification fees, and strict compliance requirements can deter farmers and producer organizations from adopting sustainable marketing practices.

Collectors, Millers & Wholesale: Brand enhancement, business diversification, supply chain stability and more fundamentally, the integration of sustainability at the core of business may factor in adopting sustainable market practices. Whereas, costs, administrative overhead, logistical complexities and compliance demands, requiring careful navigation often deter from moving towards sustainable market practices.

Retail: Accessing a niche market, building positive brand image, ensuring transparency, using Fairtrade certification for marketing and promotional purposes influences sustainable market practices. Retailers can also leverage Fairtrade's extensive network, connecting with other stakeholders, NGOs, and producers, opening doors to knowledge exchange, collaboration. However, higher cost of products which may not cater to price sensitive customers, additional administrative cost and stringent standard may pose as a challenge.

The Thai rice consumer: The total rice consumption in Thailand is one of the highest in the world and accords for 137 kilograms of rice per capita per year on average (Sriangura, 2020). Projections for 2024 indicate an increase in both total domestic rice consumption and average consumption per capita (OECD/FAO, 2020). Potential consumer to buy Fairtrade rice was based on three criteria: *income, age, and gender*. Other factors such as geographical segmentation, available platforms to purchase rice, socioeconomic condition also played a role.

Income: Thailand's economic growth over the past few decades has significantly reduced the national poverty rate from 58 percent in 1990 to 6.8 percent in 2020. Data collected indicated high income groups in Thailand were more likely to recognize Fairtrade brand, focus on sustainability when purchasing goods and also buy rice from supermarkets than low to middle income group. Thai consumers were also willing to pay a maximum of 10% for Fairtrade rice.

As income rises, demand for rice with high quality is expected to grow (Calingacion, et al., 2014). The increase in income is driving consumer demand which leads to a demand for a wide variety of products (Bharadwaj, Chaudhary, Kittikachorn, & Rastogi, 2017).

Age: In Thailand 0-14 years age group represented 16.45% of the population, 15-24 years age group represented 13.02% of the population, 25-54 years constituted the largest group at 45.69%, 55-64 years age group were at 13.01% and 65 years and above represented 11.82% of the population (CIA World Factbook, 2021). Field research observed that Fairtrade brand recognition is uniformly low across all age demographics. Older age groups focus more on sustainability when purchasing groceries (Figure 2), and no significant age-related difference with regards to retail location (Figure 3).

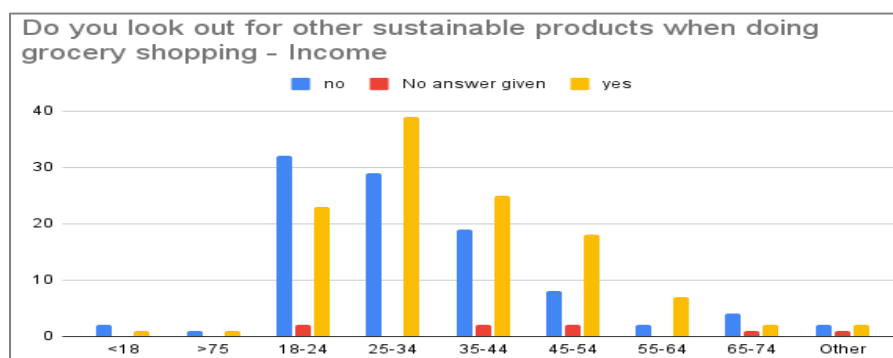


Figure 2: Preference for sustainable product during grocery shopping age wise

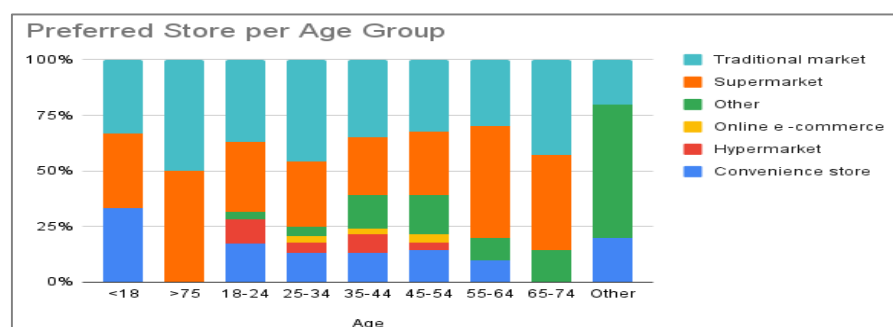


Figure 3: Store preference per age group

Younger consumers were less willing to pay a premium for Fairtrade products due to lower earning power (Figure 4), although there is general willingness across all age groups to buy sustainable products.

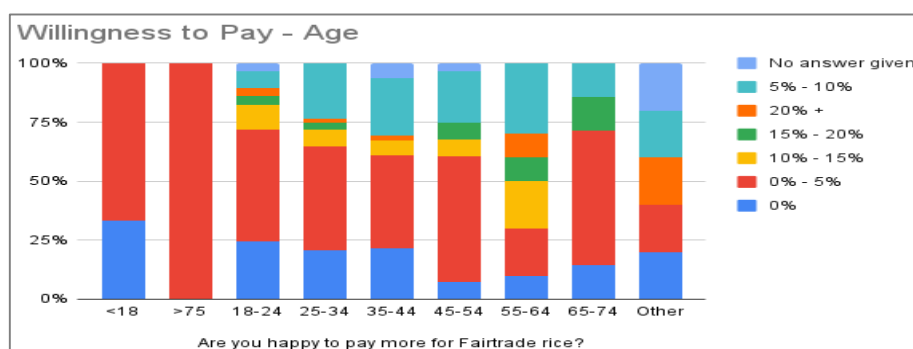


Figure 4: Willingness to pay age wise

Thus, consumers aged 25-54 years in Thailand were more likely to buy environmentally sustainable products, which may be attributed to their prime earning age (Peluso, Pichierri, &

Pino, 2021). However, recent study also highlights the preferences of GenZ and Millennials towards sustainable shopping (Wood, 2022). Most Gen Z shoppers expressed a preference for sustainable brands and were willing to spend up to 10% more on sustainable products (First Insight, 2020).

Gender: Women were more likely than men to recommend Fairtrade products to others (Morrell & Jayawardhena, 2010). Disposable income of women in Thailand relative to Thai men is higher than in other developed Asian economies, leading to the trend that women have substantial buying power (Bharadwaj, Chaudhary, Kittikachorn, & Rastogi, 2017).

Geographical segmentation, socioeconomic landscape and other factors: The socio-economic landscape of Thailand significantly contrasts between urban and rural areas. Regional disparities also exist, with the South and Northeast having nearly double the national poverty rate. Studies show that there is a positive relation between higher education and a preference for organic food products. Consumers who are older, more educated, and more likely to have children in their household are also more likely to purchase organic foods (Sangkumchaliang & Huang, 2012). Consumers owning bicycle or motorcycle were more likely to shop at fresh market than car owners (Kelly, Seubsman, Banwell, Dixon, & Sleigh, 2014). Likewise, over half of respondents shopped rice at modern retail formats, however, this figure dropped to only 38% among rural residents. Northern Thai consumers preferred traditional retail formats for rice, while Bangkok and Central Thailand residents favored modern outlets. Additionally, lower income participants were more likely to buy rice from traditional stores (Kelly, Seubsman, Banwell, Dixon, & Sleigh, 2014). These insights into the buying habits of Thai consumers, highlight the need for a location specific strategy to effectively market and distribute organic rice (Fairtrade rice).

Purchasing decisions factors: Different studies from Asia and Thailand determine that consumers mostly focus on food safety, health or nutritional value, packaging, and origin as most important rice attributes. Recent studies show that when purchasing edible products, Thai consumers are increasingly conscious about their environmental- friendliness. Although this elevated level of awareness has yet to translate into actual purchases. Thai consumers are also willing to pay more for eco-friendly products and services if prices do not exceed 20% of regular prices. These findings indicate that business should create strategies to combine their products' environmentally friendly features with other influential attributes, like packaging, to turn high awareness into actual sales (Deloitte, 2022). The most important purchase drivers for food for the Thai consumer are listed in Figure 5 below.

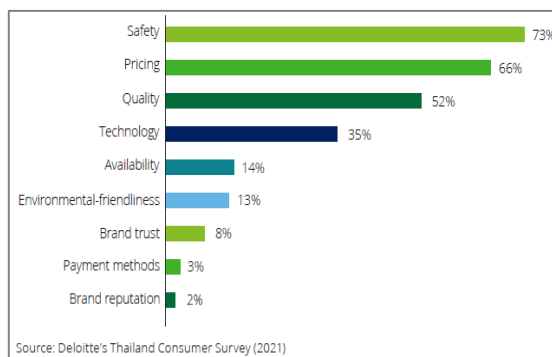


Figure 5: Purchase drivers for food (Deloitte, 2022)

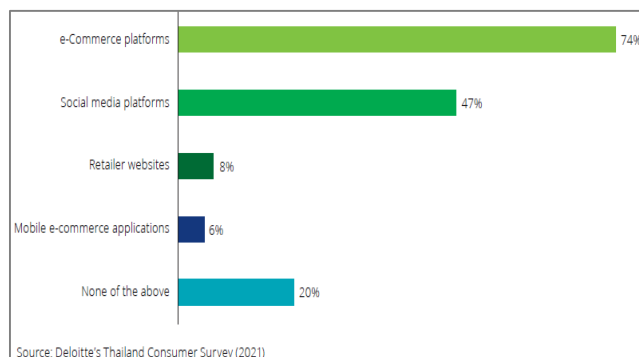


Figure 6: Most preferred online buying channels (Deloitte, 2022)

The acceleration of the 5g roll-out through Thailand opened e-commerce purchasing possibilities for consumers. Most preferred online buying channels are listed in the following Figure 6 above. (Deloitte, 2022). Lastly, shopping behavior shifted away from wet markets to

supermarkets. Currently, 69% of Thai consumers prefer buying food at convenience stores, supermarkets, and shopping malls as indicated in Figure 7 below.

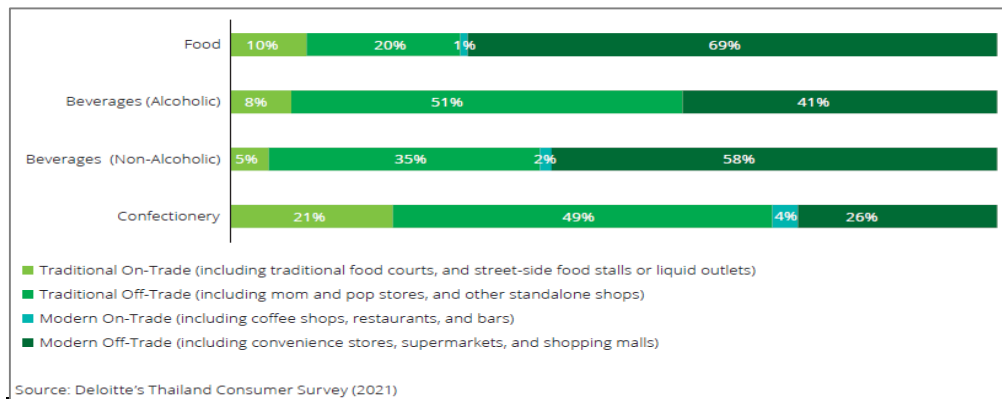


Figure 7: Most preferred buying channels for edible products (Deloitte, 2022)

6. Market preparedness and policy requirements to strengthen domestic sustainable market ecosystem in the global South

In this section, we analyze the potential market – retails, tourism sector, catering sector to understand its preparedness to host sustainable market ecosystem for selling Thai Rice (Fairtrade) and possible policy intervention that may be required to achieve this.

6.1. Retail analysis

Thailand's retail market is diverse and below we discuss in brief, type of customers, demographic and locations these retails targets, and also its current offering of rice.

Convenience Store: It caters to the demand for convenient, inexpensive and time-efficient foods, with food and beverages making up 74% of their products including ready-to-eat meals, fruits, baked goods, snacks, coffee, beverages and confectionaries (Gale, 2021) (Mullis, 2023). To meet the needs of health-conscious and aging customers, convenience stores have expanded their healthy food offerings. Targeting a broad demographic and busy urban dwellers, convenience stores are widespread, especially in urban and semi-urban, and typically offer instant or easy-to-cook rice varieties for quick meals.

Supermarkets: Highly competitive and concentrated in urban centers like Bangkok and major provinces such as Chiang Mai, Phuket, Chonburi, and Nakorn Rachasima. Key players include Central Food Retail, MaxValu, The Mall Group, Villa Market, UFM Fuji, and Foodland. They primarily target middle- to high-income consumers, with high purchasing power, offering premium products and services. Supermarkets now feature dine-in counters and also offers a diverse range of rice options, including local, imported, premium, specialty, organic options, and variety of rice packaging sizes.

Hypermarkets/ Cash & Carry: Retailers targeting small to medium-sized grocery shops, hotels, restaurants, and caterers are expanding beyond Bangkok due to limited space and high land costs. New outlets focus on large provincial cities, with hypermarket operators diversifying to include smaller-scale formats like supermarkets and convenience stores (Mullis, 2023). Hypermarkets and cash & carry stores serve these businesses by offering a wide selection of rice, including local, imported, premium, specialty varieties, and larger quantity packaging.

Online Retailing: Online retail sales in Thailand reached \$51 billion in 2021, up from \$46 billion in 2020, with food and beverage e-commerce sales at \$498 million. The COVID-19

pandemic boosted online grocery purchases due to consumer demand for convenience and speed, though online sales still represent only 10-15% of total revenue (Mullis, 2023). Online retailers target a younger, tech-savvy population across various income levels, offering convenience, a wide range of products, and home delivery.

Traditional Fresh Markets / Small Grocery Shops: Traditional fresh markets and small grocery shops focus on local rice varieties, emphasizing freshness and serving local communities with staple food items.

Selling Fairtrade rice can help retailers differentiate themselves from competitors and enable them to attract consumers who prioritize ethical and sustainable products, demonstrate commitment to CSR highlighting the retailer's dedication to supporting fair trade practices that benefit farmers and communities. On the other hand, challenges relating to cost due to higher price of Fairtrade rice, limited awareness of Fairtrade rice and therefore low demand, complexities involved in the supply chain, competition for profits may deter retailers from selling Fairtrade rice.

6.2. Tourism Analysis

Tourism is one of Thailand's biggest industries, accounting for some 20% of the gross domestic product (GDP). In 2019 Thailand had around 40 million international tourists in a year, although the number fell to 427,869 in 2021, owing to Covid 19 policy (Michael, 2022). The average length of stay of international hotel guests in Thailand was around 12.54 days in 2020. This was an increase compared to the previous year (Statista, 2022). Food is the third most important motivation for choosing a destination (World Tourism Organization, 2017). Thailand has been successful in promoting its national cuisine to tourists (Berno, Dentice, & Wisansing, 2019). The relationship between food and culture drives tourists to seek out local cuisines to explore and appreciate the local culture. Rice is central and represents the essence of Thai life and is deeply intertwined with the country's landscape. Many tourists choose to eat rice when in Thailand and it therefore, is a potential market.

6.3. Catering Analysis

The catering industry in Thailand has grown significantly, with further growth expected as caterers expand their services to meet changing consumer preferences (Ken Research, 2018). The market is attractive for Fairtrade rice, particularly in the hospitality sector, which generates significant revenue through 4-star and 5-star hotels (Ken Research, 2018). In-flight catering and services for schools, universities, and healthcare centers also represent a potential market for Fairtrade rice, aligning with ethical and sustainable practices. The industry is projected to grow at a robust CAGR of 20.7% between 2017 and 2022, driven by the increase in MICE events and marriages (Ken Research, 2018).

6.4. PESTEL analysis

Political Factors: The Thai government since 2012, has implemented schemes like Thai rice pledging scheme, rice income guarantee plan for farmers to sell at higher price and provided subsidies. However, for the 2022-23 harvest, income guarantee has been reduced from \$150 billion to \$81.2 billion, leading to lower earnings for farmers. Farmers may find it more attractive to seek means of securing a more stable income, and organizations like Fairtrade which offer minimum price guarantees may attract farmers and producers.

Economic factors: The rice pledging scheme benefited mainly high to moderate income farmers whereas decrease of budget in rice income guaranteed plan led to less income for farmers. Such factors contributed to dissatisfaction among farmers and could become an

incentive to join organizations like Fairtrade (Sathapatyanon, Kuwornu, Shivakoti, Anal, & Datta, 2018). However, fluctuations in exchange rates can affect the pricing of Fairtrade rice in international markets, potentially impacting its competitiveness (Han & Stoel, 2017).

Sociocultural factors: The level of awareness about Fairtrade principles in different regions can also influence the demand for Fairtrade rice (Han & Stoel, 2017). Over and above awareness, consumers need to comprehend why it is good to purchase Fairtrade products and develop a certain feeling when buying these products (Supanwanich, 2019). In India, for example, this is done by promoting Fairtrade products in schools and universities. As children become familiar with Fairtrade, their parents and families also become aware and the sense of belonging to a community is stimulated.

Technological Factors: The use of digital platforms and e-commerce can help reach a wider consumer base and promote Fairtrade rice. Additionally, advancements in agricultural technology can improve rice production efficiency and quality, enabling farmers to enhance their productivity and competitiveness (Udomkit & Winnett).

Environmental Factors: Farmers experience irregular rainfalls and temperatures because of climate change, leading to flooding and drought in some rice-producing areas. Some areas in the central region have resorted to substituting other crops for the second or third crop of rice to avoid crop failure due to the lack of irrigated water. With access to Fairtrade system, transition to environmentally sustainable farming may be feasible.

Legal Factors: There are certain requirements associated with promoting Fairtrade and its selling points. The most important one to mention is that it is not legal to promote fair wages for employees, as it runs the risk of harming the reputation of competitors, which is illegal. As a result, certain laws have been established in Thailand, which will limit the promotion and comparison of Fairtrade with competitors (OECD Global Forum, 2002).

6.5. Discussions and possible Policy recommendations

The study based on the Thai rice supply chain and the various stakeholders concerned is indicative of the market readiness for sustainable products. One major challenge for markets compliant with voluntary sustainability standards is that supply often exceeds demand. While there is a significant demand in Europe and North America, increasing actual consumption by boosting demand in new markets, especially in emerging economies and producing countries in Asia is necessary. This can be done by making supply chain more sustainable and resilient. For sustainable markets to thrive, policymakers, producers, and businesses require high-quality, transparent data for strategic planning. This includes data on supply and demand, certified crop prices, consumption patterns, and international trends of complaint products (ITC, 2023).

The policy recommendations arise to enhance sustainable practices both from production and consumer perspectives. On the production side, the study reveals that farmers seek higher product prices, which would include higher cost of sustainable production practices. From the consumer perspective, there exists a niche group of consumers who are aware of sustainable purchasing. The inside-out policy diffusion suggests that societal actors, including NGOs and businesses influence domestic policy, while outside-in policy diffusion suggests that because of international societies and sustainability conscious foreign tourists, awareness on sustainable buying and production is already taking place in Thailand. This context presents opportunities for state and private actors to ensure a level playing field and take first mover advantage.

The objective of the policy recommendations is therefore, for the state actor to take ownership of sustainable market ecosystem, by ensuring that state policies are synonymous with established sustainable standards such as those promoted by organizations like Fairtrade. In doing so, the sustainability market size will expand and become conducive for other sustainability standards to enter the market, particularly in global south countries where the lack of comprehensive state policies often hinders the development of a sustainable market. The state actor should also aspire to understand the benefits brought by the sustainable standards and integrate these standards into their own policies and be at the forefront of sustainability movement. Figure 9.1 and 9.2 below illustrates a graph indicative of organic trajectory of policy implementation towards fostering a sustainable market.

- Initial market condition may lack strong state policies, and low consumer awareness. State actors encourage private player to enter market and invest to create awareness, which is followed by collection of data and analysis by the state to transition to sustainable market.
- State actors enter into phased wise transition to sustainable production and marketing practices by also providing waivers and insurance in the initial phase to mitigate exclusion of marginalized producers.
- State policies guarantee sustainability from sourcing to production with focus on minimum price, living wage, premiums, stricter laws on child labor, etc. It also prepares the market to gradually adopt such standards and implement stricter policies with minimal resistance due to prior advocacy by the private players.
- International regulations such as the European Union Deforestation Rights (EUDR), Corporate Sustainability Due Diligence Directive (CSDDD) emerging from the EU parliament have made stricter rules related to environment and human rights (Lont & Bastiaans, n.d.) (Hilwani, 2024) (Soudain & Thur, 2024). The EU by enacting stringent laws and leading sustainability efforts, is a powerful example for other state actor to take lead in sustainability initiatives. The promotion of Fairtrade and similar VSS in Europe, driven by high consumer awareness and demand, exemplifies a successful collaboration between state policies and private sustainable standards.



Figure 9.1: Indicative of the organic trajectory of policy implementation towards a sustainable market

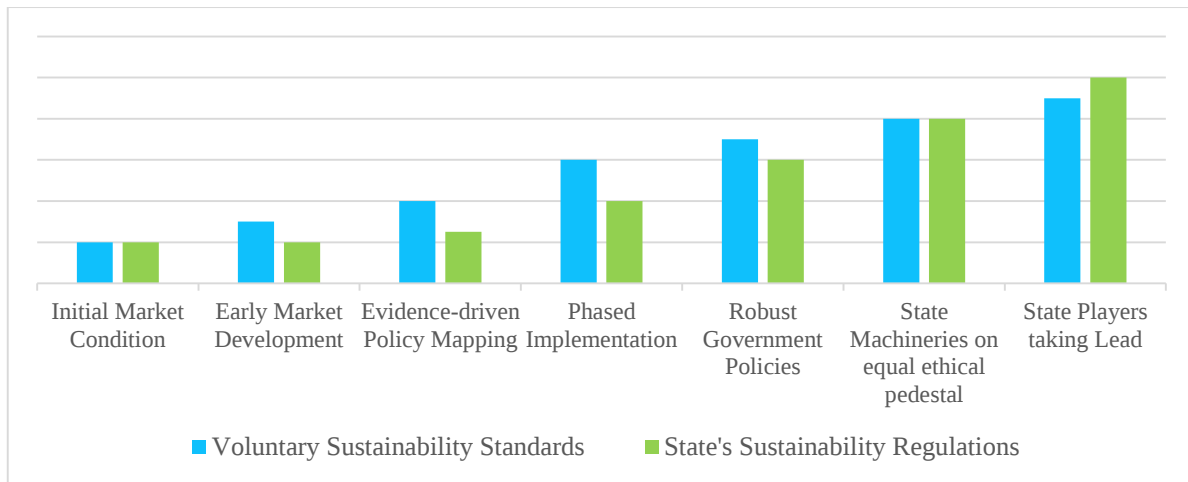


Figure 9.2: Indicative of the organic trajectory of robustness of policy implementation towards a sustainable market

Studies suggest a potential synergy between societal and state actors in shaping international environmental cooperation (Falkner, 2013). In this context, vertical linkages connect domestic environmental politics with state institutions, while the horizontal linkage connects the state actors across national boundaries. Such linkages are driving international solidarity through policy entrepreneurship and creating potential synergies across various networks. For instance, standard setting organizations like International Organization for Standardization (ISO) and public-private partnerships promote sustainable development objectives (Prakash & Potoski, 2006) (Pattberg, Biermann, Chan, & Meert, 2012). Market-based certification standards for environmental and social criteria are encourage firms to improve practices along their supply chains. While some certifications are industry controlled, others involve non-state actors like NGOs or third-party auditors, such as Forest Stewardship Council and Fairtrade certification (Cashore, 2002) (Raynolds, 2000). These certifications significantly influence market players who wish to enter global commodity chains, requiring them to comply with standards and take on certification related cost and risks.

The findings of this study demonstrate how domestic and international dynamics shape the sustainable sourcing of Thai rice, illustrating the interplay between the inside-out and outside-in frameworks.

Inside-Out Dynamics: Consumer Demand and Domestic Influencers

The research revealed that Thai consumers are increasingly aware of the importance of sustainability, especially within urban areas where younger, higher-income consumers are more willing to pay a premium for Fairtrade rice. This indicates that domestic consumer behavior can drive the adoption of sustainable practices, aligning with the inside-out framework.

Empirical Insight: Survey data showed that around 60% of consumers aged 25-54 expressed a willingness to pay up to 10% more for sustainably sourced Fairtrade rice.

Policy Link: To leverage this domestic demand, policymakers should implement consumer awareness campaigns and incentivize retailers to stock Fairtrade products through tax rebates or marketing subsidies.

Outside-In Dynamics: Global Regulatory Pressure and Market Access

Thailand's rice market is increasingly influenced by external forces, particularly the European Union's Corporate Sustainability Due Diligence Directive (CSDDD), which mandates stricter

compliance with environmental and social standards. This exemplifies the outside-in framework, where external regulatory requirements influence domestic market behavior.

Empirical Insight: Interviews with farmers highlighted those benefits arising out of certification with Fairtrade such as living income, wages, access to valuable knowledge, EU markets, thereby enhance livelihood are key drivers for aligning with Fairtrade practices.

Policy Link: Thailand's policymakers should harmonize national sustainability standards with EU regulations to ensure seamless export opportunities and compliance. This could include establishing a national certification body that aligns with global Fairtrade criteria.

Bridging the Frameworks for Holistic Policy Design

Effective policy intervention requires balancing internal demand with external regulatory pressures. This study suggests a phased policy implementation strategy where the state encourages initial private-sector leadership (inside-out), followed by state-led regulation aligning with global standards (outside-in).

Policy Recommendation: The Thai government could pilot a "Sustainable Rice Certification Program" that aligns with both domestic consumer preferences and global trade standards. This approach would create a dual incentive structure: fostering domestic demand while meeting international compliance requirements.

7. Conclusion

The Thai rice supply chain encompasses multiple stakeholders who can be further encouraged to embrace sustainable sourcing through both VSS like Fairtrade, and the state policies focused on sustainability. Studies and various analysis indicate that the Thai market and consumers are ready for a shift towards more sustainable consumption practices. State actors have a significant role and potential to ensure a smooth transition towards a sustainable market in the Global South. The market is in the stage where it requires the state to actively participate in evidence-driven policy mapping and leading in the discourse of sustainability. By implementing robust policies, ensuring the protection of human rights and environmental sustainability, the state can set a precedent for other nations in the region. The top level recommendations would be as follows:

Policymakers: May now highlight the need for policy alignment with Fairtrade standards due to identified gaps in consumer awareness.

Producers: May now emphasize opportunities for expanding sustainable practices based on market demand insights.

This collaborative approach between stakeholders and policymakers will be crucial in creating a resilient, sustainable market that aligns with global sustainability goals, thus furthering the state's objectives of leading and championing human and environment rights. Integrating inside-out and outside-in perspectives ensures that Thai policymakers not only respond to internal market dynamics but also position the country competitively in the global market. By aligning domestic policies with international standards, Thailand can achieve a resilient, sustainable rice supply chain that meets the needs of both local consumers and global stakeholders.

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