

Approach to adapting Bhutan's One Gewog One Product (OGOP) initiative by learning from Thailand's One Tambon One Product (OTOP) model

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ABSTRACT: This study evaluated the implementation of the Sufficiency Economy Philosophy (SEP) in Bhutan and Thailand and recommended adapting successful practices from Thailand's One Tambon One Product (OTOP) model for Bhutan's One Gewog One Product (OGOP) initiative. Data were collected from six Community Learning Centers (CLCs) in Bhutan and three OTOP businesses in Thailand through surveys, interviews, and focus group discussions. Respondents, primarily aged 30-50, showed differences in education levels, with 100% of Thai participants having completed formal education compared to 67% in Bhutan. Income reliance also varied, with only 26.7% of Bhutanese and 47% of Thai respondents depending solely on community products. Statistical analyses revealed that Thai farmers demonstrated a stronger understanding of SEP, which was reflected in higher well-being and economic outcomes (mean = 4.62 in Thailand vs. 3.68 in Bhutan, t -test = 7.612, $P < 0.05$). Bhutanese CLCs saw significant improvements in well-being after the project ($P < 0.05$), with scores increasing from 2.85 to 3.68. Despite these improvements, challenges remained in market access, capacity building, and product development. The study recommended strengthening government policies, enhancing training programs, improving market access, and promoting SEP for sustainable development in Bhutan's OGOP project. Collaboration with private and international partners was also advised for long-term success.

Keywords: Sufficiency Economy Philosophy; OGOP; OTOP; Well-being; Rural Development

Introduction

Bhutan, with a population of approximately 700,000, is geographically divided into 20 districts (Dzongkhags) and 205 sub-districts (Gewogs). Known for its mountainous terrain and 60% forest cover, Bhutan's One Gewog One Product (OGOP) Development Project has been a collaboration between the governments of Thailand and Bhutan, facilitated by the Thailand International Cooperation Agency (TICA) and The Queen's Project Office (QPO) since 2014. The project aimed to develop over 205 agricultural products across 205 Gewogs, with popular items including honey, green tea, rice, and pickled chilies. This initiative aligned with Bhutan's Gross

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National Happiness (GNH) philosophy, which focuses on poverty reduction, rural income enhancement, and self-reliance (Ura et al.2012) It followed Thailand's One Tambon One Product (OTOP) model (Tanwattana, 2012).

Additionally, TICA has supported the OGOP initiative in Bhutan by selecting six communities as model sites to apply the principles of the Sufficiency Economy Philosophy (SEP), initiated by King Bhumibol Adulyadej. SEP emphasizes moderation, self-reliance, and sustainable development, integrating economic, social, and environmental dimensions to enhance resilience in a globalized world and strengthen community empowerment (Office of the Royal Development Projects Board, 2017; Wongkumchai et al., 2020). SEP supports sustainable agriculture by promoting local resource use, adding value to products, and enhancing community self-sufficiency (Chantarasombat & Agsonsua, 2021). Thailand's OTOF program, inspired by SEP, fosters community-based production and economic self-sufficiency by helping local communities develop and market unique products, thereby creating jobs and alleviating poverty (Sura, 2017; Srisawat et al., 2021). This program enhances community well-being through government support in technology, management, and distribution (FAO, 2023). However, the OGOP initiative has faced several challenges, including Bhutan's rugged terrain, the remote locations of Gewogs, limited product availability, insufficient product diversification, concerns over product quality, and a lack of expertise in community business management. Therefore, this study aimed to analyze the challenges associated with the implementation of the OGOP initiative in Bhutan and recommend strategies for its improvement by drawing on lessons learned from Thailand's OTOF model, with a particular focus on the application of SEP principles.

Materials and Methods

Population and Sample

The study targeted six Community Learning Centers (CLCs) from six sub-districts in Bhutan: 1) Drakten-Trongsa, 2) Uesu-Haa, 3) Gangtey-Wangdue, 4) Khoma-Lhuentse, 5) Yangtse-Trashi Yangtse, and 6) Patshaling-Tsirang. These CLCs were supported by the Thailand International Cooperation Agency (TICA) and the OGOP organization, with a focus on sustainable development through the application of the Sufficiency Economy Philosophy (SEP) in alignment with Bhutan's Gross National Happiness (GNH) concept. Data were collected from 35 participants, including five leading members from each CLC (30 in total) and five key officials from the OGOP organization.

In Thailand, the study focused on the Community Development Department (CDD) office and three OTOF Community Business Groups in Chiang Mai: 1) Ga Thong-Mae Taeng, 2) Ban Khaew-Saraphi, and 3) Pha Pho Honey-San Kamphaeng. These groups were selected based on their 3- to 4-star ratings, recognition of SEP principles, and relevance of the products to Bhutan's OGOP. Data were collected from 35 participants, including selected members from the groups (32 in total) including leaders, active members and three key officials from the CDD, using purposive sampling.

Tools and Data Collection

In Bhutan, data were collected through Google Forms sent to representatives of the six CLCs and the OGOP organization to gather independent information and identify key areas for improvement and challenges faced by community members. Interviews with key informants, including the director and officers of the Queen

Project Offices (QPO), agricultural officers, and group representatives, provided detailed insights into farmers' difficulties, underlying causes, and potential solutions. Additionally, a focus group discussion with 10 representative participants, facilitated by an OGOP and district officer, were conducted to further explore challenges, root causes, and solutions through open-ended questions.

In Thailand, questionnaires were distributed to members of the Community Business Group and key informants from the Community Development Department (CDD) office and the OTOP initiative in Chiang Mai to gather individual insights into the project. Face-to-face interviews with CDD officers and group representatives were also conducted to explore the challenges faced by farmers, underlying causes, and potential solutions. Additionally, two focus group discussions with eight representative participants were conducted to allow for an in-depth exploration of issues and the sharing of diverse opinions and experiences. The research received approval from the Institutional Review Board of Chiang Mai Rajabhat University, Thailand, under an Exemption Review process, in accordance with both international ethical standards and relevant national laws and regulations. The certificate number issued was IRBCMRU2024/214.30.05.

Data Analysis

Descriptive statistics, including frequencies, percentages, means, and standard deviations, were employed to analyze the majority of the data. Variable were measured using a Likert scale, with scores ranging from 1 to 5. Additionally, content analysis, t-test, and ANOVA were applied to provide a more comprehensive understanding of the results.

Results

Demographic Characteristics of Community Learning Centers (CLCs) of OGOP in Bhutan and Community Business of OTOP in Thailand

The demographic data collected from the six CLCs involved in the OGOP project in Bhutan and the three community businesses under OTOP in Thailand revealed that the majority of members were educated farmers, emphasizing the agricultural focus of these community enterprises. Notably, the majority of respondents in both countries were women, highlighting the critical role of women in shaping and managing community-driven agricultural businesses (**Table 1**).

Table 1 Demographic Characteristics of Respondents of Six Community Learning Centers (CLCs) in Bhutan and Thailand

Variables	6 CLCs, Bhutan (N=30)		3 CB, Thailand (N=32)	
Gender	Frequency	(%)	Frequency	(%)
Male	4	13.0	8	25.0
Female	26	87.0	24	75.0
Age				
Under 29 years old	3	10.0	0	0.0
30-50 years old	26	86.7	26	81.3
60 years and above	1	3.3	6	18.8
Education Background				
None	10	33.0	0	0.0
Educated (Primary-High School)	18	60.0	21	66.0
Bachelor's Degree and Higher	2	7.0	11	34.0
OGOP as Main Source of Income				
Yes	8	26.7	15	47.0
No	22	73.3	17	53.0
Size of Community Business				
Small	30	100.0	31	97.0
Medium	0	0.0	1	3.0
Types of Products Available				
Food	20	67.0	21	66.0
Beverages	8	27.0	3	9.0
Handicrafts	5	17.0	1	3.0
Textiles	5	17.0	0	0.0
Herbs	7	23.0	16	50.0

Table 1 summarized the demographic characteristics of participants in Bhutan's OGOP and Thailand's OTOP initiatives. Both datasets revealed a significant gender imbalance, with 87.0% of Bhutanese respondents and 75.0% of Thai respondents being female, underscoring the dominant role of women in community-based projects, particularly in food processing and local business activities. The majority of respondents were aged between 30 and 50 years, with 86.7% in OGOP and 81.3% in OTOP. In Thailand, all respondents had completed formal education, compared to only 67.0% in Bhutan. This difference suggests that formal education levels among farmers were generally higher in Thailand, potentially reflecting variations in educational access and opportunities between the two countries. In terms of income reliance, both countries showed varied patterns. In Bhutan, only 26.7% of communities depended solely on OGOP projects for income, while in Thailand, 47.0% of respondents indicated that community products were not their primary source of income. In Bhutan, all CLCs were small

community groups with 20 to 34 members, and food production was the main activity for 67.0% of respondents. Similarly, in Thailand, 97.0% of respondents indicated that OTOP CLCs were small community businesses, with 66.0% focused on food products. This reflects the strategic use of local resources, with food production dominating community enterprises in both countries.

These findings suggested that community production in both countries was largely driven by women's involvement. However, there were notable differences in education levels and economic reliance, with Thai participants having slightly more diversified income sources than their Bhutanese counterparts. Although both OTOP and OGOP initiatives provided valuable support, they were not yet sufficient to fully sustain the livelihoods of the majority of participants.

Understanding the Implementation of Sufficiency Economy Philosophy (SEP) in Both Countries and Lessons Learned from Thailand' OTOP

Table 2 presented the level of understanding and implementation of the Sufficiency Economy Philosophy (SEP) within the community groups. The results revealed that farmers in Thailand demonstrated the highest level of understanding of SEP concepts and were actively implementing these principles in their community businesses. In contrast, although Bhutanese farmers also showed a strong grasp of SEP, their overall understanding was slightly lower than that of their Thai counterparts (mean=3.68 \pm 0.45 in Bhutan and mean=4.62 \pm SD=0.51 in Thailand; t-test=7.612, P<0.05).

Table 2 Comparison of Understanding Sufficiency Economy Philosophy (SEP) concept between OGOP in Bhutan and OTOP in Thailand

Name of CLCs		OGOP, Bhutan			OTOP, Thailand		
Q. No	Variables	Mean	S. D	Meaning	Mean	S. D	Meaning
1	Have a good understanding of the Sufficiency Economy Philosophy	3.03	0.67	Moderate	4.38	0.71	Highest
2	His Majesty King Bhumibol Adulyadej introduced the SEP concept to guide a sustainable way of life	3.53	0.63	Good	4.75	0.51	Highest
3	SEP stands for Sufficiency Economy Philosophy	3.90	0.76	Good	4.53	0.62	Highest
4	SEP means moderation, reasonableness, and self-immunity, using knowledge, virtue, and ethics as guidelines in living	3.73	0.69	Good	4.69	0.54	Highest
5	Applying the SEP concept can lead to sustainable farming practices	3.93	0.74	Good	4.66	0.55	Highest
6	SEP can help individual cope with economic uncertainties	3.90	0.71	Good	4.56	0.67	Highest
7	SEP can improve the overall well-being of rural people	3.83	0.75	Good	4.69	0.59	Highest
8	Farmers are willing to adopt SEP principles in their community groups	3.43	0.57	Good	4.69	0.59	Highest
9	SEP can minimize financial risks in various activities	3.67	0.55	Good	4.59	0.67	Highest
10	SEP is a way to balance economic growth with social and environmental responsibility	3.77	0.63	Good	4.63	0.61	Highest
11	SEP promotes the reduction of unnecessary or luxurious expenses	3.70	0.65	Good	4.63	0.61	Highest
OVERALL (t-test=7.612, P<0.05)		3.68	0.46	Good	4.62	0.51	Highest

Note: 1.00-1.80= Very Poor understanding, 1.81-2.60= Poor understanding, 2.61-3.40=Moderate Understanding, 3.41-4.20= Good Understanding, 4.21-5.00= Highest Understanding

Perception of Quality of Community Well-being Before and After Implementation of the Project in Both Countries and the Sufficiency Economy Philosophy (SEP)

The implementation of the OGOP and OTOP initiatives led to significant improvements in the perception of the well-being of communities across social, economic, environmental, cultural, and health dimensions. In Bhutan, six Community Learning Centers (CLCs) experienced an increase significantly ($P < 0.05$) in average well-being scores from moderate level ($\bar{x} = 2.85$, $SD = 0.55$) to higher level ($\bar{x} = 3.68$, $SD = 0.38$), with a t-test value of

7.775. Before the project, challenges such as subsistence farming, low crop yields, and limited knowledge of product development were prevalent. After the implementation, improvements were observed in living standards, women's empowerment, youth involvement, environmental awareness, and economic satisfaction. However, continued support remained necessary to ensure long-term sustainability.

Table 3 Quality of Community Well-being Before and After Implementation of the Project in Both Countries

Q. No	Variables	Before		After		t-test	P-Value
		Mean	S. D	Mean	S. D		
6 CLCs of OGOP, Bhutan							
1	Social Condition	2.90	0.45	3.78	0.26	10.087	P<0.01
2	Economic Condition	2.77	0.66	3.59	0.43	6.468	P<0.01
3	Environmental Condition	2.84	0.80	3.56	0.60	3.968	P<0.01
4	Cultural Condition	2.73	0.80	3.73	0.59	6.049	P<0.01
5	Health Condition	2.99	0.58	3.73	0.55	5.634	P<0.01
	Overall	2.85	0.55	3.68	0.38	7.775	P<0.01
3 CB of OTOP, Thailand							
1	Social Condition	3.31	0.38	4.07	0.43	7.801	P<0.01
2	Economic Condition	3.10	0.59	3.92	0.51	6.480	P<0.01
3	Environment Condition	3.21	0.39	4.04	0.53	6.906	P<0.01
4	Cultural Condition	3.04	0.60	4.00	0.47	7.837	P<0.01
5	Health Condition	3.23	0.38	4.02	0.42	8.165	P<0.01
	Overall	3.20	0.42	4.01	0.43	8.323	P<0.01

In Thailand, the three community businesses operating under the OTOP initiative and the Sufficiency Economy Philosophy (SEP) demonstrated a significant increase in well-being scores ($P < 0.05$), rising from moderate level ($\bar{x} = 3.20$, $SD = 0.42$) to higher level ($\bar{x} = 4.01$, $SD = 0.43$), with a t-test value of 8.323. Therefore, in both countries, the initiatives improved well-being. However, Thailand's approach, underpinned by 20 years of SEP integration, emphasized sustainability and ethical development. In contrast, Bhutan's OGOP, having implemented the initiative for less than nine years, continues to require ongoing support for long-term success.

The results of the questionnaire, interviews, and focus groups with farmers and relevant officials involved in the OGOP project incorporated insights from Thailand's OTOP project, summarizing them into six adaptation strategies: Government Policy Support, Capacity-Building and Training Programs, Market Access, Promotion of SEP for Sustainable Development, Government-Private Sector Collaboration, and International Support and Partnerships. These strategies guided the effort to overcome the challenges faced by OGOP farmers and enhanced the SEP in developing OGOP to achieve the goals of the SDGs and GNH, as summarized in **Table 4**.

Table 4 Summary of the focus group results on the challenges and adaptation strategies of the OGOP project based on lessons learned from the OTOP project

OGOP project challenge	Adaptation strategy learned from the OTOP project
Government Policy Support	The presence of sub-agencies for the OGOP project in the Dzongkhags/ Gewogs to facilitate fieldwork and coordinate with the central QPO.
Capacity-Building and Training Programs	Bhutan's OGOP would benefit from enhancing its capacity-building efforts to equip farmers with the necessary skills and knowledge to improve product quality and marketability through community learning centers like OTOP schools.
Market Access	Improve market access by adopting similar market access strategies, ensuring that certified products meet high standards and receive better promotion, helping farmers tap into both local and international markets. The systems such as the OTOP "Star Rating", 4P marketing strategy and digital marketing.
Promotion of SEP for Sustainable Development	To enhance SEP in Bhutan by fostering financial stability, community well-being, and environmental stewardship, which are critical for long-term success in rural economies.
Government-Private Sector Collaboration	Building connections with government agencies and private sectors is needed to enhance the rural communities to create more synergies, resources, and opportunities for local producers.
International Support and Partnerships	To secure the long-term success term for OGOP, International support and collaboration are needed to enhance expertise, funding, and knowledge sharing, driving growth and addressing broader global challenges.

Discussions

The study revealed that participants in Bhutan's Community Learning Centers (CLCs) developed a strong understanding of the Sufficiency Economy Philosophy (SEP), which was introduced through training sessions by officers from the Queen's Project Office (QPO), experts from the Thailand International Cooperation Agency (TICA), and volunteers. The sessions focused on product development, diversification, marketing, and natural fertilizer production (CMRU, 2023). The SEP, closely aligned with Bhutan's Gross National Happiness (GNH) philosophy, aimed to improve rural livelihoods through community support. In Thailand, participants similarly demonstrated a solid grasp of SEP principles, applying them to business practices that fostered sustainable development, financial stability, and community well-being. SEP has been a key driver in shaping rural economies, especially in agriculture, by balancing economic growth with environmental stewardship and promoting resilience and self-reliance (Wongkumchai et al., 2020). At all levels, SEP has promoted cooperation, risk management, and resilience, thereby fostering equity and fairness (Kansuntisukmongkol, 2016). It also served as a moral guide, improving livelihoods, boosting food production, and protecting the environment (Naipinit et al., 2013). SEP's contribution to Thailand's National Economic and Social Development Plan, particularly in supporting Sustainable Development

Goal 1 (SDG-1), further underscored its role in promoting self-reliance and sustainable progress (Barua and Tejativadhana, 2019). Similarly, Bhutan's OGOP project was assessed using GNH, SDGs, and SEP frameworks, with a focus on achieving social, economic, and environmental balance. The project has led to improvements in rural livelihoods, poverty reduction, and cultural preservation, with significant progress across five key dimensions: social, economic, environment, culture, and health (QPO, 2018, 2022; Penjor, 2024).

Adapting Bhutan's One Gewog One Product (OGOP) Initiative Based on Lessons Learned from Thailand's One Tambon One Product (OTOP)

The positive outcomes of Thailand's OTOP project, wherein significant improvements in farmers' well-being were achieved through the effective adoption of the Sufficiency Economy Philosophy (SEP), provided valuable insights for addressing the gaps and areas of improvement in Bhutan's OGOP initiative. To ensure sustainable progress, several key areas for enhancements have been identified.

Insufficient Government Policy Support

While Thailand's OTOP initiative thrived under strong government leadership, coordinated by the National OTOP Board, Bhutan's OGOP project lacked comparable levels of policy support. The OTOP program successfully engaged multiple public institutions to offer capacity-building, marketing, and social capital support to local communities (FAO, 2021). Similarly, Malaysia's One District One Industry (ODOI) policy, inspired by Japan's One Village One Product (OVOP) initiative, provided training, financial assistance, and incentives to support local product development and infrastructure (Igusa, 2011). To address this gap, Bhutan's government should strengthen its policy framework to provide more robust support for agricultural communities, including comprehensive coordination and resources for the OGOP initiative.

Limited Capacity-Building and Training Programs

In Bhutan, capacity-building and skills training for farmers were insufficient compared to those offered by Thailand's OTOP Academy, which provided comprehensive training on product development, quality control, marketing, and packaging (FAO, 2021). Thailand's Community Learning Centers, such as those in Ang-Thong, have successfully supported local producers in achieving high standards and earning five-star OTOP ratings through utilizing traditional techniques alongside new marketing strategies (Nitikasetsoontorn et al., 2010). To strengthen Bhutan's OGOP initiative, it is crucial to enhance capacity-building efforts to equip farmers with the necessary skills and knowledge to improve product quality and increase marketability.

Limited Market Access

Market access for OGOP products in Bhutan was limited, hindering economic stability for many farmers. In contrast, Thailand's OTOP program implemented a product rating system that ensured high standards in quality and exportability, helping entrepreneurs succeed in competitive markets (FAO, 2021; Acharya, 2019). Additionally, the adoption of the 4P marketing strategy—Product, Price, Place, and Promotion proved essential for OTOP's success (Kotler and Armstrong, 2018). Bhutan's OGOP initiative could improve by adopting similar market access strategies, ensuring that certified products meet high standards and receive better promotion. Bhutanese farmers could more successfully penetrate both local and international markets.

Insufficient Promotion of SEP for Sustainable Development

In Bhutan, the promotion and understanding of SEP remained in the early stages, with farmers receiving only basic training. In contrast, participants in Thailand's OTOP initiative exhibited a deep integration of SEP principles into their daily lives and business practices (Mettathamrong et al., 2023). To bridge this gap, Bhutan should intensify the promotion of SEP as a core strategy for sustainable rural development. The SEP principles foster financial stability, community well-being, and environmental stewardship, which are critical for long-term success in rural economies.

Inadequate Government-Private Sector Collaboration

Bhutan's OGOP project has been constrained by a lack of strong collaboration between the government and private sector, limiting resource mobilization and project synergies. The QPO, supported by agencies like the Ministry of Agriculture and Forests (MOAF), established a support system for OGOP farmers in Bhutan. This system provided technical assistance in post-harvest management, value addition, and product quality, and integrated OGOP activities into local plans across districts (Dzongkhags) and sub-districts (Gewogs) (QPO, 2022). Thailand's OTOP project, on the other hand, benefited from government interventions in supply chain management, entrepreneurship consulting, and market access expansion (Sitabutr and Paitoon, 2017). The National OTOP Committee, together with regional committees, assisted in product identification, quality control, packaging, and grading to enhance competitiveness in both domestic and international markets (Pholphirul et al., 2022). Similarly, Japan's OVOP movement thrived due to strong government backing, technical support, and training provided by research institutes (Kurokawa et al., 2010). To enhance Bhutan's OGOP initiative, stronger partnerships between the Bhutanese government and the private sector are needed to foster more synergies, resources, and opportunities for local producers.

Limited International Support and Partnerships

Bhutan's OGOP project has faced limitations due to a lack of substantial international support, which could have provided additional expertise and funding. The QPO through the OGOP initiative, received limited backing internationally. In collaboration with the TICA and Chiang Mai Rajabhat University, Thailand (CMRU), QPO provided training to OGOP farmers in product development, packaging, and technical skills (CMRU 2023). Short-term support from the Asian Development Bank (ADB), the World Wildlife Fund (WWF), and Bhutan for Life (BFL) helped OGOP farmers by providing financial resources, technology, and training in skills and product development (QPO, 2022). In contrast, international collaborations have proven essential to the success of similar rural development initiatives worldwide, optimizing resources and fostering knowledge exchange to address challenges such as poverty and inequality (Lusha, 2024). To secure long-term success for OGOP, it is imperative that Bhutan actively pursue more international partnerships to enhance expertise, funding, and knowledge sharing, all of which are crucial for driving growth and addressing broader global challenges.

Conclusion

In conclusion, this research has identified several key challenges facing Bhutan's OGOP project, including constraints in market access, capacity-building, knowledge dissemination, and financial support. These challenges have limited the project's potential to fully promote sustainable rural development. Drawing lessons from the

success of Thailand's OTOP model, it is evident that Bhutan's OGOP initiative could be enhanced through strengthened government policy support, comprehensive training and capacity-building programs, and the implementation of a product rating system to boost market competitiveness. Additionally, the integration of the Sufficiency Economy Philosophy (SEP) would serve as a crucial strategy for fostering long-term sustainable development. Providing financial support, such as grants and loans, would empower local producers to scale their operations effectively. Finally, fostering stronger collaboration between the government, private sector, and international partners is essential for accessing the expertise and resources necessary to ensure the long-term success and sustainability of the OGOP initiative, ultimately improving rural livelihoods in Bhutan.

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