

Cannabis Growing Community Enterprise Initiative in Thailand

Niorn Srisomyong^{1*}, Asawin Pasutham²

¹School of Tourism and Services, University of the Thai Chamber of Commerce, Bangkok, 10400, Thailand; niorn_sri@utcc.ac.th (N.S.).

²School of Business Administration, University of the Thai Chamber of Commerce, Bangkok, 10400, Thailand; asawin_pas@utcc.ac.th (A.P.).

Abstract. This study examines the role of cannabis in rural development, focusing on the legalization of medical marijuana under the Narcotics Act (No. 7) B.E. 2562, which allows cannabis cultivation for medical and research purposes. The fieldwork combines varied sources, including in-depth interviews. The cannabis growing initiative aims to promote rural livelihoods through community enterprises, with a case study in Buriram province, Thailand. This study addresses the challenges faced by farmers, including regulatory difficulties and the need for government support. This initiative seeks to create sustainable development and enhance rural economies in Thailand. However, farmers continue to face challenges, with gaps persisting between government support and the needs of community enterprises.

Keywords: Cannabis growing, Community enterprise, Government support, Livelihood, Rural development.

1. INTRODUCTION

The role of cannabis production in rural areas undergoing restructuring has been largely overlooked in rural restructuring literature, despite its potential significance in areas with little legitimate economic development. While traditional natural resource sectors have declined in importance, cannabis production has taken their place as a land use and an economic and cultural force^[1]. However, there are exceptions, such as the study on the role of cannabis in forming social networks and maintaining solidarity, as well as research in Morocco that found positive impacts on rural landowners who invested in infrastructure^[2]. Cannabis production is typically considered part of the shadow economy, which is often excluded from analyses of rural economic development. As a result, the role of cannabis production in community well-being, identity, and livelihoods may be overlooked, even in research on radical or fringe elements of rural economies. Ultimately, cannabis production will continue to have important implications for economic development, culture and identity, politics, and human-land relationships in rural areas^[3]. Therefore, more research is needed to fully understand the implications of cannabis production in rural places. This study is intended to provide a more approach to the study of cannabis production in rural areas, particularly in a developing world context, in this case, Thailand.

There is a growing body of research on cannabis consumption in Asia, although it is still less extensive compared to the literature on Western cannabis use. The literature on cannabis consumption has been mostly situated in Western discourse^[4]. This is because the Western world has had a long history of both using and studying cannabis, especially in the latter half of the 20th century when the drug became a topic of intense debate and scientific inquiry. However, it is important to note that cannabis has a long history of use in other cultures and regions as well, particularly in the Indian subcontinent, Africa, and South America, where it has been used for medicinal, spiritual, and recreational purposes for centuries. Thus, this study can contribute to the literature on Asia context, particularly in the developing countries context.

The case of cannabis production and consumption in Thailand, the Narcotics Act (No. 7) B.E. 2562, which came into effect on February 19, 2019, allows the use of cannabis for medical and research purposes^[5], making Thailand the first country in Southeast Asia to legalize medical cannabis (Narcotics Control Division, Food and Drug Administration, 2020). The legalization of cannabis means that it can be grown and sold, and restaurants and beverage outlets can sell food and drinks containing cannabis, provided that the THC content is less than 0.2 percent. Cannabis can be used for medical treatment, but recreational use is still not allowed^[6]. The legalization of cannabis is predicted to make Thailand another popular destination for cannabis tourism, as the country already stands out in terms of health and wellness tourism. This could help stimulate the economy, which has been struggling for over two years due to the COVID-19 situation. Forbes magazine predicts that cannabis legalization will be a key factor in boosting the economy after COVID-19, as the cannabis industry for relaxation and stress relief is rapidly growing and becoming a major driving force for global tourism, with a high value of up to 17 billion US dollars (approximately 590 billion baht)^[7]. Regardless, cannabis is still categorized as a class 5 narcotic, meaning cultivation and sale are illegal, unless licensed by the Food and Drug Administration (FDA)^[5]. However, citizens have the right to cultivate cannabis by joining community enterprises and working with government agencies, such as collaborating with local health promotion hospitals to obtain permission for medical purposes. Relevant agencies have begun to promote this collaboration model in 46 provinces, covering approximately 2,500 households and 251 local health promotion hospitals, with 15,000 cannabis plants already cultivated. The government hopes that both cannabis and hemp will become another major economic crop,

providing alternative sources of income and improving the lives of farmers, as well as being a fundamental basis for producing new innovative products in the future^[8].

This study selects Buriram province in the Northeast Thailand as case study. This is because Community Enterprise in Khumuang district such as Play La Ploen and Non Malai which are the pioneer pilot community enterprise, allowed to grow cannabis, by the collaborating with Khumuang Hospital located in Buriram Province^[9]. Buriram is a province in northeastern Thailand, bordering the Cambodian, also known as Isan. Recent years have seen a significant agrarian transformation in rural areas of Northeast Thailand, involving a shift from subsistence-oriented to market-oriented agriculture. This transformation affects all aspects of the agricultural system, including technology, economic orientation, social relations, and cultural values. However, the region remains impoverished and underdeveloped due to the intrinsic unproductivity of rainfed rice farming, which is characterized by low and unstable yields resulting from poor soil quality, limited access to water supplies, and unfavorable environmental conditions such as erratic rainfall^[10]. The economy of Buriram is primarily based on agriculture, with rice and cassava being the main crops grown. The province is also known for its production of livestock and other agricultural products, such as sugarcane, rubber, and corn^[11]. However, farmers in Buriram have faced various challenges, including risk of natural disasters, high production costs, low purchasing prices, and issues with agricultural products quality due to farmers' production processes^[12]. Thus, the government has initiated the Cannabis Growing Community Enterprise project to help farmers increase their income and sustain their livelihoods. The approach to encouraging cannabis cultivation among farmers involves the requirement that they do so through a community enterprise. The legalization of medical cannabis in Thailand presents an opportunity to promote rural development and encourage the economy. Despite the potential economic benefits of cannabis cultivation, the topic has not been extensively researched in Thailand. Most of the existing literature on cannabis in Thailand has focused on either medical applications or policy matters^[13-17]. A few studies have been in area of cannabis cultivation for rural development. Thus, this study also focuses on livelihood opportunities available to farmers through this cannabis growing community enterprise.

Therefore, the importance of this study lies in exploring the potential for cannabis cultivation as an integrated initiative to promote rural development in Thailand, particularly in areas with little legitimate economic activity. The aim of this paper is to examine the cannabis growing community enterprise initiative in a case study area, Buriram province in Thailand. The objectives include exploring the challenges faced by the community enterprise, the livelihood opportunities available to farmers through cannabis growing, and the effectiveness of Thai government policies and practical support for the cannabis growing community enterprise initiative. By investigating these issues, this research seeks to contribute to the broader literature on cannabis production for rural development, particularly in the developing world context.

2. LITERATURE REVIEW

2.1. Cannabis Liberalization in Thailand

Thailand's native plant, *Cannabis sativa* L., commonly referred to as ganja, is subject to specific regulations under Thai law. Hemp and cannabis belong to the same species, with hemp defined as a cannabis plant containing less than 1% THC (Tetrahydrocannabinol), a psychoactive agent. On June 9, 2022, the cannabis plant was removed from the list of narcotics, allowing its cultivation with government notification through an application or website. However, the use of cannabis flower buds in dishes or food products is prohibited by the Food Act. Other parts of the cannabis plant can be used, but eateries must inform customers if a dish contains cannabis and provide warnings to individuals under the age of 20, pregnant women, and breastfeeding women^[18].

Products intended to be rinsed off, as well as food products (excluding those for babies) and herbal products, may contain restricted quantities of cannabis components such as CBD (Cannabidiol), hemp seed oil, and extracts, but not flower buds. Herbal medicines containing cannabis extract require a prescription from a medical doctor. Traditional cannabis remedies can be obtained from government hospitals, private clinics, and pharmacies^[18].

The legalization of medicinal cannabis in Thailand in 2018 has led to a significant increase in reports of adverse effects from cannabis products, including cases involving children and adolescents. The variety of cannabis-containing products has expanded, ranging from extracts to foods and energy drinks. This increase in cannabis-related cases, including first-time recreational users, has raised public health and safety concerns^[19]. Current problems and obstacles for the cannabis industry in Thailand stem from the lack of clarity in government policies and the interpretation and enforcement of rules, regulations, and conditions that do not align with the context of farmers. From the process of obtaining permits to the criteria for locations, these issues cause farmers to spend a significant budget on cultivation. Managing the cannabis business in Thailand involves promoting knowledge to enhance cannabis quality. Both the government and community enterprise groups need to promote and develop marketing channels to facilitate the distribution or diversification of products^[20].

The perception of cannabis in Thai society has changed significantly, with more people having access to medical cannabis oil and a shift in public perception. There is hope that cannabis can help restore the economy and improve people's well-being. There is an ongoing debate between groups supporting and opposing the use of cannabis, with some opposing its legal use due to myths and misconceptions. However, societal attitudes are shifting towards more acceptance and open discussion about cannabis^[21].

However, there is still a lack of knowledge among tourists, especially foreign tourists, about the legalization of cannabis in Thailand. Thus, it is important to educate tourists about this issue. Legalizing cannabis means it can be grown and sold, and restaurants and beverages can sell food and drinks containing cannabis with THC content less than 0.2%. While cannabis can be used for medical and therapeutic purposes, recreational use is not yet allowed. Smoking cannabis in public for recreational purposes is punishable by imprisonment for up to three months, a fine of up to 25,000 baht, or both^[18].

Thus, clear, decisive, and comprehensive policies are necessary to promote the cultivation and use of cannabis, with integration across relevant departments^[22]. The policy should encourage investment in cannabis cultivation, transforming it into a cash crop that benefits all stakeholders in the supply chain, particularly the farmers.

In conclusion, the literature on cannabis liberalization in Thailand provides a broad understanding of the regulatory framework, public perception, and economic potential of cannabis. By examining Thailand's approach to cannabis legalization, this study can better assess the opportunities and risks of promoting cannabis growing initiative into rural development. Effective cannabis growing initiative can enhance rural economies, create new market opportunities, and promote social acceptance, while ensuring public health and safety.

2.2. Livelihood Diversification and Livelihood Opportunities

Sustainable livelihood is defined as the amalgamation of necessary capabilities, assets (both material and social), and activities required for a means of living. A sustainable livelihood can endure and recover from stresses and shocks while preserving or improving its capabilities and assets, without depleting the natural resources it relies on^[22].

Livelihood diversification refers to the array of strategies that individuals, households, or communities employ to sustain their livelihoods. Persistent agrarian crises and economic instability have driven farmers to diversify their activities, sometimes at the expense of agricultural productivity^[23]. Diversification is not solely a response to crises but also to seasonal fluctuations. He identifies six determinants influencing livelihood diversification: seasonality, risk management, access to labor markets, credit market limitations, investment for future prospects, and diversification itself^[24].

Diversification can be a means of accumulation for some, while for others, it serves as a coping mechanism. Although diversification provides households with additional opportunities, it can also exacerbate economic inequality over time^[25]. For the very poor, diversification can be crucial for survival, potentially preventing them from falling into destitution^[26]. argues that poor producers may not reinvest increased incomes into agriculture or other areas, often only meeting their subsistence needs.

Diversification can effectively reduce uncertainty, especially when it constitutes a significant part of the farmer's income and offers a stable return^[27]. The European Common Agricultural Policy supports multifunctionality and diversification to address the crisis of the productivist model of agriculture, which focused on increasing farm output^[28]. Emphasizing multifunctionality, the policy encourages on- and off-farm activities to enhance farm household incomes, potentially leading to more flexible responses to consumer demands and market variability^[27].

Rural development plays a crucial role in creating new products and services, developing new markets, and realigning agriculture with European society and culture. The transformation of specialized farms into multifunctional enterprises and the creation of new practices and networks have practical implications for farmers and rural communities^[28]. This multi-level and multi-actor nature of rural development highlights the importance of diversification in fostering economic and social development.

Thus, livelihood diversification emerges as a multifaceted strategy essential for both coping with and capitalizing on various economic, environmental, and social changes. It plays a critical role in ensuring the sustainability of livelihoods, particularly in rural contexts like Northeast Thailand. The agrarian transformation in this region emphasizes the shifts towards market-oriented agricultural practices, demanding responsive policies. Diversification not only mitigates risks and alleviates incomes but also aligns agricultural practices with rural changes.

This livelihood diversification concept is integral to this study as it provides an understanding of how diversification can enhance rural livelihoods. By examining the processes and impacts of livelihood diversification, we can better understand how introducing cannabis growing could serve as a new, additional income for rural economic development. Cannabis growing represents a potential diversification strategy that can boost income, reduce economic vulnerabilities, and foster rural resilience, thereby directly contributing to the broader objectives of rural development.

2.3. Government Support for Cannabis Growing to Promote Rural Development

The approach to encouraging cannabis cultivation among farmers involves the requirement that they do so through a community enterprise. However, farmers cannot register as a community enterprise to grow cannabis together because cannabis is still classified as a type 5 narcotic drug. Therefore, if farmers want to grow cannabis, they must follow the following steps^[5]:

1. Farmers can register as a community enterprise for businesses other than growing marijuana.
2. Register as a community enterprise and operate the business according to the application submitted at the district agriculture office in the area to receive a certificate of registration as a community enterprise.
3. The registered community enterprise must have a contract with a government agency or an academic institution responsible for medical or pharmaceutical research or education for the benefit of medicine or pharmacy, which has been licensed by the FDA.
4. Apply for permission to grow only marijuana which is classified as a type 5 narcotic drug.
5. When permission is granted, the enterprise can grow only marijuana which is classified as a type 5 narcotic drug, and can apply to expand its community enterprise business at the district agriculture office where it is registered.

Government support for cannabis growing can be provided through funding, dissemination of knowledge and information, or the implementation of favorable policies. The study by Bloomer emphasized the need for policymakers to consider alternative strategies, such as the legal production of hemp, to address the socio-economic challenges faced by rural communities engaged in cannabis cultivation. Cannabis cultivation in rural Lesotho, for example, is seen as a coping strategy rather than criminal opportunism, serving the subsistence needs of marginalized rural households. Policies aimed at reducing cannabis production in Lesotho would significantly impact these households, suggesting alternative strategies like legal hemp production^[29].

Another study explained that administrative burdens imposed by the regulatory system, including compliance costs, learning costs, and psychological costs, are significant challenges for farmers. Inconsistencies between federal, state, and local cannabis policies create additional hurdles. The evolving nature of cannabis legalization and regulation can lead to variations in policies at different government levels, resulting in inconsistencies or conflicts in implementation and enforcement^[30].

The cannabis industry has complemented the restoration sector by initially providing financial capital for restoration projects and supporting the growth of the restoration economy (Kelly and Formosa, 2020). Economic challenges faced by rural areas with the legalization of cannabis highlight the need for policies and strategies that support economic diversification, ensuring that the restoration sector thrives alongside the changing dynamics of the cannabis industry^[1].

The literature on government support for cannabis cultivation highlights the importance of well-designed government interventions and community involvement to promote rural development. This review is included to this study as it emphasizes the regulatory challenges and opportunities associated with cannabis cultivation. By understanding the regulatory framework and the role of government support, this study can better assess how to effectively cannabis cultivation to enhance rural economies, encourage sustainable development, and improve livelihoods.

3. METHODOLOGY OF STUDY

For this study, the researchers choose Khu Muang district, Buriram province as a case study. The selection of Khu Muang district in Buriram province as a case study was justified due to its pioneering role in cannabis cultivation and its potential as a model for other regions. In Khu Muang District, there are 13 community enterprises in the area of this study that are the first groups to cultivate cannabis. These enterprises serve as important starting centres or models for other community enterprises throughout the country. The researchers selected the Play La Ploen Community Enterprise and the Non Malai Community Enterprise, in Buriram Province, as case study. Play La Ploen Community Enterprise is the first pilot community enterprise, allowed to grow cannabis, by the collaborating with Khu Mueang Hospital in Khu Mueang District, Buriram Province while Non Malai Community Enterprise is the first cannabis cultivation demonstration plot in Thailand, where cannabis is grown at the household level using the 6-plant model (Non Malai Model) to produce herbal medicine for patient care in the area.

The research employed a qualitative approach, utilizing in-depth interviews and secondary data analysis to gain a comprehensive understanding of the phenomenon. This research adopts a purposive sampling approach for key informants who are of interest for the research objectives and are directly related to the cannabis growing community enterprise initiative. The target respondents of this study were divided into three categories: community enterprises, government organizations, trade associations and entrepreneurs (Table 1). The interviews were conducted from August until November 2023.

Table 1: Summary of key actors who were interviewed.

| Sectors | Actors | Number of cases |
|-------------------------------------|---|-----------------|
| Community enterprises | - Heads - Farmer - Agricultural expert | 4 cases |
| Government organizations | National and local level organizations | 7 cases |
| Trade associations and entrepreneur | - Chamber of Commerce - Thai Industrial Hemp Trade Association - Arokaya Wellness | 3 cases |
| Total number of cases 14 | | |

The analytical approaches were applied in this research. First, analysis of the interviews began with their verbatim transcription, which took about a month. Second, the secondary documents were read and notes were made based on each reading. The notes were organized under themes based on issues relevant to the research. The documents were stored and organized. The analysis of documents in parallel with interviews would therefore provide opportunities for the corroboration of data. Third, it was a process of data management. This involves deciding upon the themes under which the data will be labelled, sorted, and compared. Fourth, analysis of the transcripts took place, which involved reading, exploring, and examining the transcripts in order to identify broad themes and concepts. Then, after having an initial framework, the next task was applying it to the transcripts and the secondary documents [31].

4. RESULTS AND DISCUSSIONS

4.1. The Cannabis Growing Community Enterprise Initiative in Buriram

4.1.1. Play La Ploen Community Enterprise

Play La Ploen Community Enterprise started as a small community business focusing on cultivating medicinal herbs such as lemongrass for lemongrass tea and butterfly pea for butterfly pea tea. These herbs were initially supplied to hotels in the area and used internally within Play La Ploen resort itself. The enterprise expanded into cannabis cultivation within the Play La Ploen resort, with the resort owner allocating space for the community enterprise. Initially, the group consisted of around 20 members, mostly farmers with spare time from rice farming. The resort owner provided free space for cultivation and seedlings, ensuring the stability of the community enterprise. Thus, Play La Ploen Community Enterprise began as a small-scale community business emphasizing the cultivation of medicinal herbs for local hotels. Following this, when the government initiated the cannabis legalization project, the Director of Khumuang Hospital contacted Play La Ploen Community Enterprise to collaborate on medical cannabis cultivation. The proximity of the community to Khumuang Hospital and its potential were key factors. An MOU was signed to cultivate cannabis under a controlled environment with regulated light and temperature. Initially, they encountered challenges with Thai strain cultivation and subsequently switched to cultivating CBD strains instead. Khumuang Hospital reached out to Play La Ploen Community Enterprise to initiate the cannabis cultivation project.

Currently, Play La Ploen Community Enterprise has only 10 remaining farmers, with several reasons contributing to this decrease, such as challenges in management and low income. *"They are villagers after all. It's tough, so only about 10 or so are left"* said a head of Play La Ploen Community Enterprise. The combination of low income and heavy burdens has led many to abandon their original intentions. In the initial stages, Play La Ploen Community Enterprise conducted the cannabis cultivation project with Khumuang Hospital as a trial without compensation. Later on, they started hiring farmers to generate income. The head of Play La Ploen Community Enterprise mentioned, *"Once we started cultivating cannabis, we had to hire them. Otherwise, the villagers wouldn't have any income"*. Additionally, indoor cannabis cultivation involves high costs due to extensive use of lighting, leading to significant expenses, especially in electricity bills. The owner of Play La Ploen resort helped secure funding to support these expenses, sourced from Lin Sugar Company as part of their corporate social responsibility (CSR) budget.

Play La Ploen resort has been operating for about 12-13 years, while Arokaya Wellness has been operational for 3 years. Arokaya Wellness serves as a hub that supports cannabis cultivation to produce various cannabis-related products. *"At Play La Ploen community enterprise, they have everything from the source, the middlemen, and the end-users. They have experts, private sectors, and various academics"* explained the senior officer of Medical Cannabis Institute. Play La Ploen Community Enterprise has achieved success in their medical cannabis cultivation endeavors, attracting numerous external organizations for study visits, especially during the initial stages of their cannabis project. The medical cannabis cultivation initiative by Play La Ploen Community Enterprise has been successful in generating income and promoting community health. According to the previous study, he emphasized that Thailand needs to establish and promote hospitals and clinics dedicated to cannabis, authorize cannabis doctors, build manufacturing plants and wellness resorts, and offer tour packages to boost awareness and recognition[32]. Therefore, this can serve as a model for others to learn from and follow. Thus, Play La Ploen Community Enterprise may be attempting to diversify into other health and wellness products and activities through the use of cannabis.

4.1.2. Nonmalai Community Enterprise

The cannabis project of Khumuang Hospital collaborated with the Tambon Health Promotion Hospital (a primary healthcare service unit under the Office of the Permanent Secretary, Ministry of Public Health, and transferred to local administrative organizations) and the Non Malai community in 2020, with operations beginning in November of the same year. The Tambon Health Promotion Hospital held meetings with eight villages in its service area, inviting community leaders to discuss which village would be interested in participating in cannabis cultivation. The six cannabis plants at Non Malai represent the first cannabis cultivation plot in Thailand (Picture 1). This initiative was organized under a project aimed at developing a model for

cannabis cultivation to provide palliative care for patients at the Ban Non Malai Tambon Health Promotion Hospital in Khumuang District. Cannabis cultivation at the household level follows the Non Malai model of six plants, intended for producing herbal medicine to care for patients in the area. The cannabis plants were obtained from Chao Phraya Abhaibhubejhr Hospital in Prachinburi Province in January 2021, to be used as parent plants for propagation through stem cuttings for members of the Herb Community Enterprise. The produced cannabis oil is delivered to the Non Malai Tambon Health Promotion Hospital and Khumuang Hospital to be used in patient care. The remaining leaves, roots, and stems are utilized by the community enterprise^[18].



Figure 1: The six cannabis plants at Non Malai Community Enterprise.

After the project was established, various agencies helped ensure that cannabis cultivation complied with the law. The Tambon Health Promotion Hospital invited community leaders and local officials to meet and agree on the operation and control of cultivation. The farmer of Nonmalai Community Enterprise noted that *"The Health Promotion Hospital invited community leaders, the police, and local officials to a meeting, and we decided to accept the project"*. Ultimately, four villages showed interest and formed cannabis cultivation groups with a total of 23 members. However, only seven families were able to proceed due to control limitations.

The initiative's conditions require the community enterprise to provide cannabis leaves to the Tambon Health Promotion Hospital for medical use. Each household must deliver 6 kilograms of dried cannabis leaves. *"The agreed condition is that the enterprise must send leaves to the Health Promotion Hospital for medical use"* the farmer of Nonmalai Community Enterprise explained. In addition to providing cannabis leaves, the Nonmalai community enterprise has also produced various cannabis-based products, such as herbal compress balls and food items like fried crickets mixed with cannabis leaves. The initiation and implementation of this cannabis project have received support from multiple parties, including the government and the community, ensuring that the project operates legally and effectively. Similar to Play La Ploen Community Enterprise, Nonmalai Community

Enterprise is also trying to diversify cannabis into various health and wellness products. As the previous study noted, rural development is vital for creating new products and services and developing new markets. The transformation of specialized farms into multifunctional enterprises and the establishment of new practices and networks have practical implications for farmers and rural communities^[28].

4.2. Challenges of Cannabis Growing Community Enterprise Initiative

The community enterprises cultivating cannabis in Khumuang district currently face several challenges, both internal and external. Internal factors include the farmers' lack of knowledge about growing and caring for cannabis plants. External factors encompass market conditions, government support, cannabis laws, competition from external investors, and impacts from various situations. Farmers face problems ranging from high investments to low returns. They must pay for seeds, fertilizers, soil, and other equipment but cannot receive the expected returns. Furthermore, they lack clear guidance and advice from consultants and companies selling seeds and equipment, resulting in high costs for the farmers. When it comes time to sell their produce, the prices they receive often do not meet expectations, and the produce is considered low quality due to pesticide residues from areas where pesticides or herbicides are used. This is a common issue many farmers face. *"When it comes time to sell their produce, the prices are not as expected, and the reason cited is that the produce is of poor quality"* stated the senior officer of Medical Cannabis Institute. A major problem is that cannabis is a plant with the ability to absorb toxins. If grown in areas where pesticides or herbicides are used, the produce will contain residual toxins, making it fail to meet standards and unable to be sold as expected. Additionally, the senior officer of the Government Pharmaceutical Organization stated that Thai cannabis strains have THC levels of only 3-4%, while developed foreign strains have THC levels above 20% (for this research, the term "cannabis" is used, although it does not have the same meaning with marijuana. Cannabis refers to all products derived from the Cannabis sativa plant, which contains approximately 540 chemical compounds. On the other hand, "marijuana" specifically refers to parts or products of the Cannabis sativa plant that have significant amounts of tetrahydrocannabinol (THC), the substance responsible for the plant's effects on an individual's mental state. However, certain cannabis plants have minimal amounts of THC^[33].

Commercial cannabis cultivation requires investment and management knowledge, which most farmers cannot achieve. A senior officer of Government Pharmaceutical Organization mentioned that *"Farmers can only cultivate to a certain extent; they cannot operate commercially"*. This statement indicates that cannabis is a plant requiring substantial knowledge and expertise. Additionally, planning cannabis cultivation must start with knowing the target market for the products and conducting a thorough market demand study. A senior officer of Government Pharmaceutical Organization stated that *"You need to know who you are selling to first because each buyer has different specifications"*. Producing medical-grade cannabis requires high quality and adherence to stringent standards. *"When Khumuang Hospital received the produce, they rejected it entirely due to contamination"* said a senior officer of Medical Cannabis Institute. This highlights that cultivation knowledge alone is insufficient. A planning from cultivation to marketing produces is very important, forming a complete supply chain from upstream to midstream and to downstream.

Addressing the challenges faced by cannabis farmers requires substantial support from the government. The government should promote and provide guidance on product registration, including downstream processes such as setting production standards, issuing licenses, and managing the market for cannabis products. Farmers need to thoroughly study and understand cannabis cultivation methods, considering soil conditions and chemical usage in the planting area. They should also be cautious and check for soil toxins before starting cultivation to reduce the risk of producing non-compliant crops that cannot be sold as expected.

Additionally, farmers should have alternative ways to utilize their produce, such as cannabis farm tourism or developing medical and other products that can generate income. However, while cannabis farm tourism might be an interesting activity, it does not necessarily provide sustainable benefits. *"Currently, growers have almost no options. If you say it's for tourism to see the cannabis farm... what benefit does it create?"* a senior staff of the Thai Industrial Hemp Trade Association added.

Cannabis cultivation also faces competition from large investors who have substantial greenhouses and vast financial resources. However, some of these large investors still encounter issues with selling their products and suffer losses. A farmer of Nonmalai Community Enterprise observed that *"These large greenhouses, costing tens of millions, still cannot sell their products and are incurring losses"*. Thus, creating a market for cannabis is crucial. It is essential to develop a diverse range of cannabis products, such as medical products, dietary supplements, or other value-added products. Additionally, promoting the tangible use of cannabis in the industrial sector is necessary.

The development of cannabis cultivation in Thailand requires continued support from the government in market management and development, as well as in the improvement of cannabis strains and stringent quality control to ensure high-quality products that meet market demands. Farmers need clear guidance and knowledge about proper cannabis cultivation methods to minimize risks and increase the chances of producing high-quality yields. Establishing a clear market and developing diverse cannabis products will help increase value and generate income for farmers. Particularly, cultivating cannabis to meet the quality standards required by hospitals, known as medical grade, demands substantial expertise. Producing cannabis for medical purposes

requires high-quality standards and adherence to specific regulations. This involves meticulous soil and water quality checks, as well as testing for heavy metals and contaminants, making the cultivation process complex and necessitating significant knowledge and skills. The officer of the Sub-district Agricultural Extension Office in Buriram stated, *"Cultivating cannabis for medical purposes is complex from the very first step, requiring meticulous attention to every stage of the process"*. The senior officer of the Medical Cannabis Institute recounted, *"When Khumuang Hospital received the cannabis, it was all rejected due to contamination."*

Therefore, cultivating cannabis for medical purposes requires large quantities and proper management. If farmers can meet the conditions set by the government, they will receive substantial compensation. *"We can buy it, but you have to meet our specifications. If you do, we are willing to pay 40,000 baht (approximately USD 1,165) per kilogram for dried cannabis"* asserted a senior officer of Government Pharmaceutical Organization. However, the conditions for medical-grade cannabis require farmers to use their expertise and experience in cultivation. As a result, *"many have gone bankrupt"* mentioned a senior officer of Government Pharmaceutical Organization). This is the situation faced by cannabis farmers. Furthermore, a representative from the Cannabis Institute has stated that the development and regulation of cannabis cultivation is not solely the responsibility of the Ministry of Public Health. It also requires collaboration with the Ministry of Agriculture and Cooperatives to achieve the best results. The cooperation between different agencies will strengthen the production and marketing processes.

Besides the previous issues, farmers also face legal challenges regarding cannabis. The lack of clear legislation on cannabis and hemp creates confusion for farmers. A head of Herbs Produced for Medical Community Enterprise complained that *"After we formed a group, we encountered a legal vacuum, as the Cannabis and Hemp Act has not yet been enacted. This is the most disruptive aspect"*. This uncertainty makes planning and implementing cannabis cultivation even more difficult for community enterprise growing cannabis.

The Department of Thai Traditional and Alternative Medicine under the Ministry of Public Health is preparing to draft a new Cannabis and Hemp Act to regulate these substances. Key provisions in the new draft include prohibiting recreational consumption, banning sales to four specific groups, and requiring authorization for the sale, cultivation, and production of cannabis and hemp. This drafting of the Cannabis and Hemp Act has been an ongoing issue since the administration of Prime Minister Prayut Chan-o-cha (2014–2023) and continues to the present day. The "Medical Cannabis Policy" no longer classifies cannabis and hemp as Category 5 narcotics but still raises concerns about regulatory control. The previous draft of the Cannabis and Hemp Act during Prayut Chan-o-cha's administration did not pass through the House of Representatives, necessitating the creation of a new draft. Dr. Cholnan Srikaew, former Minister of Public Health, stated that since the stems, leaves, and flowers still contain THC, if used improperly, there will be laws to regulate such use. For instance, growing cannabis requires authorization, and opening a cannabis shop must comply with statutory laws. Existing shops can continue operating because they have obtained proper authorization. The new provisions in the draft Cannabis and Hemp Act will focus on regulating misuse. Currently, the government is in the process of gathering public opinions to ensure the effective use of cannabis for medical purposes and to bolster the country's economy^[34].

Therefore, growing cannabis in Thailand has the potential to develop into a significant economic crop. However, it requires strong support and effective management from all sectors to enable farmers to achieve success and sustainable income. Promoting community enterprises to cultivate cannabis in Thailand is a challenging effort, especially with the changes in laws and economic trends that need to be considered. On one hand, cultivating cannabis as an economic crop can generate income for communities and strengthen the local economy. On the other hand, there are several limitations and obstacles that need to be carefully considered. This study aligns well with the findings of Chankheagla's study^[20]. In his study, he highlighted that the current challenges for the cannabis industry in Thailand arise from unclear government policies and inconsistent interpretation and enforcement of rules and regulations, which do not align with the farmers' context. Issues such as the permit process and location criteria cause farmers to incur significant cultivation expenses. Managing the cannabis business in Thailand requires promoting knowledge to enhance cannabis quality. Both the government and community enterprise groups must work on developing and promoting marketing channels to facilitate product distribution and diversification.

4.3. Livelihood Opportunities Available to Farmers through Cannabis Growing Community Enterprise Initiative

The area of study for this research is Khumuang District in Buriram Province. Most farmers in Khumuang District engage in rice farming, cassava cultivation, sugarcane, and rubber plantations. However, most of the rubber plantations are owned by investors, with local residents employed as rubber tappers. The majority of the community members in this area are from other places and rent land for agricultural purposes, lacking land ownership. Consequently, most villagers work as laborers to make a living. The head of Play La Ploen Community Enterprise stated, *"Most villagers work as laborers because the community members around here come from various places, mostly without land of their own, renting land for agriculture"*. An agricultural expert of Play La Ploen Community Enterprise stated, *"There is a sugar factory nearby, but during the off-season, there is no work"*. This statement highlights the issue of job scarcity during certain periods, compelling farmers to seek new ways to

generate income. Play La Ploen Community Enterprise started with the collaboration of around ten farmers and six agricultural experts. The farmers involved with this enterprise are usually those interested in cultivating plants or older individuals looking to earn additional income. Play La Ploen Community Enterprise also purchases vegetables and herbs from these farmers. The farmers who assist the enterprise earn income by selling their produce.

Farmers who cultivate cannabis are employed and receive a regular income, as growing cannabis requires knowledge and expertise. Previously, cannabis was supplied to the Khumuang Hospital, but this has been discontinued, and there is uncertainty about its continuation. However, cannabis is still being sent to the Government Pharmaceutical Organization for extraction into medicine and raw materials are also supplied to Arokaya Wellness, a wellness center located in the same area as the Play La Ploen Community Enterprise.

The cultivation of cannabis by Play La Ploen Community Enterprise is driven by customer orders. An agricultural expert from Play La Ploen Community Enterprise stated, *"We have a market because we grow according to orders. If the customers do not need it, we will halt production as there are currently many growers"*. This statement reflects the enterprise's adaptation to control production based on market demand. Currently, there are fewer than 10 farmers remaining in the enterprise, as some have left due to family and health reasons. Most of the remaining farmers are from villages near Play La Ploen resort. This change highlights the challenges in maintaining a workforce and the subsistence of the community enterprise.

Before cannabis was decriminalized, the demand for cannabis cultivation was very high, with the value of cannabis leaves alone reaching several thousand to tens of thousands of baht per kilogram. Farmers and enterprises were eager to grow cannabis due to the high value of its leaves and flower clusters. However, once cannabis was decriminalized and no longer classified as a narcotic, demand decreased, and the increase in cultivation led to a significant drop in prices. A senior officer from Khumuang hospital in Buriram stated, *"When cannabis was still classified as a narcotic, many farmers and community enterprises wanted to grow cannabis. The parts used for medical purposes were the flower clusters and seeds, while other parts, such as leaves and roots, were used for other benefits"*.

During the period when cannabis leaves were in high demand, cafes and restaurants sought cannabis leaves for various uses, driving up their value. However, when cannabis was decriminalized, cultivation increased rapidly, leading to a significant drop in prices. A senior officer from Khumuang Hospital in Buriram also commented, *"When cannabis was decriminalized and no longer classified as a narcotic, everyone could grow it, which led to a decrease in demand and a drop in prices"*. Many community enterprises that invested in cannabis cultivation did not succeed and faced losses because the prices they received did not meet their expectations. Many farmers had to stop growing cannabis due to the inability to find a market.

During the time when cannabis was still classified as a narcotic, many people visited Play La Ploen Community Enterprise to study cannabis cultivation and the licensing process. However, after cannabis was decriminalized, the number of visitors significantly decreased. A head of Play La Ploen community enterprise remarked, *"Previously, when cannabis was a narcotic, farmers who couldn't grow it complained about the difficulty of obtaining a license. But now that everyone can grow it, it's a disaster for all"*.

A senior officer of Khumuang hospital in Buriram stated, *"Therefore, cultivating cannabis for economic purposes is challenging in the current environment. The legalization of cannabis cultivation has flooded the market, reducing demand. Promoting cannabis as an economic crop is now more challenging than ever, especially since every household can grow and use cannabis on their own."* The senior officer of Khumuang hospital added, *"Pushing cannabis as an economic crop would be difficult. With the legalization, it's even worse"*. This reflects the complexity and challenges of promoting cannabis as an economic crop, particularly concerning the fluctuating demand and rapidly changing market management.

For the Nonmalai Community Enterprise, a representative explained that although producing cannabis products has potential, it is still quite challenging to turn it into a viable business. Each cannabis plot yields about 5,000 baht (approximately USD 145) per year. This statement highlights the challenges in generating income from commercial cannabis cultivation. Nonmalai Community Enterprise practices greenhouse cultivation, whereas Play La Ploen Community Enterprise and Herbs Produced for Medical Community Enterprise use indoor cultivation methods.

The Nonmalai Community Enterprise also utilizes cannabis leaves to produce goods that generate income for the community. Products containing cannabis produced by the community include cannabis balm, cannabis inhalers, cannabis soap, and cannabis sugarcane juice. A large sugarcane enterprise in Khumuang District has also started using cannabis leaves to develop various products. However, the use of cannabis in medicine still faces many limitations, especially given the high standards required for medical cannabis. These standards become even more rigorous with the involvement of the Food and Drug Administration (FDA). A representative from the Nonmalai Community Enterprise stated, *"We understand traditional knowledge, but when it comes to the standards of the Food and Drug Administration (FDA), we can't do anything because the FDA is involved"*. Receiving approval from the FDA is a significant obstacle in developing cannabis products into marketable goods. The lack of certification makes it difficult for farmers and community enterprises to enter the cannabis market. Thus, developing cannabis products into fully marketable goods remains a challenge that must be faced.

However, the cultivation of six cannabis plants in greenhouses as a model for the Nonmalai Community Enterprise was initiated by the government. In the early stages of the project, there was significant interest from people coming to study the model. But when cannabis was legalized in 2022, the number of cultivators increased dramatically. This impacted community enterprises cultivating cannabis, including the Nonmalai Community Enterprise. Currently, this community enterprise hardly cultivates cannabis, and the existing plots are not well-maintained. Thus, this government-mandated approach demonstrates the unsustainability of the project.

A senior officer of Khumuang Hospital in Buriram stated that the orders for raw materials are usually not in large quantities, typically around 5-10 kilograms at a time, because cannabis oil has a limited shelf life. Therefore, the production of cannabis oil is based on pre-orders from hospitals. Hospitals that need cannabis medicine must clearly indicate their requirements so that the producers can manufacture according to the orders. A senior officer of Khumuang Hospital in Buriram said that during the initial phase of cannabis legalization, many growers contacted the hospital to sell their raw materials. However, trading with government agencies might not be smooth due to insufficient budget for purchasing raw materials. Additionally, the production of cannabis-based medications primarily focuses on palliative care, which is the care of terminally ill patients or those experiencing significant pain. Cannabis medication is crucial in alleviating pain and improving the quality of life for patients. Therefore, producing cannabis oil in small quantities to maintain quality and shelf life is essential. Ordering and producing according to the clear demands of hospitals helps ensure efficient management. However, trading with government agencies still faces limitations due to budget constraints. Nonetheless, the use of cannabis medication in palliative care focuses on pain relief and improving the quality of life for patients, highlighting the significant medical benefits of cannabis.

Cannabis is a high-value economic crop, and some countries place significant importance on this economic plant. A senior officer from the Department of Thai Traditional and Alternative Medicine stated *"The development of the cannabis industry in other countries has enormous value. If we study it, we will find that the world's leading cannabis companies have very high valuations, especially the top four, which are in countries that once enforced global regulations banning cannabis use, namely the United States, Canada, and Israel. These values amount to trillions of dollars"*. Thus, developing cannabis as an economic crop can significantly increase farmers' income. However, a representative from the Thai Industrial Hemp Trade Association expressed that promoting cannabis cultivation among farmers should focus on using it as a general herbal remedy, such as in medicinal recipes, massage oils, or balms, rather than emphasizing medical-grade cannabis. This is because cultivating cannabis for medical purposes requires extensive knowledge. This approach makes it easier for farmers to access and understand the cultivation process. This opinion reflects the perspective of the representative from the Thai Industrial Hemp Trade Association, who believes that cultivating cannabis in a way that farmers can manage and understand will better strengthen communities.

Additionally, he proposed that promoting cannabis tourism in rural areas, such as forming cannabis farms with cafes for visitors to take photos and drink cannabis-infused beverages, might be a good approach for local economic development. This idea could help communities generate income from tourism and selling cannabis products, thereby adding value to the community. However, he warned that *"if the cannabis flowers cannot be sold after cultivation, the prices will plummet"*. Without supporting industries, cannabis cultivation could lead to bankruptcy for farmers. This opinion emphasizes the risks farmers may face if there is no market for their products. Furthermore, the development of the cannabis industry requires proper product registration, responsibility, and knowledgeable use. Knowledge and responsibility in using cannabis are essential for the sustainable growth of the cannabis industry. The representative from the Thai Industrial Hemp Trade Association emphasizes efficient and standardized development to truly create added economic value for the community.

4.4. Support for the Cannabis Growing Community Enterprise Initiative

4.4.1. Current government support for the Cannabis Growing Community Enterprise Initiative

The Thai government provides support to the Cannabis Growing Community Enterprise Initiative in terms of information and finance. Starting a community enterprise to grow cannabis involves a complex process and must adhere to legal procedures. Thus, for this process the government can provide information relating to this initiative. Farmers who want to cultivate cannabis need to form a group of at least seven people to establish a community enterprise. This step is crucial for obtaining the necessary permits for cultivation.

Promoting the legal cultivation of cannabis by farmers requires guidance and education from relevant agencies. *"We may not provide cannabis plants or fertilizers, but we can offer knowledge and advice to support them in growing"* said an officer of the Sub-district Agricultural Extension Office in Buriram. This knowledge encompasses both academic and practical aspects, including care and maintenance throughout all stages of cannabis growth. However, with the liberalization of cannabis, the government's role in supporting and developing cannabis cultivation has diminished, as the private sector can now operate independently. The government continues to provide academic support and knowledge on cannabis cultivation but does not need to lead communities or farmers as it did in the past.

The support for capacity development and education for various personnel, especially the public and farmers,

has decreased as laws now allow the private sector to operate independently. The current government focuses on providing academic knowledge and guidance. *"Previously, the state had to guide the process, but now the private sector can manage all steps independently"* said the senior officer of Medical Cannabis Institute, thus reducing the state's involvement significantly.

In the past, cannabis cultivation had to be directed by medical needs, requiring farmers to grow it for specific medical purposes. However, with current laws allowing the private sector to manage the entire process independently, the government's role is now focused solely on providing academic support, knowledge, and guidance.

Another form of government support can be policy support. In 2019, when the law allowed the use of cannabis for medical and research purposes, combined with the potential increase in economic value, the Thai Food and Drug Administration (FDA) had to revise health product regulations. These revisions included food laws covering high-protein hemp seeds, cosmetic laws addressing antioxidant-rich hemp seed oil, and herbal medicine laws incorporating cannabis into traditional remedies. *"Cannabis formulations have been part of our wisdom for almost a century"* said a Senior officer of the Thai Food and Drug Administration. The Thai Food and Drug Administration (FDA) has been updating regulations since 2019 to allow the use of cannabis in health products, including branches, roots, leaves, and extracts, with the requirement that THC content does not exceed 0.2% to comply with narcotics laws. As of October 31, 2023, approximately 2,700 products containing cannabis and hemp have been approved by the Thai Food and Drug Administration (FDA). These products include cosmetics, food, and herbal medicines. This initiative by the FDA aims to support and promote the economic growth of products incorporating cannabis and hemp. *"This is the economic extension of the Thai Food and Drug Administration's role in supporting the inclusion of cannabis and hemp in products,"* stated a senior officer of the Thai FDA.

Changes in drug laws have allowed the private sector to operate independently without needing state permission, except for extraction processes. *"But if you're producing products, you don't need to request permission since the law already covers it"* said a senior officer of the Medical Cannabis Institute. Therefore, the development of wellness products related to cannabis has been increasing. Khumuang Hospital is an example of utilizing strategies and opportunities to produce herbal medicines from cannabis. When the government announced its policy to make cannabis an economic plant, hospitals with expertise in traditional Thai medicine and herbal medicine production saw an opportunity to drive the economy forward.

Financial support is also crucial for farmers who want to start their cultivation. State support can be provided in the form of loans, which farmers can use to cultivate cannabis crops. The head of Herbs Produced for Medical Community Enterprise noted that financial support from institutions like the Bank for Agriculture and Agricultural Cooperatives is crucial for starting cannabis cultivation. Another form of financial support is allocating budgets to hospitals that offer cannabis clinics. There are plans to upgrade the herbal medicine production building into a new facility that aims to meet Asian GDP standards at Khumuang Hospital. Additionally, the government has provided financial support to certain hospitals and healthcare facilities, such as Chao Phraya Abhaibhubejhr Hospital in Prachinburi and Khumuang Hospital in Buriram, to produce and distribute medication to patients free of charge. However, this approach is neither sustainable nor suitable in the long term because it fails to establish a process that can be carried forward sustainably.

State support in the form of budget allocations to various hospitals enables patients to access medication for free. However, when these budgets are depleted, the free distribution of medicine may cease, forcing the public to purchase their own medication. This type of approach may not be sustainable in the long term. In addition, the government continues to drive health policies to boost the national economy through various programs, such as the "Health for Wealth" policy. This initiative integrates tourism with healthcare services. *"Each point will be part of a tourism route, combining travel with wellness activities"* explained a senior officer of the Medical Cannabis Institute. The aim is to establish health tourism routes and wellness centers, blending tourism with health and wellness to promote economic growth. A senior officer of the Medical Cannabis Institute mentioned that Thai traditional medicine, which includes the use of cannabis as a medicinal herb, is a unique strength of Thailand. This tradition supports the "Health for Wealth" policy, allowing the country to quickly implement cannabis-related health initiatives. Thus, the support from the Department of Thai Traditional and Alternative Medicine and the Thai Traditional Medical Council enables rapid progress in this field.

Buriram province has seen significant support from the Bhumjaithai Party, leading many locals to start cultivating cannabis. *"People are growing a lot, especially in Buriram, where seedlings are being distributed,"* said the Representative of Chamber of Commerce in Buriram. Nakhonchaiburi is developing into a prominent health tourism destination by utilizing cannabis as an attraction. Government and private sectors in the region are promoting cannabis for medical use, relaxation, and spa treatments. Various cannabis-based products such as oils, creams, soaps, teas, and foods are available for purchase. Additionally, clinics, spas, and tourist sites offer services like massages, baths, and cannabis inhalation for relaxation. Nakhonchaiburi has the potential to attract tourists seeking relaxation, health rejuvenation, and new experiences. The growth of health tourism will create new business opportunities for farmers, entrepreneurs, and local communities. Nakhonchaiburi can become a research hub for developing new cannabis products and services. However, challenges remain, such as changing regulations, a shortage of skilled personnel knowledgeable about cannabis, and public misconceptions about its

use. Entrepreneurs must closely follow regulations, and ongoing public education campaigns are necessary to ensure correct understanding and safe usage of cannabis^[35, 36].

Thus, government policies and practical support are vital for the success of the Cannabis Growing Community Enterprise Initiative in Thailand. Comprehensive regulation, financial assistance, and strategic planning are crucial to harnessing the economic potential of cannabis while ensuring safety and quality. By focusing on community enterprises and promoting cannabis as a general herbal remedy, Thailand can achieve sustainable growth in the cannabis sector, benefiting farmers and local economies.

4.4.2. Views On the Effectiveness of the Support Provided by Government

Some informants claimed that there are gaps between the support provided by the government and the needs of the community enterprises. A senior officer of Government Pharmaceutical Organization mentioned that government support for cannabis use in medical requires a comprehensive view of the supply chain and collaboration among related agencies. Establishing strict quality control from cultivation to production and distribution is essential to build credibility and sustainability in cannabis policy implementation. Promoting the cultivation of cannabis and its use in various products also requires detailed planning and quality control. The senior officer of Government Pharmaceutical Organization emphasized that *"If you produce cannabis with a low percentage of active ingredients, who will buy it? It's not worth the extraction costs"*. This means that cannabis production must adhere to specified standards, otherwise, it will not be marketable. However, the involvement of state agencies in supporting farmers can sometimes be unclear, leading to unrealistic expectations among farmers. *"State agencies don't really know; they go on to support and give hope, leading people astray"* expressed a senior officer of Government Pharmaceutical Organization.

The farmer of Nonmalai Community Enterprise expressed that financial support from institutions like the Bank for Agriculture and Agricultural Cooperatives remains challenging due to market uncertainties, making it difficult to obtain financial support. Effective management and continuous support from the government are important to help farmers cultivate cannabis as an economic crop, thereby enhancing the country's economic value effectively.

The senior officer of the Government Pharmaceutical Organization highlighted that the Bhumjaithai Party utilized the liberalization of cannabis as a campaign issue during elections, viewing it as an opportunity for securing votes since each person's support translates into votes. Farmers were particularly targeted with the promise of prosperity which helped the party gain support. Bhumjaithai played a significant role in promoting policies for the medical, economic benefits, and potential export of cannabis, including pushing legislation for cannabis and hemp in 2022, supporting research and development of new strains, and promoting the processing of cannabis products. One of the significant achievements of the Bhumjaithai Party in Thailand is their role in the decriminalization of cannabis, which has allowed a large number of community enterprises and individuals to cultivate and process cannabis. This change has led to the emergence of new products and services derived from cannabis, positioning it as a potential major export commodity. However, this policy has been criticized for prioritizing economic benefits over safety and health, neglecting issues related to cannabis access for children and youth, supporting large capital interests, and lacking effective regulatory and oversight mechanisms. The future of liberalized cannabis depends on practical management, strict laws, and collaboration from all sectors (BBC News Thai, n.d.). A previous study by Shatnataphat^[17] highlighted the necessity of clear, decisive, and comprehensive policies, emphasizing the importance of integration across relevant departments to promote the cultivation and use of cannabis.

The farmer of Nonmalai Community Enterprise reflected that the government should promote cannabis as an economic crop by implementing measures to control cultivation and prioritize Thai farmers. Cultivation should be registered and supported in designated areas. Additionally, imported cannabis flowers without clear origins should be restricted to control the quality of cannabis in the market. Focusing on cultivation by community enterprises can significantly reduce foreign cultivation. A community enterprise must consist of at least seven farmers, which can eliminate up to 80% of foreign cultivation due to the requirements for community enterprises. Additionally, the economic development of cannabis requires efficient support and management from the government, particularly in providing knowledge and guidelines on cultivation and marketing. However, farmers should educate themselves via the internet and market information. This farmer added that even some agricultural academics seek knowledge from farmers. This is because cannabis is a very new crop with insufficient data in the current agricultural education system.

5. CONCLUSION

This paper examined the cannabis growing community enterprise initiative in a case study area, Buriram province in Thailand. The Cannabis Growing Community Enterprise Initiative in Thailand illustrates the efforts and challenges faced by local communities in integrating cannabis cultivation into their agricultural practices. Play La Ploen Community Enterprise and Nonmalai Community Enterprise serve as primary examples of how these initiatives can develop. Play La Ploen Community Enterprise, initially focused on medicinal herbs, expanded into cannabis cultivation with significant support from Khumuang Hospital and private sector funding.

Despite successes in generating income and promoting community health, they face challenges such as high operational costs and management difficulties. Nonmalai Community Enterprise, the first six cannabis plant plot in Thailand, has also seen progress but struggles with sustaining development. This Community Enterprises has overcome regulatory challenges with support from various agencies; however, it continues to face obstacles in maintaining compliance and diversifying its product offerings. The need for comprehensive government support, clear legislation, and effective market management is evident in these community enterprises. Overall, these community enterprises demonstrate the potential of cannabis cultivation to contribute to local economies and community health. However, they also emphasize the necessity of strong government support, effective regulatory frameworks, and continuous support to overcome the various challenges they face.

This paper provided livelihood opportunities available to farmers through this cannabis growing community enterprise. The cultivation of cannabis in Khumuang District, Buriram Province, offers livelihood opportunities for farmers. As some local farmers and people are landless laborers working in rice farming, cassava cultivation, sugarcane, and rubber plantations, cannabis cultivation presents a viable alternative to diversify income sources. The involvement of community enterprises such as Play La Ploen and Nonmalai Community Enterprises highlights the potential for cannabis to provide constant employment and additional income. Play La Ploen Community Enterprise, for instance, has successfully benefited its resources to cultivate cannabis. By transforming part of the Play La Ploen resort into a cultivation area and collaborating with wellness centers like Arokaya Wellness, the enterprise has created a sustainable model that generates income through the sale of cannabis products and attracts tourists for health and wellness experiences. This model demonstrates how strategic partnerships and market-driven cultivation can provide employment for local farmers, even those without land ownership. Cannabis cultivation also offers the opportunity to develop diverse products such as cannabis balm, inhalers, soaps, and beverages, which can be marketed to tourists and wellness enthusiasts. Nonmalai Community Enterprise, despite facing challenges, has shown the potential to create income-generating products from cannabis leaves. Promoting such products can stimulate local economies and provide farmers with new revenue.

This paper looks at the effectiveness of Thai government policies and practical support for the cannabis growing community enterprise initiative. Government policies and practical support play a crucial role in the development of the Cannabis Growing Community Enterprise Initiative in Thailand. The evolution of cannabis policies, particularly the Buriram Model, exemplifies the collaboration between government agencies and community enterprises to promote medical cannabis use. Initially, rigorous regulations and the necessity for MOUs with government agencies ensured controlled cultivation and quality production. The establishment of cannabis clinics in hospitals across Buriram Province made medical cannabis more accessible, demonstrating the model's success until the decriminalization of cannabis in 2022. Despite the relaxation of laws, licensing remains essential for medical-grade cannabis cultivation. Government agencies continue to monitor THC levels and the end use of cannabis products to maintain safety standards. The proposed Cannabis and Hemp Act aims to further regulate cannabis use, focusing on medical applications and preventing recreational misuse. Support from the Thai government extends to financial aid and policy reforms. Loans from institutions like the Bank for Agriculture and Agricultural Cooperatives and budget allocations to hospitals facilitate cannabis cultivation and product development. However, gaps remain between government support and the needs of community enterprises. Effective management, consistent communication, and clear regulations are necessary to align government support with community requirements. The Bhumjaithai Party's efforts in promoting cannabis legislation have significantly impacted the sector, but effective management and strict laws are essential for development. Prioritizing Thai farmers and community enterprises can reduce foreign competition and ensure high-quality cannabis production.

Future research the Cannabis Growing Community Enterprise Initiative in Thailand could benefit from the following ideas. First, future research might focus on issue of the potential of cannabis growing to contribute to the local and national economy. Future research might focus on a comparative study of this topic by applying the research framework to different areas in Thailand. Furthermore, future research might include farmers or community enterprises who have decided to finish their cannabis growing. It might be interesting to explore the barriers they may have confronted and their reasons for ending the cannabis growing.

REFERENCES

- Afsahi, K. (2011). Cannabis cultivation practices in the Moroccan Rif. In G. Potter, M. Bouchard, & T. Decorte (Eds.), *World wide weed: Global trends in cannabis cultivation and its control* (pp. 39–53). Ashgate.
- Bangkok Biz News. (2024). การเปิดเผยข้อมูลด้านสาธารณสุข [Public health data disclosure]. <https://www.bangkokbiznews.com/health/public-health/1107720>
- Benveniste, A. (2022, June 14). *Cannabis is now legal in Thailand. What does that mean for tourists?* The Washington Post. <https://www.washingtonpost.com/travel/2022/06/14/marijuana-legal-thailand-tourists/>
- Berry, S. (1989). Social institutions and access to resources. *Africa*, 59(1), 41–55. <https://doi.org/10.2307/1160762>
- Bloomer, J. (2009). Using a political ecology framework to examine extra-legal livelihood strategies: A Lesotho-based case study of cultivation of and trade in cannabis. *Journal of Political Ecology*, 16, 50–62. <https://doi.org/10.2458/v16i1.21691>
- Bodwitch, H., Polson, M., & Biber, E. (2021). Why comply? Farmer motivations and barriers in cannabis agriculture. *Journal of Rural Studies*, 86, 155–170. <https://doi.org/10.1016/j.jrurstud.2021.05.006>

- Bryceson, D. F. (1996). Deagrarianization and rural employment in sub-Saharan Africa: A sectoral perspective. *World Development*, 24(1), 97–111. [https://doi.org/10.1016/0305-750X\(95\)00119-W](https://doi.org/10.1016/0305-750X(95)00119-W)
- Buriram Town Municipality. (2020). *Buriram Province*. <https://www.buriramcity.go.th/>
- Chankheagla, P. (2022). Cannabis business management model. *Thai Research and Management Journal*, 3(1), 45–52.
- Charoenwisedsil, R., Pisutsan, P., & Matsee, W. (2023). Revisiting Thailand's cannabis legislation. *Journal of Travel Medicine*, 30(4), 1–2. <https://doi.org/10.1093/jtm/taad004>
- Corva, D. (2014). Requiem for a CAMP: The life and death of a domestic U.S. drug war institution. *International Journal of Drug Policy*, 25, 71–80. <https://doi.org/10.1016/j.drugpo.2013.02.003>
- Department of Thai Traditional and Alternative Medicine. (n.d.). *DTAM news*. <https://www.dtam.moph.go.th/>
- Ellis, F. (2000). *Rural livelihoods and diversity in developing countries*. Oxford University Press.
- HealthServ. (n.d.). *List of community enterprises allowed to grow marijuana in Thailand*. <https://healthserv.net/9358>
- Hussein, K., & Nelson, J. (1998). *Sustainable livelihoods and livelihood diversification*. Institute of Development Studies. <https://www.ids.ac.uk/download.php?file=files/Wp69.pdf>
- Kanjanasiripan, K. (2022). Policy promotion of cannabis cultivation in Thailand and legalization. *Journal of Social Science and Buddhist Anthropology*, 7(2), 530–545.
- Kelly, E. C., & Formosa, M. L. (2020). The economic and cultural importance of cannabis production to a rural place. *Journal of Rural Studies*, 75, 1–8. <https://doi.org/10.1016/j.jrurstud.2020.02.009>
- Khongcharoensombat, T. (2019). Cannabis from past to present. *Thai JPEN*, 27, 1–7.
- Medical Cannabis Institute. (n.d.). *Knowledge*. Ministry of Public Health, Thailand. <https://mci.moph.go.th/knowledge.html>
- Meraner, M., Heijman, W., Kuhlman, T., & Finger, R. (2015). Farm diversification determinants: An analysis of Dutch farms. *Land Use Policy*, 42, 767–780. <https://doi.org/10.1016/j.landusepol.2014.10.013>
- Narcotics Control Division, Food and Drug Administration. (2020). *Manual for obtaining a cannabis cultivation permit for farmers* (pp. 3–4). Aksorn Graphic and Design.
- National Center for Complementary and Integrative Health. (2019). *Cannabis (marijuana) and cannabinoids: What you need to know*. <https://www.nccih.nih.gov/health/cannabis-marijuana-and-cannabinoids-what-you-need-to-know>
- Nonthanathorn, P. (2021). The cannabis economy: Introductions. *The Association of Researchers of Thailand Journal*, 26(2), 102–112.
- Office of the Permanent Secretary for Ministry of Agriculture and Cooperatives. (n.d.). *Agriculture and production in Buriram*. <https://data.moac.go.th/>
- ORYOR. (n.d.). *การอัปเดตข่าวสาร [News updates]*. https://oryor.com/media/newsUpdate/media_news/2289
- Parntong, P. (2022). *Cannabis tourism*. <https://onceinlife.co/cannabis-tourism#:~:text=เมื่อพูดถึง%20Cannabis%20Tourism,ถึงกิจกรรมอื่นๆ%20 อาทิ>
- Phiphat, N. (2021). The cannabis economy: Introductions and developments. *Journal of the Association of Researchers*, 26(2), 102–109.
- Rambo, A. T. (2017). The agrarian transformation in Northeastern Thailand: A review of recent research. *Southeast Asian Studies*, 6(2), 211–245. https://doi.org/10.20495/seas.6.2_211
- Ritchie, J., Spencer, L., & O'Connor, W. (2003). Carrying out qualitative analysis. In J. Ritchie & J. Lewis (Eds.), *Qualitative research practice: A guide for social science students and researchers* (pp. 219–262). Sage.
- Shatnataphat, C. (2022). Cannabis promotion policy in Thai society. *Journal of Social Sciences & Humanities*, 48(1), 171–186.
- Suphanchaimat, R., & Pavasuthipaisit, C. (2018). Potential benefits and risks from medicalisation and legalisation of cannabis. *Health Systems Research Journal*, 12(1), 71–94.
- Tao, T. C. H., & Wall, G. (2009). Tourism as a sustainable livelihood strategy. *Tourism Management*, 30(1), 90–98. <https://doi.org/10.1016/j.tourman.2008.03.009>
- Van Der Ploeg, J. D., Renting, H., Brunori, G., Knickel, K., Mannion, J., Marsden, T., de Roest, K., Sevilla-Guzmán, E., & Ventura, F. (2000). Rural development: From practices and policies towards theory. *Sociologia Ruralis*, 40(4), 391–408. <https://doi.org/10.1111/1467-9523.00156>
- Wen, J., Kozak, M., & Ying, T. (2022). Cannabis tourists' perceived constraints to engaging in commercial cannabis tourism overseas: A comparison of first-time and repeat tourists. *Asia Pacific Journal of Marketing and Logistics*, 35(1), 130–148. <https://doi.org/10.1108/APJML-06-2021-0411>
- Worrachaddejchai, D. (2021, May 23). *Cannabis tourism offers ray of hope for battered industry*. Bangkok Post. <https://www.bangkokpost.com/business/2122379/cannabis-tourism-offers-ray-of-hope-for-battered-industry>