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BUDDHIST AGRICULTURE AND THE YOUNG SMART FARMER CONCEPT IN THAILAND

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ABSTRACT

This study explores the concept of the “young smart farmer” and Buddhist agriculture using qualitative research techniques, such as group discussions, in-depth interviews, and participant observation. It highlights the growing recognition among younger generations of the importance of Buddhist agriculture, which focuses on farming without harm and prioritizes environmental sustainability. Buddhist agriculture is seen as a component of sustainable farming, aiming to protect the environment, maintain soil fertility, and support ecological balance. Younger generations identify four key benefits of this approach: economic, societal, environmental, and political. By integrating Buddhist teachings on interconnectedness, this farming method emphasizes organic practices, such as growing heritage grains without synthetic fertilizers or pesticides. These eco-friendly techniques, which rely on natural resources like rainfall, promote water-efficient and less resource-intensive agriculture. The Buddhist principle of interconnectedness encourages symbiotic relationships with the ecosystem, leading to more responsible farming. Additionally, the study notes that sustainable farming practices like regenerative and organic agriculture can enhance the flavor and nutritional value of crops, especially grains, due to the healthier soil and biodiversity involved. These practices are appealing to health-conscious consumers seeking nutrient-rich food.



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INTRODUCTION

The principles of Buddhism that emphasize harmony with nature revolve around understanding and living in accordance with the interconnectedness and interdependence of all life forms. This core Buddhist doctrine states that all phenomena arise and live interdependently with other phenomena. Nothing exists in isolation. This teaches that humans, animals, plants, and the earth are interconnected in a complex web of relationships. Thus, harming the environment ultimately harms ourselves, and caring for nature is caring for all beings.¹

Ahimsa is a principle adopted by Buddhists from earlier Indian traditions. It implies non-violence towards all living beings. In the context of nature, this principle encourages Buddhists to live in a way that causes the least harm to other beings and the environment.² This includes practices like vegetarianism or veganism, organic farming, and avoiding overconsumption. Including all forms of life thus, organic agriculture is defined as agriculture that prioritizes supporting nature and refraining from damaging living things. This ethical approach fosters a sense of stewardship towards the environment, promoting conservation and sustainable practices and avoiding extremes. Three Buddhist beliefs serve as the foundation for this type of agriculture. Firstly, farming practices that uphold moral standards centered on the avoidance of damage to oneself or others. Secondly, focusing on social responsibility and giving. Thirdly, paying attention to outcomes and maintaining a steady income through environmental preservation. In terms of environmental ethics, this suggests a balanced approach to living—not exploiting nature to the fullest for human benefit, nor completely abstaining from using natural resources. It advocates for sustainable and moderate use of resources, ensuring that the needs of both current and future generations are met.³

The European Union (EU) defines a Young Smart Farmer as someone who possesses skills and knowledge and is between the ages of 17 and 45. Since countries in the EU belong to a group of nations with high levels of education, including the Netherlands, Estonia, Finland, and Ireland, farmers there have the capacity to be self-reliant, possess an understanding of contemporary technologies, possess language proficiency, recognize that agrarian culture has a helping mentality, and they are able to impart agricultural information to others who are interested. As a result, the next generation of farmers will be curious and like learning new things through study tours, training, and academic seminars, as well as establishing a varied network and working with academic establishments to support agricultural innovation research.⁴ In order

¹ Yi-Fang Chang, “Sociology of Religion, Basic Principles of Buddhism and Its Possible Action in Present World Crises,” *International Journal of Modern Social Sciences* 4 (2015): 82-93.

² Hannah Jean Brown, “Key Tenets of Classical Buddhist Dharma Leave Space for the Practice of Abortion and are Upheld by Contemporary Japanese Buddhist Mizuko Kuyo Remembrance Rituals,” *Journal of Religion and Health* 58 (2019): 476-489.

³ Dabbert, Stephan, Anna Maria Haring, and Raffaele Zanoli, *Organic Farming: Policies and Prospects* (United Kingdom: Zed Books, 2004), 13-14.

⁴ European Commission, et al. *Needs of Young Farmers: Report I of the Pilot Project: Exchange Programmes for Young Farmers Final* (Belgium: Publications Office of the European Union, 2016), 46, <https://doi.org/10.2762/13075>.

to ensure the longevity of their jobs' longevity, Young Smart Farmers saw themselves as a group of individuals with up-to-date technology skills, knowledge, and understanding. At the same time, the main focuses of farm development today are ecologically friendly agriculture, restoring ecosystem balance, and the ability to shift from "doing a lot, getting a little" to "doing a little, getting a lot." Encouraging and supporting younger farmers is believed to be crucial for the long-term growth of the agricultural sector.⁵

The concept of Young Smart Farmer in the agricultural sector in Thailand must use Buddhist ideas in order to satisfy the demands of sustainable development. By taking the moderate route, that is, refraining from doing damage to oneself or others, a healthy nuclear system can be produced. By fusing contemporary smart farming techniques with the Buddhist values of harmony, mindfulness, and ethical living, a holistic approach to agriculture that is both technologically and spiritually sound may be achieved. In order to increase farming's productivity and efficiency, smart farming makes use of technology like drones, AI, precision agriculture, and the Internet of Things (IoT). Utilizing these technologies in a way that minimizes harm to the environment and improves the quality of life for all concerned parties may be guided by mindfulness. Precision agriculture, for instance, may be used carefully to apply the precise quantity of water, fertilizer, and pesticides needed, minimizing waste and harm to the environment.⁶

A group of persons known as Young Smart Farmers are knowledgeable, skilled, and adept at using technology, particularly in agriculture, and respect ecologically friendly agriculture. Smart farming is becoming increasingly important, especially in today's culture. Data-driven decisions in smart farming have a major impact on the effectiveness and results of agricultural techniques. A Buddhist ethical approach involves considering the long-term consequences of these decisions on the environment and all living beings. This might mean choosing sustainable practices that preserve soil health, water resources, and biodiversity, even if they are not the most economically profitable in the short term.⁷ Just as Buddhism teaches the interconnectedness of all life, smart farming can be seen as a system where various elements like soil health, crop health, weather patterns, and market demands are interconnected. Understanding and respecting these connections can lead to more holistic and sustainable farming practices. For example, using crop rotation and polyculture techniques can enhance biodiversity and soil health, benefiting the wider ecosystem. In Buddhism, the concept of impermanence (*anicca*) is fundamental. Everything is in a constant state of flux, and nothing remains the same. This understanding encourages individuals to be flexible and adaptable to the changes in life. By embracing change, Buddhists are better equipped to handle life's challenges with equanimity and wisdom. The teachings of the Buddha (*Dhamma*) are not static but require ongoing reflection, practice, and learning. Practitioners are encouraged to develop mindfulness, meditation, and ethical conduct, which are all seen as continuous processes of self-improvement and

⁵ Mieczysław, Adamowicz, and Adam, Szepeluk, "Support to Young Farmers as Part of Agricultural Policy of the European Union," *Problems of Agricultural Economics* 3 (2016): 111-112.

⁶ Sarvesh Tanwar, Sumit Badotra, and Ajay Rana, *Machine Learning, Blockchain, and Cyber Security in Smart Environments: Application and Challenges* (United Kingdom: CRC Press, 2022), 98.

⁷ Ruth W. Mwangi, et al. "Selected Emerging and Reemerging Plant Pathogens Affecting the Food Basket: A Threat to Food Security," *Journal of Agriculture and Food Research* 14 (2023): 100827.

spiritual growth. Adaptation and continuous learning as part and parcel of smart farming is an approach to agriculture that uses technology and data to optimize the use of resources, improve yields, and adapt to changing environmental conditions. Farmers who practice smart farming are constantly adjusting their methods based on real-time data, weather patterns, soil conditions, and market demands. This requires a high degree of adaptability, as conditions in agriculture can change rapidly. Smart farming involves the use of advanced technologies like sensors, drones, AI, and big data analytics. Farmers must continually learn and update their knowledge to effectively use these tools and stay ahead of agricultural trends. This continuous learning ensures that they can make informed decisions to improve productivity and sustainability. In agriculture, this might involve constantly adjusting practices based on real-time data about weather, soil conditions, and crop health. From a Buddhist perspective, this continuous learning is akin to the practice of mindfulness—being fully present and aware, open to learning from each moment, and adapting as necessary.⁸

Therefore, the study team believed that applying Buddhist teachings to the Young Smart Farmer concept can emphasize the importance of community and helping others. In smart farming, this could translate into sharing knowledge, data, and technologies among farmers, promoting community-supported agriculture (CSA), and engaging in cooperative resource management. This approach not only fosters a sense of community but also leads to more resilient and sustainable farming practices.⁹ By blending the ancient wisdom of Buddhism with modern smart farming technologies, farmers can create a system that is not only efficient and productive, but also ethical and sustainable. This approach encourages a deep respect for the land and all life forms, mindful use of resources, and a commitment to the well-being of future generations. It represents a convergence of spiritual mindfulness and technological innovation, leading to a path of ethical and sustainable agriculture.

The concept of the "young smart farmer" is a modern agriculturist who uses technological advances such as AI, data analytics, and the IoT for precision farming, efficient resource use, and increased productivity, all while keeping sustainability and ethical considerations in mind. This highlights how a Buddhist approach can guide these young farmers in making choices that are not only economically beneficial but also environmentally sound and socially responsible. Since agriculture is predicated on sustainable growth, it also encourages and supports Young Smart Farmers in their quest to learn more about Buddhist teachings. The world's population has food security thanks in part to agriculture.

In light of the aforementioned explanations of Buddhist perspectives on food and agricultural ethics, the goal of this current research is to provide insights into how Buddhist ethics are applied to food production and agriculture, which could help shape the foundational principles of sustainability and food security in the future.

⁸ Ben C. L. Yu, et al., "Reducing Stigma through Interconnectedness and Compassion: A Buddhism-based Approach to Reduce Stigma toward People with Mental Illness," *Mindfulness* 12 (2021): 1779-1790.

⁹ Ana Paula Pedrosa and Romana Xerez, "Social Policy and Environment in Brazil: Why does Community-supported Agriculture Matter?" *Global Social Policy* 23 (2023): 304-324.

METHODS

This research has a qualitative focus. The researchers aimed to compile information on governmental policy, including a four-year development plan for the Nakhon Chai, Burin provincial group and create a strategy to educate the upcoming generation of clever farmers in Nakhon Chai Burin, Surin, Buriram, and Chaiyaphum provinces.

The research focused on ideas and frameworks related to marketing, farm maintenance, and the creation of incentives for the upcoming generation of farmers. Connections were established through networking with both public and private sectors, while also learning from key success factors to help foster a new generation of informed farmers. Furthermore, information on the capabilities and readiness of future agricultural generations was collected. Moreover, the researchers employed triangulation in terms of data gathering techniques to ensure that the data were correct and trustworthy, involving gathering information on research topics through participant observation, in-depth interviews, individual interviews, group debates, organizing forums, and document study techniques. Here are the specifics:

1. The research employed the examination of papers related to current government policies to gather data from secondary sources. The Nakhon Chai Burin Province group, which includes Nakhon Ratchasima, Chaiyaphum, Buriram, and Surin, has developed a strategic development plan. This plan focuses on creating a development strategy for the next generation of knowledgeable farmers, in collaboration with the relevant agencies within the Nakhon Chai, Burin Province.

2. Primary sources used the following data-gathering techniques:

- 2.1 In-depth interview technique: This involved compiling information on the status and challenges related to educating a new generation of smart farmers. It focused on understanding the identity and role of these farmers, including their approach to plantation management, motivation, and marketing partnerships with both public and private sectors. The interviews addressed key challenges impacting agriculture and the dynamics of smart farmer networks. In-depth interviews were conducted with 10 younger farmers, aged 17 to 45, who were knowledgeable and experienced in eight different agricultural fields: 1) agroforestry, 2) mixed agriculture, 3) mixed farming, 4) shifting cultivation, 5) natural agriculture, 6) novel agricultural theory, 7) fine farming, and 8) organic farming. Additionally, interviews were conducted with members of political parties to discuss their strategies for training the next generation of farmers.

- 2.2 Focus group discussions: Using an interview schedule, the researchers employed brainstorming and mind mapping techniques through the Appreciation-Influence-Control (AIC) method. This process helped analyze the strengths, weaknesses, opportunities, and limitations of the new generation of farmers. Additionally, the group gathered insights on current government policies and the Nakhon Chai Burin Province Group Development Strategy, particularly focusing on agricultural issues, and the knowledge and understanding required for successful farming. The focus group discussions were divided into two sections: a Younger Farmers Group consisting of 5-10 young farmers and a Government Organizations Group made up of 6 individuals from government organizations involved in educating and training the next generation of smart farmers. These individuals were actively engaged in activities such as marketing, advertising, building processing networks, composting, soil conditioning, and designating planting spaces.

2.3 Non-participant observation: This technique involved observing the attitudes, behaviors, and interactions between younger and older generations of farmers, using a checklist. The interactions observed were categorized into three directions: 1) constructive, 2) adverse, and 3) indifferent. These categories were based on how individuals engage in cooperative farming tasks.

Informants

In this study, 30 individuals were selected by purposive sampling and divided into five groups to gather data from key informants:

1. Younger farmers: Ten farmers, aged 17 to 45, who were knowledgeable and experienced in eight different agricultural fields: 1) agroforestry, 2) mixed agriculture, 3) mixed farming, 4) shifting cultivation, 5) natural agriculture, 6) novel agricultural theory, 7) fine farming, and 8) organic farming.

2. Government organizations: Six individuals from government organizations who played a role in educating and training the next generation of smart farmers. They were involved in activities such as marketing and advertising, building networks for processing, composting, soil conditioning, and designating planting spaces throughout Nakhon Chai Burin Province, which includes Nakhon Ratchasima, Chaiyaphum, Buriram, and Surin. These organizations provided training programs for the next generation of farmers, including pest control, inspection of agricultural production standards, and monitoring and evaluation.

3. Private sector: The four members of the private sector, who were essential in promoting marketing, examining manufacturing standards, and educating the next generation of farmers. The Chamber of Commerce in the provinces of Nakhon Chai Burin also contributed to this effort.

4. Nascent farmer network: Eight emerging farmers with knowledge and understanding who provided a training area and networked with the next generation of farmers through study trips. These trips encouraged the establishment of agricultural learning networks, such as the Green Agriculture Network and the Safe Vegetable Production Network in Nakhon Chai Burin Province.

5. Political party members: Two political party members who explored their parties' strategies for training the next generation of farmers in Nakhon Chai Burin Province. They also offered opinions and recommendations for creating plans for future generations of agriculture.

RESULTS

The Lower Northeastern Region 1 group of provinces, comprising Nakhon Ratchasima, Chaiyaphum, Buriram, and Surin (The Nakhon Chai Burin group), features a diverse range of agricultural regions, from lowlands and plateaus to hills and sandy soils. Agriculture in this region often depends on the geography and available natural resources. In addition to animal husbandry, which plays a significant role in the regional economy, farmers focus on cultivating crops suited to the soil and climate of each area. Key economic crops in these provinces include cassava, sugarcane, rubber, and jasmine rice. These crops have a substantial impact on regional and national economic development.

Agriculture is the most significant activity in the provinces of Nakhon Chai Burin due to the frequent exploitation of agricultural land and its role as the primary income source for the majority of the population.

Agriculture not only supports local communities by generating jobs and increasing incomes but also strengthens and sustains both local and regional economies through the raising of various animals and the cultivation of cash crops. The region has the potential to develop organic and mixed agriculture, which could enhance the value of agricultural products and ensure long-term sustainability. Additionally, this could lead to the creation of exportable goods, benefiting the national economy.

Buddhism, a major religion in the province of Nakhon Chai Burin, significantly influences the local culture and lifestyle. As Thailand's official religion, Buddhism forms a foundational cultural and social basis, impacting daily life in this region. Consequently, there is a strong connection between religion and lifestyle, with Buddhism being integrated into agricultural practices, a concept known as «Buddhist agriculture».

Buddhist-oriented agriculture emphasizes farming and living in alignment with Buddhist teachings, which include compassion for all living beings, conservation of nature's balance, and the pursuit of happiness without harming the environment. This approach is lauded as a fundamental principle of sustainable development. Increasingly, young people are engaging in eco-friendly farming practices that reflect Buddhist values, emphasizing resource efficiency and environmental harmony. This lifestyle promotes living in sync with the natural world and includes self-improvement, mindfulness training, and Dharma practice, which many young people seek for greater happiness.¹⁰

Incorporating the philosophical and economic perspectives of young, progressive farmers is crucial. This involves focusing on sustainability, small-scale solutions, and non-materialistic values. Schumacher, known for his phrase "Small is Beautiful," advocated for simple, small-scale solutions over complex, large-scale ones. In discussing Buddhist agriculture, he would likely emphasize local, community-based farming practices that align with sustainable techniques. Schumacher believed that economic systems should prioritize the well-being of people and the planet, not just profit and production. He would highlight how Buddhist agriculture supports the spiritual, mental, and physical well-being of individuals and communities, and shape sustainable farming practices.¹¹

While Schumacher valued traditional wisdom and practices, he did not oppose modern technology. He would advocate for appropriate technology that supports sustainable farming, enhances quality of life, and remains accessible to small-scale farmers. Schumacher would discuss how Buddhist agriculture contributes to both economic and environmental sustainability, offering a model of living that respects the natural world's limits and ensures the well-being of future generations.¹²

According to the study's findings, the present generation acknowledged the importance and value of Buddhist agriculture. This approach involves farming practices that avoid harm to oneself and others. Prioritizing environmentally friendly agriculture, or sustainable agriculture, aims to grow food in a way that protects the environment, maintains soil fertility, and preserves ecological balance. This method reduces

¹⁰ Jeffrey B. Rubin, *Psychotherapy and Buddhism: Toward an Integration* (New York: Springer, 2013), 13.

¹¹ Joy A. Palmer, David E. Cooper, and Peter Blaze Corcoran, *Fifty Key Thinkers on the Environment* (London and New York: Routledge, 2001), 208-209.

¹² *Ibid.*, 207-208.

negative environmental impacts and often includes various eco-friendly practices that respect natural life cycles. Consequently, the younger generation perceives four key advantages of Buddhist agriculture: 1) economic benefits, 2) social benefits, 3) Environment benefits, and 4) political benefits. These advantages are outlined as follows:

1. Economic benefits: The concept of «Buddhist Agriculture in Concept of Young Smart Farmer with Economic benefits» involves a comprehensive analysis that blends Buddhist principles with the innovative, technology-driven approaches of modern farmers. This approach integrates the wisdom of Buddhism with the advancements achieved in industrial and post-industrial economies, aiming to apply these experiences thoughtfully to economic objectives. This is not a critique of the accomplishments of modern and postmodern society, but rather an effort to apply these experiences and accomplishments to a more thoughtful and efficient application of the economic objectives as defined by Aristotle.¹³

Buddhism emphasizes moral, conscientious, and environmentally friendly farming methods, incorporating principles such as compassion, mindfulness, and our interconnectedness with nature. This approach promotes biodiversity, organic farming, and natural pest management, aiming to minimize harm to both humans and the environment. The goal is to grow food in a manner that respects life and the natural order, ensuring the long-term viability of land and resources.

Young Smart Farmers represent a new generation of agriculturists who are technologically adept and open to innovative farming techniques. They utilize tools such as precision agriculture, data analytics, and IoT devices to boost productivity and efficiency. These farmers are typically more adaptable and willing to embrace sustainable and ethical farming practices that align with Buddhist principles.¹⁴

In a case study of Mr. Suksom Thongboon (pseudonym), a young farmer in Buriram Province, said:

“Buddhist farmers emphasize using natural resources with appreciation and without destroying the environment, which allows existing natural resources to be used sustainably in production in the long term without causing damage to the environment. This practice is consistent with sustainable economic development because it reduces environmental costs and helps natural resources. Organic farming or mixed farming that does not use chemicals and synthetic substances can significantly reduce production costs, while also promoting the creation of high-quality products that can be sold at higher prices.”

Buddhist agriculture integrates ethics, sustainability, and economics. The use of smart farming practices can enhance yields, improve food quality, reduce prices, and make resource use more efficient. Furthermore, the growing market for ethically and organically produced food can lead to increased revenue for farmers. Sustainable practices also address environmental challenges, such as climate change, ensuring long-term economic viability.

¹³ Viktor Zinchenko and Mykhailo Boichenko, “Buddhist Economics as a Return to Rational Model of Economic Management,” *Journal of Philosophical Economics* 15 (2023): 227-244.

¹⁴ Ernest C. H. Ng, *Introduction to Buddhist Economics* (Germany: Springer International Publishing, 2020), 5.

A key aspect of this approach is balancing the pursuit of profit with ethical and sustainable practices. Young, innovative farmers face the challenge of navigating market pressures and financial constraints while adhering to their ethical and environmental goals. These young farmers may make decisions based on Buddhist principles that not only benefit the economy but also support social and environmental well-being. This approach promotes social well-being, environmental preservation, and food security on both local and global scales. By adopting environmentally friendly and compassionate practices, farmers contribute to a more sustainable and just world. This strategy serves as a model, demonstrating that agriculture can be both ethically and economically viable.

2. Social benefits: The integration of innovative farming techniques with Buddhist ethical and spiritual principles offers significant social advantages. Buddhism advocates for harmonious coexistence with the natural world, and young, forward-thinking farmers who adopt these principles are likely to embrace more environmentally friendly and sustainable practices. This results in improved soil health, better water conservation, and overall environmental well-being—key factors for the health of society. Sustainable practices ensure food security and resilience against climate change, directly benefiting society.¹⁵ Central to Buddhist teachings are mindfulness and ethical considerations, which are expected to influence young farmers by prioritizing environmental stewardship and the welfare of all living beings. This could lead to reduced use of harmful chemicals and pesticides, enhanced animal welfare, and a focus on ethical food production, all of which contribute to better food quality and more humane farming practices. These improvements can enhance societal health and moral standards.

Buddhist farming also emphasizes social justice and community involvement. Young farmers may become more engaged in their communities, supporting local economies and advocating for fair labor practices. They might also participate in educational initiatives that raise awareness about sustainable farming, leading to a more informed public. This can foster stronger community ties, enhance local food security, and promote more equitable resource distribution. By practicing agriculture aligned with Buddhist values, young farmers contribute to preserving cultural heritage and advancing moral and spiritual values. They serve as role models, encouraging others to lead more ethical and environmentally conscious lives. By combining ancient wisdom with modern technology, these farmers support a dynamic society that values both innovation and tradition.¹⁶ In a case study, Ms. Suksom Thongboon (pseudonym), a young farmer in Buriram Province, said:

“In line with Buddhist ideals, which urge us to try to use the resources we have for our living without causing damage to others, farming helps the community become self-reliant and less dependent on outside goods. Buddhism instructs us to refrain from destroying the environment and to use natural resources responsibly. Sustainable farming practices priorities the preservation and management of natural resources, including soil, water, and plant species. Furthermore, because farming demands attention to detail in order to properly

¹⁵ Zoltán István Privóczki, Csaba Borbély, and Károly Bodnár, “Young Farmers and Sustainable Development.” *Review on Agriculture and Rural Development* 6 (2017): 113-117.

¹⁶ Pakapon Saiyut, et al., “Changing Age Structure and Input Substitutability in the Thai Agricultural Sector,” *Kasetsart Journal of Social Sciences* 38 (2017): 259-263.

care for crops, it provides workers with opportunities to practice mindfulness and concentration. Peace of mind can also be attained by working outdoors.”

Cleaner, healthier food produced through Buddhism-influenced farming practices benefits societies in several ways. Reduced exposure to harmful chemicals and increased availability of organic foods can lead to better overall health. Additionally, the spiritual aspects of this farming approach can promote a more mindful and serene lifestyle, enhancing the community’s mental and emotional health.

3. Environmental benefits: Buddhism emphasizes sustainability and balance, which likely influences young, innovative farmers to adopt resource-efficient practices. These practices include using energy-efficient technology, optimizing organic matter for soil fertility, and implementing water conservation strategies. Such approaches reduce the agricultural carbon footprint and help preserve ecosystems through sustainable resource management. A fundamental component of Buddhism-influenced agriculture is reverence for all living organisms and the interconnectedness of ecosystems. This perspective often translates into practices such as crop rotation, intercropping, and using organic fertilizers, which enhance soil health and promote biodiversity. Healthier soils lead to better agricultural yields and reduced need for chemical inputs, while increased biodiversity helps ecosystems resist pests and diseases.¹⁷

Core Buddhist principles like harm reduction and mindfulness can help farmers to minimize the use of artificial fertilizers and pesticides. By opting for organic inputs and natural pest control methods, young farmers can reduce hazardous materials in the environment, preserve natural balance, and protect wildlife, soil, and water resources. The emphasis on sustainability and harmony with nature in Buddhist agriculture supports efforts to combat climate change. Techniques such as agroforestry, permaculture, and conservation tillage enhance carbon sequestration, lower greenhouse gas emissions, and increase resilience to climate variability. Through these practices, young farmers contribute to global climate change mitigation efforts.¹⁸

Given their appreciation for the interconnectedness of all life, young farmers are likely to prioritize the protection of natural ecosystems and habitats. This may involve planting trees, reforesting areas, or engaging in low-impact farming practices that avoid sensitive ecological zones. Such conservation efforts the preservation of natural processes and biodiversity.¹⁹ Based on data from a young innovative farmer, he stated:

“Agriculture practiced in accordance with the five precepts—number one being refraining from taking human lives, number two being abstaining from stealing, and number three being refraining from using chemical pesticides—is referred to as Buddhist agriculture. Without supplying customers with unclean and unsafe food the dishonest acquisition of

¹⁷ Susan M. Darlington, “Buddhist Integration of Forest and Farm in Northern Thailand,” *Religions* 10 (2019): 521.

¹⁸ Lindsay Falvey, *Religion and Agriculture: Sustainability in Christianity and Buddhism* (Australia: The Institute for International Development, 2005), 113.

¹⁹ Johan Elverskog, *The Buddha’s Footprint: An Environmental History of Asia* (Pennsylvania: University of Pennsylvania Press, 2020), 25.

property is a part of theft. Article 3: Don't behave inappropriately with women. Peaceful farming tricks customers into making further purchases. Point 4: Never tell falsehoods to customers; Point 5: Never use alcohol or other intoxicants. By refraining from employing chemical pesticides, which are substances that endanger the health of both farmers and consumers.”

Young farmers, leveraging their tech-savviness, may embrace and develop environmentally friendly technologies aligned with Buddhist principles of sustainability and harm reduction. This includes using biodegradable materials instead of plastics in farming, employing precision agriculture tools to optimize resource use, and adopting sustainable energy sources. These practices contribute to a more sustainable agricultural industry and reduce the environmental impact of farming.

In conclusion, "Buddhist Agriculture in Concept of Young Smart Farmer with Environment Benefits" represents a forward-thinking approach that merges the technological expertise and creativity of young farmers with the ethical and spiritual depth of Buddhist teachings. This synergy leads to a healthier and more sustainable Earth, enhancing biodiversity, reducing reliance on chemicals, mitigating climate change, promoting sustainable resource use, and preserving natural habitats.

4. Political benefits: Young, innovative farmers engaged in Buddhist agriculture have the potential to lead the way in the development of sustainable agricultural policy. Their success stories and methods may inspire politicians to support and implement laws that promote ethical farming, environmental preservation, and sustainability. This can lead to the establishment of comprehensive agricultural practices that prioritize long-term environmental health and societal welfare. Farmers practicing Buddhist principles are also more likely to engage in political activism concerning moral and environmental issues. They could assume leadership roles in their communities, advocate for like-minded individuals, and promote political agendas that support conservation, rural development, and ethical farming. Their participation can enhance democratic processes and ensure that agricultural policies align with community values and needs.²⁰

The mindfulness, moral behavior, and emphasis on communal well-being central to Buddhist agriculture could serve as a model for ethical governance. These principles may guide politicians and policymakers in creating more responsible, transparent, and humane governance systems. This shift could encourage political actions that prioritize societal and environmental welfare alongside business interests. Furthermore, the environmental and ethical appeal of Buddhist agriculture can enhance a nation's international reputation, especially when combined with advanced, productive farming methods. It can open avenues for collaboration and dialogue on environmental preservation, sustainable agriculture, and cultural exchange. By leading in this niche but increasingly important field, countries can foster global goodwill and potentially influence international agricultural policies towards more sustainable and ethical practices.²¹ Information from the Civil Society Agriculture Commissioner provided in group conversations with political leaders is as follows:

²⁰ Ardeth Maung Thawngmung, *Behind the Teak Curtain: Authoritarianism, Agricultural Policies and Political Legitimacy in Rural Burma/Myanmar* (London, New York, Bahrain: Routledge, 2012), 196.

²¹ Melvin McLeod, *Mindful Politics: A Buddhist Guide to Making the World a Better Place* (Boston: Wisdom Publications, 2006), 59.

“Young Smart Farmers focus on integrated work and harness the collaborative power of various sectors, including the government, academia, civil society, and the private sector, to address and enhance the efficiency of Thailand’s agricultural problems. Along with driving public policies through Hybrid Models of Policy, which integrates both Bottom-up and Top-down approaches to achieve balance and effectiveness. This involves reflecting the issues and needs of farmers to relevant governmental and private sectors, offering solutions to problems for improving farmers’ quality of life and the country’s development direction. For example, the Digital Economy Promotion Agency has projects to support drones for agriculture, providing drones to the Young Smart Farmers for agricultural use. Similarly, TOT aims to provide smart farming equipment to farmers to save time and increase agricultural efficiency, supporting almost all the New Generation Smart Farmers.”

These agricultural techniques can reduce resource-related disputes, ensure food security, and encourage equitable practices, local development, and community well-being. They can help alleviate rural poverty. Such improvements create a more contented and stable community, which benefits any political system.²²

In conclusion, this approach illustrates a complex strategy where political goals intersect with sustainable and ethical agriculture. It highlights how the agriculture industry can influence international relations, political discourse, and policy-making when guided by sustainability and ethical values. This can lead to greater societal stability, responsible governance, and effective climate action. In alignment with Thailand’s 20-year strategic plan, the focus is on enhancing agricultural production through Smart Farming. This involves applying technology and innovation to create smart farms that maximize agricultural yield in both value and volume, while also preparing for climate change impacts. The plan emphasizes sustainable and environmentally friendly resource use and seeks to balance food energy agriculture.

Technologies such as precision agriculture, greenhouse crop production with automated systems and smart sensors, and adjustments based on regional potential are being employed. The promotion of young smart farmers is a key part of this effort, aiming to reform and elevate the Thai agricultural sector towards value-added agriculture. This includes improving product development, processing, packaging, marketing, establishing production standards, and enhancing storage and transportation. The current shift from traditional to value-added agriculture is gaining popularity, particularly among educated young farmers who seek stable incomes and societal respect, rather than enduring debt and poverty associated with traditional farming. This growing trend has led to a significant number of young people becoming committed to agricultural reform.

²² Lindsay Falvey, *Religion and agriculture: Sustainability in Christianity and Buddhism* (Australia: The Institute for International Development, 2005), 109.

CONCLUSION

Upon examining Buddhist agriculture within the framework of Young Smart Farmers, a number of significant themes and factors become apparent. This conversation examines the ways in which traditional knowledge may be combined with contemporary invention, the opportunities and problems this brings, and the possible effects on the agricultural environment. By combining traditional knowledge with contemporary ingenuity, Buddhist farming places a strong emphasis on mindfulness, ethical living, and balance with the environment. It supports actions that respect all living things, support biodiversity, and are sustainable. This calls for organic farming, the least amount of chemical use, and a comprehensive comprehension of the ecology. Data-driven strategies, technological innovation, and a new outlook on agriculture are brought to agriculture by young farmers. To increase effectiveness, productivity, and sustainability, they make use of technologies such as drones, AI, IoT, and precision farming. Their openness to embracing and modifying novel techniques has the potential to revitalize farming approaches. The topic of debate is how these two factors working together may produce a strong and long-lasting agricultural system. Young farmers have the potential to spearhead a movement towards sustainable and ethical food production by merging the efficiency and inventiveness of smart farming with the ethical and mindful approach of Buddhist agriculture. For this research, significant information was found, as follows.

1. Case studies and success stories: Buddhist agriculture in the context of Young Smart Farmer: A young farmer converted her family's conventional farm into an organic one using Buddhist agricultural principles. She reduced dependency on pesticides through crop rotation, composting, and natural pest management, which led to a rise in soil fertility and stronger yields. Because of the farm's growing popularity, organic merchants from nearby cities began offering higher prices for her vegetables. The introduction of sustainable practices and mindfulness exercises benefitted the local community. This set an example for other young farmers in the area, encouraging them to follow in his footsteps. Integrated smart farming technologies with Buddhist ethical principles. She used precision agriculture techniques to optimize water and nutrient use, installed solar panels for renewable energy, and created a harmonious working environment for her staff based on the Buddhist teachings of compassion and respect.

2. Social and economic impact: A shrewd young farmer may choose to invest in property, high-quality seeds, organic fertilizers, and cutting-edge farming technology, including precision agricultural machinery, renewable energy sources, and IoT devices for monitoring crops and soil. The initial expenses for this approach may be higher than in traditional farming due to the technology and organic certification required. However, these costs are offset over time by profits and savings from higher productivity, reduced input costs, and premium product pricing.

Organic and ecologically friendly methods are typically linked to the sustainable and moral values emphasized in Buddhist agriculture. Although such methods may appear more costly at first—due to prices of organic supplies and the labor-intensive nature of certain organic techniques—these expenses are often offset by reduced reliance on expensive chemical pesticides and fertilizers, more water-efficient irrigation, and improved soil that eventually requires less maintenance.²³ In the marketplace, products from ethical and sustainable farms are often priced higher, especially for health-conscious city dwellers.

²³ Chanatporn Limprapoowiwattana, "The Art of Buddhist Connectivity: Organic Rice Farming in Thailand," *Agriculture and Human Values* 40 (2023): 1087-1103.

Young, smart farmers can also benefit from agritourism by offering organic, locally grown produce, farm stays, workshops, and meditation retreats. Community-supported agriculture (CSA) programs, which allow consumers to buy directly from local farms, offer another way to diversify revenue streams and significantly boost profitability.

There is a growing market for food that is produced organically, locally, and ethically. Consumers are increasingly willing to pay more for products that align with their values, particularly when they are aware of the environment and health impacts of their dietary choices. Young, forward-thinking farmers who practice Buddhist agriculture are well-positioned to benefit from this trend. According to Zinchenko and Boichenko,²⁴ the three main pillars of the Buddhist economy are a unique approach to economic management, prioritizing the individual as a spiritual value, and considering labor as both creativity and care for family and friends. The frugal economic model of Buddhist economics seeks to protect the earth from resource depletion and destruction. Individuals in society are encouraged to trust in human nature and to correct the Western approach to work, which tends to treat it as compulsory and focuses on minimizing costs.

3. Policy implications: The influence of Buddhist agriculture on policy may lead to more sustainable agriculture on policy. Their accomplishments and methods could serve as evidence of the benefits of sustainable farming, persuading decision-makers to support organic farming, soil preservation, water management, and biodiversity initiatives. This could result in increased funding for research on sustainable agriculture, tax breaks for organic farmers, and tighter laws governing harmful pesticides. Adopting policies that encourage the practice of Buddhist agriculture by young, intelligent farmers could help revitalize rural communities and attract more young people to agriculture. Governments might develop programs that offer training, financial support, and mentorship to young people interested in ethical and sustainable farming. This could lead to more vibrant rural communities, the preservation of agricultural traditions, and innovation within the farming sector.

The aims of climate action align well with the practices of Buddhist agriculture, which include reducing chemical usage, carbon sequestration through organic techniques, and the preservation of natural environments. By employing these methods, young farmers may influence the policies supporting renewable energy, lowering agriculture's carbon footprint, and conserving natural resources. Buddhist agriculture's emphasis on regional, sustainable food production may also affect food security and safety policies. Governments may create laws to support small-scale farmers, promote local food systems, and ensure that food is produced in a safe, nutritious, and ethical manner. This might involve greater support for regional markets and more stringent food production safety standards.

²⁴ Viktor Zinchenko and Mykhailo Boichenko, "Buddhist Economics as a Return to Rational Model of Economic Management," *Journal of Philosophical Economics* 15 (2023): 230-231.

According to Sarao²⁵ the current profit-oriented global economic system, driven by consumerism and selfishness, is incompatible with sustainable development. Achieving sustainable development requires a reevaluation of attitudes, lifestyles, and policies. From a Buddhist perspective, policy should prioritize the well-being of society as a whole. Buddhism emphasizes restraint, voluntary simplicity, and contentment with minimum needs, viewing the pursuit of luxury and abundance as the root cause of suffering. A new relationship between people and nature should be based on cooperation rather than exploitation. Production should serve the genuine needs of people rather than the demands of the economic system.

Environmental preservation is a cornerstone of Buddhist agriculture. In contemporary agriculture, one way to apply this principle is through organic farming. By avoiding the use of harmful chemicals and maintaining the quality of land and water, organic farming provides customers with safe, toxic-free food while also protecting the environment. Beyond mere output, Buddhist agriculture fosters the development of a morally upright community. To build a robust and sustainable agricultural community, the principles of Buddhist agriculture seek to educate farmers about the importance of sharing, cooperation, and avoiding exploitation in labor or commerce. Reducing suffering and promoting happiness are central to Buddhist philosophy. Modern agriculture can benefit from Buddhist agriculture's emphasis on fulfilling employment that doesn't harm the environment or oneself. Buddhist farmers strive to avoid depleting natural resources that are essential for everyone's livelihood. By engaging in labor that helps both themselves and others, Buddhist farmers cultivate a calm mind and a sense of contentment. In conclusion, Buddhist agriculture, as viewed through the lens of an innovative young farmer, underscores the fusion of information technology, including IoT and cloud computing, with agricultural practice.²⁶ This approach aims to mitigate the environmental impacts of conventional farming, such as water and air pollution, greenhouse gas emissions, and the depletion of natural resources.²⁷ It highlights how environmentally sustainable agriculture aligns with Buddhist values, which advocate for causing no harm to oneself or others, cultivating a mindset open to change, fostering sharing and support, and promoting mindful and efficient consumption. By emphasizing production limits and eco-friendly objectives, Buddhist agriculture advocates for a renewed relationship between humanity and nature—one that is cooperative rather than exploitative—and focuses on production that meets genuine human needs. By integrating Buddhist principles with modern agricultural methods, young individuals can play a crucial role in driving sustainable development and addressing the shortcomings of modern liberal economics.

²⁵ Karam Tej Sarao, "The Buddhist Perspective on Sustainable Development," *Transition Strategies for Sustainable Community Systems*, ed. A. Nayak. (New York: Springer Cham, 2019), 39-50.

²⁶ Para Jansuwan and Kerstin K. Zander, "Getting Young People to Farm: How Effective is Thailand's Young Smart Farmer Programme?" *Sustainability* 13 (2021): 11611.

²⁷ Jali Suhaman, et al., "Smart Plant: A Mobile Application for Plant Disease Detection," *GMPI Conference Series 2* (2023): 52-57.

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