Research Article

MONK-LED PARTICIPATORY HERBAL EDUCATION FOR ENHANCING COMMUNITY WELL-BEING LITERACY

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Abstract

Background and Objectives: Traditional herbal wisdom of rural Southern Thailand, particularly in the Tamot District, faces an acute crisis fueled by accelerating urbanization, a widening generational gap, and a critical disconnect from the local natural ecosystem. This progressive erosion of indigenous knowledge poses a direct threat to public health by fundamentally undermining the community's capacity for self-reliance in health and holistic well-being. To counteract these profound challenges, the research leverages the intrinsic socio-cultural power of Buddhist temples, which function as vital cultural and agricultural centers. The solution involves integrating core ethical Buddhist values, such as non-harm and heedfulness, with sustainable farming practices, a synergy termed Buddhist agriculture. This integrated approach offers a potent, culturally grounded model designed to actively restore the crucial link between human health, community integrity, and the environment. The study aimed to achieve three objectives: To systematically document and revitalize local indigenous herbal knowledge, to cultivate and enhance community health literacy and practical herbal skills, and to establish sustainable monk-led learning centers within temple grounds.

Methodology: The study utilized a Participatory Action Research (PAR) approach in the Tamot district, engaging 35 key community members as co-researchers. The research followed the Plan-Act-Observe-Reflect cycle through four phases. Key tools included in-depth interviews and ethnobotanical walks (Phase 1, Exploration) and community workshops (Phase 2, Co-learning). This led to the collaborative establishment of three herbal gardens (Phase 3, Garden Development). The final stage focused on group discussions, feedback sessions, and observed behavioral shifts (Phase 4, Evaluation and Refection). Data analysis was conducted using Thematic Analysis, supported by Triangulation and Member Checking.

Main Results: The project achieved significant practical and spiritual results, substantially improving the knowledge of participants about local herbs and preventive health, and resulting in the cultivation of more than 30 medicinal species in three new learning gardens. The initiative successfully linked Dharmic principles to tangible action: Ecological stewardship (Mettā and Karunā) was realized through monk-led cultivation emphasizing non-harm; Community harmony was

promoted through strengthening the intergenerational dialogue, led by women and elders; and Self-reliance in health was enhanced, as participants gained confidence in using herbal remedies responsibly, aligning with Appamāda (Heedfulness). This validated the efficacy of the holistic model in fostering both ecological awareness and resilient community well-being.

Involvement to Buddhadhamma: This finding was consistent with the development of wisdom and morality by demonstrating a shift toward holistic self-reliance. The monk-led approach leverages moral authority, ensuring that herbal knowledge is applied with ethics and responsibility in community health and resource use. The participatory learning fosters practical wisdom (Paññā) as participants gain critical health literacy, enabling informed, disciplined choices over passive consumption. Ultimately, the successful establishment of the learning centers signifies the community's commitment to sustainable conduct (Sīla) and spiritual grounding.

Conclusions: This research successfully validated the monk-led educational model to improve community well-being and health literacy. All three objectives were successfully achieved: 1) Local wisdom was revitalized; 2) Health skills were promoted; and 3) Sustainable, inclusive learning centers were established at the temples. This culturally grounded model is highly adaptable and ready for replication in similar rural communities across Southeast Asia to promote grassroots health, education, and ecological resilience.

Keywords: Community Well-Being, Participatory Learning, Monk-Led Education, Herbal Learning Gardens

Introduction

Traditional herbal wisdom in many rural communities in southern Thailand, orally inherited from ancestors, serves as a vital resource for natural preventive and curative healthcare. This knowledge originated from continuous trial and error (Prasopsuk, 2023) and careful observation of plant properties, sometimes integrating supernatural beliefs or the doctrine of signatures (e.g., Using Physalis or Red-Colored Plants). However, rapid social change, including urbanization and modernization, is severely eroding this invaluable knowledge base (Erisa, 2025); (Kanu et al., 2024). Most local herbal healers (Chanprasit et al., 2020) are the main holders of knowledge; They are elderly, while younger generations show decreasing interest. This trend raises serious concerns that this essential herbal knowledge will be lost in time (Cherdgotha, 2020), threatening community health due to lack of access to affordable treatment alternatives and threatening cultural continuity (Posey, 2000).

Despite rapid social changes, Buddhist temples remain crucial multi-functional institutions in rural Thai society, serving as community hubs for cultural preservation, education, and ecological stewardship (Kaza & Kraft, 2000); (Pangthipampai, 2024). This role is based on the concept of Buddhist agriculture (Darlington, 2019); (Phra Thepratanamuni (Saipong Anomapanno/Kongsin) et al., 2014), a new framework that integrates ethical and ecological principles from Buddhist teachings (Berkes, 1999). It applies the Majjhima Patipada (Middle Path) principle, aiming for non-harming of self and others, promoting diligence, moderation (Live Simply, Eat Simply, Use Simply), and reducing desire. Critically, this framework is strongly aligned with Thailand's 20-Year National

Strategy (2018-2037) and public health policies, specifically "Strategy 3 Human Resource Development," which focusses on: 1) Promoting health literacy and supportive environments; 2) Developing quality Thai traditional medicine/alternative medicine services; 3) Ensuring adequate standards for herbal medicine; and 4) Establishing robust, self-reliant community health systems based on local wisdom. Therefore, integrating Buddhist agriculture offers a compelling mechanism for revitalizing traditional practices and promoting ecological and health consciousness in communities, consistent with the nation's sustainable development goals.

The preservation of traditional herbal knowledge and the utilization of local plant resources for health and treatment directly contribute to enhancing community health literacy through ancestral wisdom (Pimapunsri, 2020). Recognizing the value and abundance of local herbs, providing proper knowledge, support for conservation, and appropriate use enables communities to maximize herbal benefits (Minkler & Wallerstein, 2017), fostering stewardship over resources and creating opportunities for supplementary income or new local occupations (Sawaengkaew, 2022). Furthermore, the Buddhist temple (Wat) is crucial as a holistic learning center, with the role of monks (Phra Kumron Ratiko (Samran), 2022), through propagation, welfare, and education-being vital to managing the temple as an educational hub across six dimensions, including lifelong education, skill development, cultural learning, and spiritual space (Phrapalad Nutthawut Anantho et al., 2020). Therefore, the essential mechanism that needs exploration and development involves utilizing spiritual leadership (Monks) in conjunction with local wisdom and the Buddhist agriculture concept (Shiva, 2016) as a key tool to effectively address the loss of traditional knowledge and sustainably improve community well-being (Wasi, 2023).

This study focuses on the Tamot district in Phatthalung province, a rural area where these dynamics are particularly evident. By engaging monks, farmers, traditional healers, women, and youth, the research investigates how participatory herbal learning within Buddhist agricultural contexts can enhance community well-being literacy. The project aims to document and protect local herbal knowledge, promote practical health skills, and reuse temple spaces as centers for holistic education that blend spiritual, ecological, and health dimensions.

To achieve this, the study employs Participatory Action Research (PAR), a methodology that prioritizes collaboration and empowerment. PAR supports co-creation of knowledge and collective problem-solving, ensuring that interventions are culturally resonant and sustainable (Chambers, 2008); (Erisa, 2025). Ultimately, this research seeks to demonstrate how spiritual leadership, indigenous wisdom, and participatory learning can converge to promote holistic well-being and foster sustainable rural development.

Objectives

The study aimed to achieve three objectives: To systematically document and revitalize local indigenous herbal knowledge; To cultivate and enhance community health literacy and practical herbal skills; and To establish sustainable monk-led learning centers within temple grounds.

Methodology

This study used a Participatory Action Research (PAR) approach because PAR emphasized collaboration, empowerment, and co-creation of knowledge between researchers and participants throughout the entire research process (Chambers, 2008); (Erisa, 2025). This methodology ensured that the results were both culturally relevant and sustainable. Rather than viewing local people merely as "Subjects," this research positioned them as active agents in identifying problems, generating deeper understanding, and implementing practical solutions that align with their challenges and the loss of herbal wisdom in the Tamot district, Phatthalung province. The study population comprised all members of the Tamot district community involved in herbal medicine and temples. The purpose sampling technique was used to select a sample of 40 participants who represent key actors in learning and knowledge transfer, divided into five main groups: Wat Tamot monks (2 Individuals) selected for their involvement in agriculture and environmental roles; A spiritual leader (1 Local Imam); Local herbal healers/elders (10 Individuals) who are recognized public health volunteers; Community group representatives (10 individuals) from groups such as organic rice, stingless bee farmers, and homestay tourism groups, selected for their commitment and resources; and Youth aged 15-18 (17 Individuals) selected from the district's local school.

Research Tools

The primary tools for this Participatory Action Research (PAR) study comprised four main types: 1) In-depth Interview guidelines, used to gather deep insights into local wisdom, practices, and beliefs; 2) Focus group discussion guidelines, utilized for brainstorming and co-designing project activities; 3) Participant observation guidelines, used to record activities in the field (Such as Herbal Gardening); and 4) Participatory tools used in practical sessions, including herbal plant classification, herbal remedy preparation workshops and the development of a community strategic plan related to community well-being.

Validity and Reliability (Trustworthiness)

This qualitative research focused on ensuring the trustworthiness of the data through established criteria. Credibility was established using the technique of triangulation by comparing data from three sources: The research team, participating community members, and monks/spiritual leaders; Specifically, cross-referencing interviews (Verbal Accounts), observations (Practices), and documented materials (Recorded Wisdom). Furthermore, member checking was utilized by taking the analyzed data back to the sample group for verification of accuracy. Transferability was ensured by clearly detailing the context of Tamot, a dual-faith community where Buddhists and Muslims coexist peacefully and harmoniously.

Data Collection

Data collection was systematically carried out following the PAR cycle (Plan-Act-Observe-Reflect) over a period of seven months, utilizing the research tools previously specified. Data were continuously gathered throughout the activity period and involved audio/video recording "Where Permission was Granted," along with detailed field notes to ensure a comprehensive capture of the intervention process and outcomes.

Data Analysis

Qualitative data analysis was systematically conducted following a structured process: Transcription first involved converting all audio/video recordings of interviews and focus groups into text. Next, coding was performed by the main researcher and a co-coder, who read the data repeatedly to establish open codes based on actual field data, subsequently grouping similar codes. This process led to "Thematic Analysis," where open codes were organized into "Axial Codes and Major Themes" relevant to the research objectives (e.g., Monk-Led Knowledge Transfer or Increased Herbal Literacy). To ensure the rigor of interpretation, an inter-coder check was utilized, where the co-coder verified coding consistency (Aiming for at least 80% Agreement). Finally, the presentation of results involved narrating the analysis findings, supported by participants' direct quotes to substantiate the discovered themes.

This method ensured that vital lived experiences and indigenous knowledge held by monks in the Tamot district, farmers, traditional healers, women's groups, and youth were recognized and utilized, profoundly shaping both the learning process and the research findings. Study Setting and Participant Engagement.

The research was carried out strategically in the Tamot district, Phatthalung province. This specific area was selected because of its reputation for rich traditional herbal knowledge that, despite its value, was at considerable risk of being lost. Furthermore, local Buddhist temples were deemed ideal research sites, as they function as crucial social and knowledge centers, perfectly aligning with the objective of establishing sustainable learning hubs. Participant recruitment utilized purpose-based sampling, focusing on individuals with essential knowledge or significant community roles. The invitation process was facilitated by key figures, including local monks and community leaders, resulting in 35 key community members serving as active co-researchers throughout the study.

The Interconnected PAR Cycle

The research unfolded over four interconnected phases, explicitly demonstrating the cyclical nature of PAR, where the outcome of one stage directly informed the planning, acting, observing, and reflecting of the next.

Phase 1: Exploration and documentation served as the initial observe and reflect stage. The focus was on deep knowledge extraction through four ethnobotanical walks and 15 in-depth interviews with elders and traditional healers, complemented by community mapping and storytelling. These activities were instrumental in revealing the community's rich yet fragile herbal knowledge. These critical data then directly guided the planning for the content and focus of the capacity-building efforts in Phase 2.

Phase 2: Co-learning and capacity building transitioned into the act and observe phase. This involved running six community learning workshops, where participants gained practical skills in safe herbal preparation and preventive health care. Intergenerational knowledge exchange was central, allowing younger members to digitally record shared wisdom. Observing skill acquisition following

the act led to a vital Reflection on the need for practical, hands-on application, consequently prompting the Planning for the physical gardens in Phase 3.

Phase 3: Herbal garden development was the second major act and observation phase of the study. This involved the collaborative creation of three herbal gardens, within temple grounds and public spaces, which served as living classrooms rooted in Buddhist agricultural values. Observing the practical application and utilization of these gardens informed a reflection on resource needs for sustainability, which subsequently guided the final plan for the creation of the community manual in Phase 4.

Phase 4: Evaluation and reflection served as the final reflection and plan stage. The focus was on synthesizing outcomes through group discussions, feedback sessions, and observed behavioral shifts. This final collective reflection culminated in the tangible product of the community herbal manual, designed to ensure the long-term preservation and wider use of the gathered indigenous knowledge.

Ethical Safeguards and Data Integrity

Throughout the research, robust ethical procedures were followed. Formal approval and consent were secured from both community leaders and the chief abbots of the participating temples. All participants provided their informed consent and were guaranteed the privacy and confidentiality of their data. For data analysis, qualitative information derived from interviews, observations, and transcripts was subjected to thematic analysis involving systematic coding to identify key knowledge themes. The trustworthiness of the findings was ensured through triangulation (Cross-referencing Multiple Data Sources) and member checking, where preliminary findings were reviewed by the co-researchers to confirm accuracy and contextual validity.

The flow from light green to dark green in the tree diagram emphasizes the integration of core Buddhist principles with practical activities. This realization occurs through monk-led education and participatory learning, focusing on local herbal knowledge and well-being literacy, all sustained by the operation of the (Buddhist Agricultural Gardens or Herbal Learning Gardens). White line linkage: The white line connects the dark brown and light brown sections, which are linked to the trunk. This signifies causality or (Causal Flow) and mutual support. Specifically, it illustrates how Dharmic principles and indigenous wisdom (Dark Brown) serve as the foundational roots that define the structure of the activities and processes, which are then realized through practical herbal activities in Buddhist agricultural gardens. The feedback loop from light brown to dark brown indicates that positive outcomes lead to social strengthening, which in turn reinforces faith and the sustainability of Buddhist principles (Light Brown) as, in Figure 1.

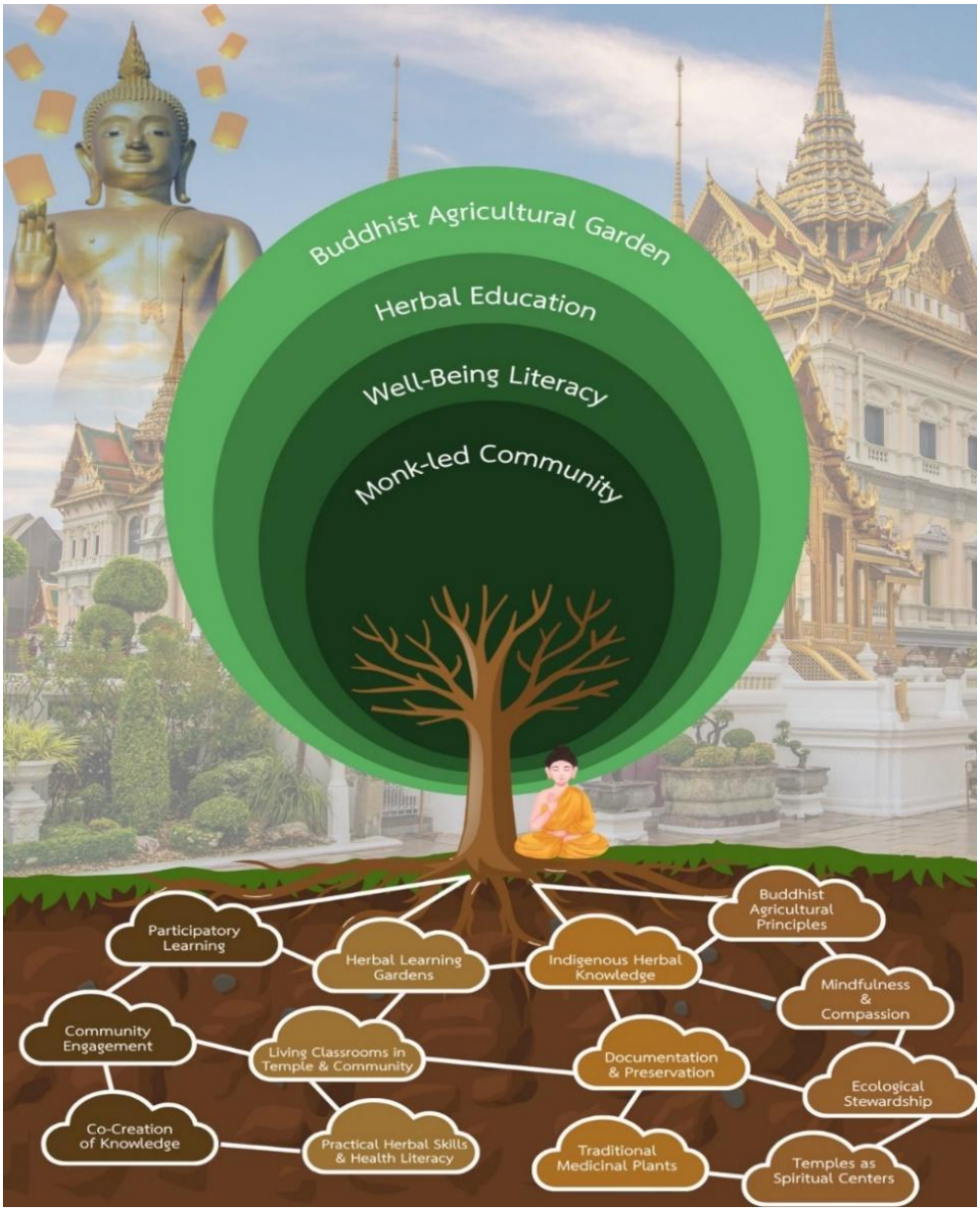

Figure 1 Conceptual Framework Diagram: Well-being Literacy through Monk-Led Participatory Herbal Education in Buddhist Agricultural Gardens

Data Interpretation

Mechanism of Integration: Promoting Well-being Through Buddhist Agriculture.

This project is founded on the strong integration of four core components, with monk-led education serving as the primary driving mechanism. Monks function as moral authority and key coordinators, and their leadership grants cultural credibility to the project, utilizes the temple grounds as a learning center, and incorporates Buddhist principles such as Mettā (Loving-kindness), Karunā (Compassion), and Appamāda (Heedfulness) as the operational framework.

The next vital component is herbal education, which constitutes both the content and the indigenous wisdom of the project. This herbal learning is integrated with the monks' leadership

to document and revitalize the disappearing wisdom. The ultimate goal is to enable the community to achieve self-reliance in health at the primary care level. All practical activities take place within the (Buddhist Agricultural Garden or Herbal Learning Garden), which serves as both the operational space and the natural classroom of the project. The garden is integrated with Buddhist ethics, adhering to Sammā Ājīva (Right Livelihood) and Ahimsā (Non-Violence) in organic cultivation. It functions as a source of raw materials and a venue for participatory learning. The results of this entire integration led to "Community Well-being Literacy," the ultimate outcome sought by the project. This increased literacy results from herbal learning, which equips villagers with self-care skills, and from joint practice, which fosters community bonds and ecological awareness in a holistic manner.

Integration Mechanism: The Core Process.

The research employs a systematic mechanism of collaboration to achieve the restoration of indigenous wisdom and sustainable development. The core process centers on the continuous integration of three essential concepts: "Participatory Learning," which ensures that villagers, particularly the knowledge-holding elders, are involved equally in planning and decision-making; "Community Management," which utilizes the principles of human and environmental resource stewardship led by the community itself to foster a deep sense of ownership and sustainability; and Finally, "Co-creation of Knowledge," This co-creation process, resulting directly from participatory learning, leads to the merging of Indigenous Herbal Knowledge with modern understanding, thereby generating new, contextually relevant knowledge crucial for local development.

Outputs and Action Space.

The core driving mechanism directly supports the operational areas and knowledge base, generating the project's key outputs and action spaces. Specifically, "Herbal Learning Gardens and Living Classrooms" in the temple and community are established and managed through Community Management, serving as vital natural classrooms for hands-on herbal learning. Consequently, this active engagement enables the systematic archiving and preservation of indigenous herbal knowledge through the co-creation of knowledge process, ensuring accuracy and preventing knowledge loss associated with the passing of elders. Ultimately, participation in garden-based activities and learning sessions results in a measurable increase in practical herbal skills and health literacy among community members.

The ultimate outcomes and the foundation of the project are firmly anchored in the core Buddhist values that guide the long-term success of the initiative. Specifically, the management of the herbal gardens is based on the Buddhist agricultural principles, reflecting the ethical emphasis on non-harm (Ahimsā) and right livelihood (Sammā Ājīva). Furthermore, engaging in practical work with herbs and activities within the gardens, acting as "Living Classrooms," actively promotes mindfulness (Sati) and compassion (Mettā/Karunā) toward both yourself health and others. This commitment to practice enhances ecological stewardship, as increased environmental awareness leads directly to the sustainable maintenance of the local natural environment.

Finally, the project successfully reaffirms the temple's foundational role as a "Spiritual Center," extending its spiritual authority to champion community well-being and sustainability throughout the region.

Comprehensive Summary of the Integration Mechanism

Community management underpinned by participatory learning is the key that transforms the herbal garden into a "Living Classroom," generating knowledge and skills (Health Literacy) that are aligned with the Dharmic principles in all dimensions, ultimately supporting sustainable well-being. This mechanism, driven by "Monk-Led Education," systematically integrates the co-creation of indigenous herbal knowledge with local resource stewardship to create practical action spaces. These activities not only foster practical herbal skills and strengthen community bonds, but also actively promote mindfulness and compassion, ensuring that the restoration of local wisdom is fully compliant with Buddhist agricultural principles and leads to enduring ecological stewardship and sustained community health self-reliance, firmly anchored in the temple's moral authority.

Results and Discussion

This Participatory Action Research (PAR) successfully achieved all three objectives by establishing a clear operational link between the revitalization of wisdom, health enhancement, and the temple's role as a driving mechanism. The study first fulfilled objective 1 by documenting more than 30 species of traditional medicinal plants (e.g., Eurycoma Longifolia, Justicia Gendarussa) as shown in Table 1 within Buddhist agriculture gardens, as shown in Figure 2.

Table 1 Medicinal Plants and Herbs

No.	English Common Name	Scientific Name
1	Tongkat Ali/Malaysian Ginseng	Eurycoma Longifolia
2	Willow-leaved Justitia/Gendarussa	Justicia Gendarussa
3	Champuun/Luzon Anaxagorea	Anaxagorea Siamensis
4	Freshwater Mangrove	Barringtonia Acutangula
5	Mai Nuan Wood	Siphonodon Celastrineus
6	Thai Mao	Antidesma Thwaitesianum
7	China Root Smilax/Glabrous Greenbrier	Smilax Glabra
8	Wild Galangal/Greater Galangal	Alpinia Galanga
9	Cowa Tree	Garcinia Cowa
10	White Root King	Clerodendrum Petasites
11	Hairy Uvaria	Uvaria Rufa
12	Laurel Clock Vine	Thunbergia Laurifolia
13	Dog's Paw Hammer Wood	Aporosa Microcalyx
14	Mickey Mouse Plant/Kamlang Hanuman	Ochna Integerrima
15	Black Vine	Dioscorea Bulbifera
16	False Daisy/Elephant's Foot	Elephantopus Scaber
17	Shoebutton Ardisia	Ardisia Elliptica
18	Dragon Stomps Factory (Local/Medicinal Vine)	Ficus Heteropleura

Table 1 Medicinal Plants and Herbs (Continued)

No.	English Common Name	Scientific Name
19	Bird Coconut Macaranga	Macaranga Siamensis
20	Uvaria	Uvaria Siamensis
21	Pink Mempat/Mountain Mempat	Cratoxylum Formosum
22	Fishtail Palm	Caryota Urens
23	Wrigthia	Wrightia Religiosa
24	Thai Malaeb	Atalantia Monophylla
25	Velvet-leaf Miliusa	Miliusa Velutina
26	Mui/Paniculate Grewia	Grewia Paniculata
27	Chum Saeng	Xanthophyllum Virens
28	Ma Khang	Xylopia Vielana
29	Siam Weed/Bitter Bush	Chromolaena Odorata
30	Agarwood/Eaglewood	Aquilaria Crassna
31	Devil Tree/Indian Teak	Alstonia Scholaris

Figure 2 Survey of Herbal Plants in the Buddhist Way Agricultural Garden

Note on ethical compliance: The project was fully in compliance with ethical requirements. Parental consent was secured for the publication of all photographs involving minors, ensuring adherence to child safeguarding principles. Furthermore, the entire research methodology has received formal approval from the research ethics committee, confirming compliance with the highest academic and ethical standards.

This crucial effort confirmed the urgent need for preservation due to the rapid erosion of knowledge among youth, serving as the foundational database for all subsequent activities. This knowledge was directly applied in the pursuit of objective 2, were participatory workshops and hands-on activities distinctly improved community health literacy and practical skills, as shown in Figures 3.

Figure 3 Practical Workshop on Utilizing Local Herbs to Make Herbal Compress Balls for Women, Farmers, and Youth

Specifically, women and youth showed increased confidence in preparing products such as herbal balms, demonstrating enhanced self-care capacity. The resultant intergenerational learning, which saw youth take the lead in digital documentation guided by elders, was strongly aligned with Saengsin et al. (2023) regarding the positive role of technology in motivating younger generations and strengthening social cohesion. Furthermore, the establishment of three herbal gardens, two on temple grounds, served as living educational spaces, fulfilling objective 3 and

serving as tangible symbols of the integration between the spiritual, ecological, and health dimensions of well-being. Ultimately, the participatory nature of the project resulted in genuine community empowerment, institutionalizing knowledge through the creation of a community herbal handbook and enhancing the community's capacity for sustainable self-care and health promotion, suggesting strong potential for scaling and adaptation in similar rural Buddhist agricultural settings, as shown in Figures 4, 5, and 6.

Figure 4 Land Preparation for Establishing a Local Herbal Garden

Figure 5 Commercial Use Training for Herbal Compress Balls

Figure 6 MOU for Shared Utilization of Medicinal Herbs in Buddhist Agricultural Gardens by Multi-Sectoral Partners

Discussion

The significant findings from this study powerfully underscore the role of the participatory herbal learning model as a critical pathway to transformation. Deeply rooted in the distinct context of Buddhist agriculture, this approach is uniquely capable of significantly elevating a community's well-being literacy. Crucially, the model is designed to be more than a simple mechanism for knowledge transfer. Instead, it fosters a harmonious integration of traditional indigenous knowledge with essential practical skills and deep spiritual values. This unique synthesis gives rise to a holistic framework highly effective in simultaneously addressing two core societal challenges: Health promotion and the achievement of environmental sustainability. Conceptually, this framework is aligned with the principles of ethnoscience and human ecology, centralizing the essential role of traditional ecological knowledge (TEK) (Berkes, 1999).

The profound resilience of the model stems directly from its Buddhist foundation. As Kaza & Kraft (2000) suggest in their exploration of the Buddhist canon, these ecological roots are fundamentally robust, possessing the strength to support continued growth across many reasons. In practice, the achievement of environmental sustainability is directly linked to the commitment to non-harming agriculture, which necessitates actively avoiding chemicals and protecting biodiversity. This practice transcends mere regulatory compliance, as it is ethically driven by the Buddhist principles of restraint and compassion, ensuring that environmental stewardship is guided by deep spiritual values.

The use of Buddhist principles (Dharma) in creating learning centers represents a crucial integration of moral and ethical principles into education, aiming to achieve balanced development in both intellect (Panya) and mind/spirit (Jitjai). This approach to developing a learning center does not merely focus on promoting academic knowledge and skills. Instead, it emphasizes the development of virtues, ethics, and a way of life that demonstrates responsibility toward society and the environment (Pangthipampai, 2024).

Furthermore, the model's objectives resonate with historical indigenous movements, aiming to strengthen the ecological base of agriculture. Thus, making the agricultural system more robust and sustainable through methods that preserve soil health, biodiversity, and natural resources, and actively promote self-reliance among community members and farmers (Shiva, 2016). This focus on self-reliance empowers individuals to manage their fundamental needs independently, reducing over-reliance on external factors. The model also aligns with the principle of self-governance according to one's own culture and language, emphasizing that culture and language are not merely abstract concepts but are deeply intertwined with the specific context of each area and its biological diversity. This understanding entails protecting culture, language, and biodiversity simultaneously (Posey, 2000).

Under the guidance of monks, who are the successors of the Buddha's will, practicing and disseminating the Dharma, Thai society highly values the Sangha (Monkhood). This is because monks are regarded as respected community leaders to whom the community offers support and demonstrates reverence (Phra Kumron Ratiko (Samran), 2022). This respect and support are channeled through the direct engagement of the community, local herbs, and Buddhist agricultural gardens, situating the model within a local context of necessity. Due to the community's self-reliant livelihood based on agriculture, specifically rice farming and rubber tapping, residents often treat illnesses or discomfort using traditional folk herbal medicine. This necessity has consequently raised awareness among community members about conserving the wisdom related to herbal formulas, ensuring their continuation within the community. Furthermore, it instills a sense of cherished pride in the indigenous herbal wisdom, which is considered the community's cultural heritage (Prasopsuk, 2023). Through this context (Referring to the Community's Self-Reliance in Using Traditional Herbal Medicine), the learning model utilizes hands-on activities and knowledge-sharing to cultivate a vital, deep-seated connection.

The indispensable relationship among people, plants, and place is essential for sustaining both cultural heritage and ecological balance. Furthermore, the model integrates the "Thai Way of Life" and "Local Wisdom" with diverse artistic fields, which requires integrated collaboration among various expert groups such as chefs, artists, and art designers from different disciplines, local philosophers or artists, new generation entrepreneurs, and local government agencies. This integration does not necessarily have to be limited to community members alone but can welcome external individuals (Outsiders) to work together in a manner of "Creating Shared Values." That is to say, it is not necessary for every group to undertake the same activities or collaborate in every process of development, as each group possesses different potential and limitations, but they can still create shared value (Pimapunsri, 2020). Ultimately, the model serves as a powerful source of inspiration and support for a diverse range of stakeholders, including students, public health volunteers, the elderly, farmers, and community enterprises, in their collective efforts toward sustainable development (Minkle & Wellerstein, 2017).

This locally focused model is effectively reinforced by the strength of communal living. Grouping and organizing social activities in both rural and urban settings fundamentally involves

this communal foundation. The community, functioning as an immune system, provides essential psychological, social, and economic resilience and protection for its members. Consequently, it is vital that everyone engages in learning about community life and actively participates in building a strong sense of community. Furthermore, the development of "Community Spirituality" is the precursor to achieving spiritual well-being or intellectual well-being. As such, the community serves as the major pathway (Highway) to intellectual well-being (Wasi, 2023).

One of the most compelling outcomes is the bridge built between generational divides within the community. As younger generations actively engage with elders and traditional healers within the self-sustaining structure of the "Living Classrooms" and community-managed gardens, there is a renewed sense of cultural pride and identity. This mechanism of ongoing intergenerational dialogue does more than preserve herbal knowledge; It demonstrably contributes to revitalizing community cohesion, fosters mutual respect, and lays the foundation for strengthening resilience against the homogenizing pressures of modernization and globalization. In this sense, the project serves as a cultural safeguard, ensuring that indigenous wisdom continues to inform contemporary health practices and ecological stewardship.

The positioning of Buddhist temples as central hubs for learning and ecological stewardship further distinguishes this approach. Temples, traditionally spiritual sanctuaries, are reimagined as inclusive centers that link spiritual teachings with practical community needs such as health literacy and environmental care. This alignment resonates with Buddhist principles of compassion, mindfulness, and interconnectedness, which provide a culturally sensitive and spiritually meaningful framework for rural health promotion. Unlike conventional health education programs that may overlook the cultural context, this model integrates faith and practice, thereby enhancing its relevance and acceptability within the community.

However, sustaining the momentum of this participatory herbal learning initiative requires addressing several challenges. Chief among these is maintaining active youth engagement, which is critical for generational continuity. Social dynamics in rural communities are rapidly evolving due to migration, education, and technological influences, which can create barriers to traditional knowledge transmission. Thus, ongoing support from local institutions, including Buddhist temples, government agencies, and NGOs, is essential to provide resources, incentives, and platforms for youth participation. Moreover, adaptive strategies will be necessary to ensure that the learning process remains relevant in changing socio-economic contexts.

Future research could contribute significantly to understanding the long-term impacts of this model on community health outcomes and ecological sustainability. Longitudinal studies could evaluate changes in health indicators, the use of herbal remedies, the conservation of biodiversity, and the socio-cultural resilience over time. Additionally, expanding this research to diverse cultural settings in southeast Asia could illuminate how contextual variables influence the effectiveness and adaptability of the model. Comparative studies would also enrich theoretical frameworks related to community health literacy, indigenous knowledge systems, and culturally grounded education.

Originality and Body of Knowledge

Explicit knowledge contribution: The "Monk-Led Sustainable Community Well-being Mechanism" based on explicit knowledge contribution derived from this research, the "Monk-Led Sustainable Community Well-being Mechanism" is based on Buddhist agriculture. From Figure 7, the model comprises core, newly established components designed for community transformation. Central to the mechanism is Participatory Action Research (PAR), a transformative process that promotes "Community Empowerment" by positioning women, youth, and elders as co-creators and custodians of indigenous wisdom. Another vital element is "Eco-centric Herbal Conservation" (Ethnobotany & Ecology), realized through the establishment of living herbal learning gardens within the temple grounds, which seamlessly integrates spiritual principles (Compassion and Mindfulness) with ecological practices. To ensure knowledge continuity, the model includes a defined "Mechanism for Intergenerational Knowledge Transfer," where elders serve as knowledge holders and youth act as digital documenters. Furthermore, the model incorporates an economic dimension through Income generation from "Indigenous Wisdom," utilizing practical workshops (Such as Making Herbal Compress Balls) to transform traditional knowledge into entrepreneurial skills and a sustainable source of income, as shown in Figure 5.

The Role of Temples and Scalability Potential: This research expands the understanding of the temple's role, emphasizing that temples function as Multifaceted Hubs that seamlessly integrate Buddhist principles (Compassion and Mindfulness) with health and ecological systems. The utilization of the spiritual leadership of the monks as the primary driving mechanism for knowledge transfer renders this model culturally sustainable and presents it as a replicable and scalable model for other rural Buddhist agricultural communities across southeast Asia. This approach aligns with the achievement of the Sustainable Development Goals (SDGs) related to good health, quality education, and life on land.

Input 1-4: This research employs an integrated research process that combines Participatory Action Research (PAR), empowerment, and the co-creation of knowledge, serving as an effective, action-oriented methodology to achieve social change. The work is fundamentally based on the strategic integration of indigenous knowledge and herbal wisdom, which is systematically supported by documentation and preservation efforts to safeguard this accessible resource. The knowledge's long-term vitality is secured through intergenerational learning, ensuring cultural continuity and the adaptability of traditional wisdom in contemporary contexts. This entire initiative operates within a Buddhist agricultural, spiritual, and ecological framework, guiding activities by integrating principles of sustainable practice with core Buddhist values. Within this context, the temple effectively functions as a cultural hub, transcending its traditional role to become a vital learning platform that strengthens community cohesion and practical sustainability. Ultimately, the project yields significant multidisciplinary contributions, enriching public health through community-based non-conventional methods; Creating value for anthropology by studying cultural practices and the temple's evolving social role; and Furthering religious studies by providing a modern, applied understanding of Buddhist principles in ecological and social development.

Circular Process 5: The integration of core Buddhist principles with practical activities. This realization occurs through monk-led education and participatory learning, focusing on local herbal knowledge and well-being literacy, all sustained by the operation of the (Buddhist Agricultural Gardens or Herbal Learning Gardens).

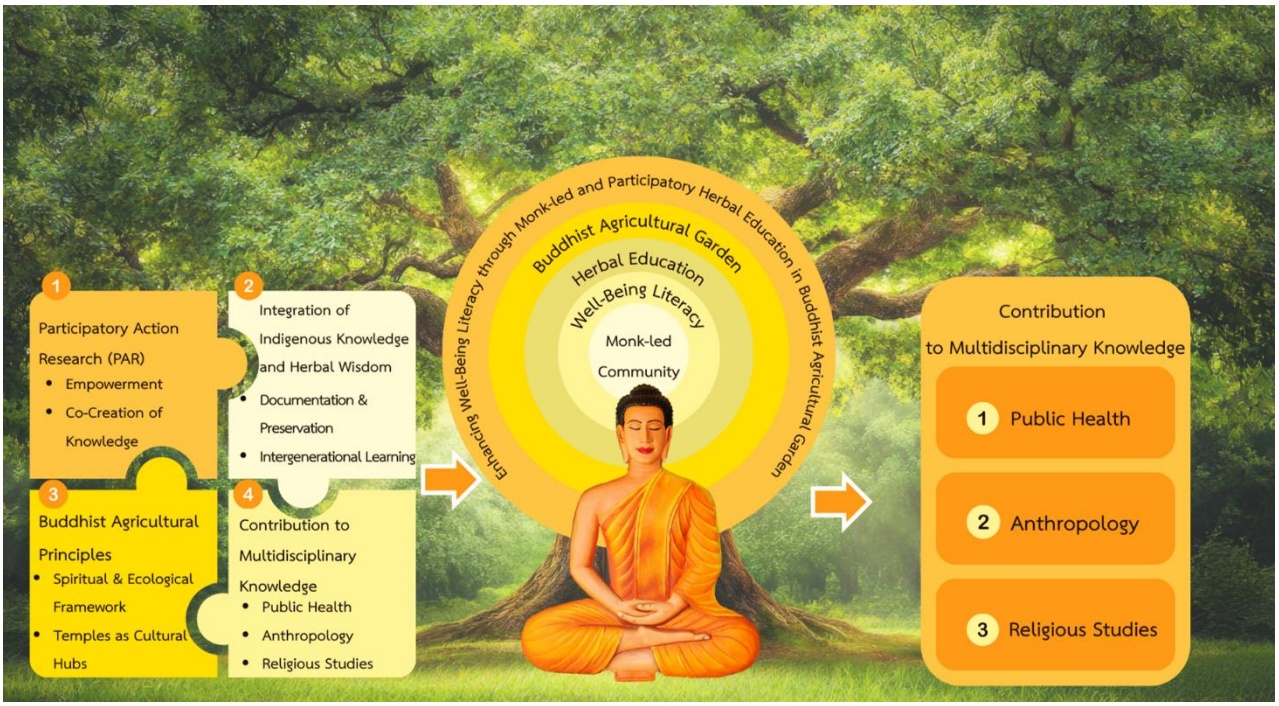

Figure 7 Originality and Knowledge Framework: Monk-Led Participatory Herbal Education for Well-Being Literacy in Buddhist Agricultural Gardens

Three main outputs: This research makes a significant contribution to multidisciplinary knowledge, with details as follows:

1. Public Health: It establishes a community-based approach to health promotion that focuses on utilizing local herbal wisdom and spiritual practices for Holistic Wellness. This approach not only complements but also fills the gaps in conventional public health systems, creating a sustainable model for community self-reliance in health management.

2. Anthropology: It provides valuable insights into cultural practices and the study of intergenerational knowledge transmission, revealing the mechanisms by which society preserves and adapts traditional wisdom.

3. Religious Studies**:** It enriches the field by offering a modern, applied understanding of Buddhist principles. These principles are practically implemented within the context of ecological and environmental ethics.

Conclusions and Recommendations

This study conclusively demonstrates that participatory herbal learning, embedded in Buddhist agricultural settings, is an effective mechanism for improving community well-being literacy

and preserving invaluable indigenous herbal knowledge. The engagement of various stakeholders, including monks, elders, women, youth, and farmers, in collaborative learning processes, supported by the establishment of herbal learning gardens in temple grounds, has revitalized traditional health practices and ensured the transfer of knowledge between generations. The unique integration of Buddhist philosophical principles (Compassion and Mindfulness) with sustainable agriculture and ecological management provides a holistic framework that strengthens spiritual, physical, and environmental awareness, compared to fragmented health education models. Furthermore, the use of participatory action research democratized knowledge production, fostering community empowerment, self-efficacy, and resilience. The model shows significant potential for improving public health outcomes, especially in rural settings. The key recommendations include: 1) Scaling and replication in similar contexts; 2) Long-term institutional support (Including Youth Engagement); 3) Integration with formal education; 4) Digital documentation and innovation for greater dissemination; and 5) Ongoing participatory research and evaluation to ensure its sustainability and maximize its holistic benefits for community health and cultural preservation.

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