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## The transmission of local wisdom in herbal processing of Pa Wa agroforestry network members, Kaeng Hang Maeo district, Chanthaburi province

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**Abstract** The content analysis revealed that the transmission of local wisdom in herbal processing among the agricultural network members involved in sender/source of information and transmitters, which included knowledgeable members of the network on herbal properties and processing methods, message or content are medicinal properties of herbs, processing procedures, and packaging methods, communication channels, including hands-on learning, demonstrations, practical involvement, and information exchange through discussions or inquiries, and the receivers of the transmitted knowledge, primarily network members, family members, relatives, and interested individuals participating in learning activities. The findings underscored the importance of preserving local wisdom in herbal processing within the community, as it resided within individuals and could potentially be lost. Therefore, it should focus on collecting and storing this knowledge for easier accessibility to ensure its continuity and potential development in the future.

**Keywords:** Transmission, Local wisdom, Herbal

### Introduction

Thai traditional herbs have played a crucial role in Thai society since ancient times, with roots tracing back to the Sukhothai era and continuing to influence contemporary practices (Wang and Su, 2024). These herbs are not only essential ingredients in Thai cuisine, adding flavor to dishes, but also hold significant medicinal value for health maintenance and treatment, as well as beauty enhancement (Buathong and Duangsrirai, 2023). The continuous development and utilization of herbs have led to the creation of various products that contribute to Thailand's cultural heritage, with a focus on producing high-

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quality raw materials and leading herbal products in the ASEAN region (Yingngam, 2024). National master plans have been established to support the export of standardized, high-quality herbs, aiming to enhance competitiveness both domestically and internationally, showcasing Thailand's commitment to preserving and promoting its rich herbal traditions. Local wisdom plays a significant role in contemporary Thai society, particularly in rural communities where agriculture is prominent. The integration of traditional knowledge with modern practices has become essential in shaping community activities and direction. Studies like those on the Ambengan tradition in Indonesia (Winarva *et al.*, 2024) and the Mancoliak tradition in the Tamansari Indigenous Community (Ramadhani *et al.*, 2024) highlight the importance of local wisdom in guiding behavior and upholding values. Furthermore, research on local wisdom in educational settings in Thailand demonstrates how it can be integrated into learning models like the SAAOL approach, enhancing student satisfaction (Krualunteerayut *et al.*, 2024). Additionally, the development of cultural products based on local wisdom, such as rice straw paper in the Wat Kai Tia community, showcases how identity and traditional knowledge can inspire creative endeavors and consumer satisfaction (Sonhom and Taravet, 2023). The transmission of local wisdom, as seen in the management of agroforestry land in Batu Nindan Village, reflects a process of sharing knowledge within and between communities, contributing to the enrichment of Thai society's cultural heritage (Hanifah *et al.*, 2023).

The formation of the Pa wa agroforestry network in 2003 was a result of agroforestry practitioners in Pa wa Subdistrict and nearby areas desiring closer and more convenient meetings to facilitate collaboration and community connection (Isra *et al.*, 2024). This network, focusing on self-reliance through agroforestry, engages in income-generating activities such as producing herbal products derived from local wisdom and individual interests, showcasing a commitment to applying and innovating generational knowledge (Islam, 2024). The network's activities align with the broader benefits observed in agroforestry programs globally, which not only enhance livelihoods but also contribute to socio-economic development, education, and infrastructure improvements within communities (Islam, 2024). Additionally, the utilization of agroforestry practices has been shown to significantly contribute to household income and climate change adaptation, emphasizing the multifaceted advantages of integrating agroforestry into land management strategies (Bhattarai *et al.*, 2023). Therefore, understanding local wisdom, it is essential not only to study its meaning and significance but also to explore the process by which knowledge is transmitted from local sages or community wisdom bearers to the younger generations. This aspect is crucial for ensuring the appropriateness and success

of community learning management. Studying this transmission process provides valuable insights into how to effectively preserve and pass on this knowledge within the community (Ratanachai, 2020).

The research aimed to study the components of communication for the transmission of local wisdom in herbal processing by members of the organic farming network in Pa Wa agroforestry network members, Kaeng Hang Maeo district, Chanthaburi province. The goal was to use this information to plan the promotion of utilizing local wisdom in herbal processing for the network members in the future.

## **Materials and methods**

### ***Scope and sample***

The research was done using a qualitative study focused on the local wisdom of herbal processing among members of the Pa wa agroforestry network in Kaeng Hang district, Chanthaburi province. (Khermkhan *et al.*, 2024). The sample group was selected using purposive sampling, with the key informants chosen based on the following criteria: Individuals who actively participated in the herbal activities of the Pa wa agroforestry network, Kaeng Hang Maeo district, Chanthaburi province. Individuals who possessed knowledge and experienced in transmitting local wisdom related to herbal processing. Individuals who are recognized by the members of the Pa wa agroforestry network as knowledgeable in local wisdom related to herbal processing. Based on these criteria, the researcher selected a sample group of 15 participants for the study.

### ***Methods***

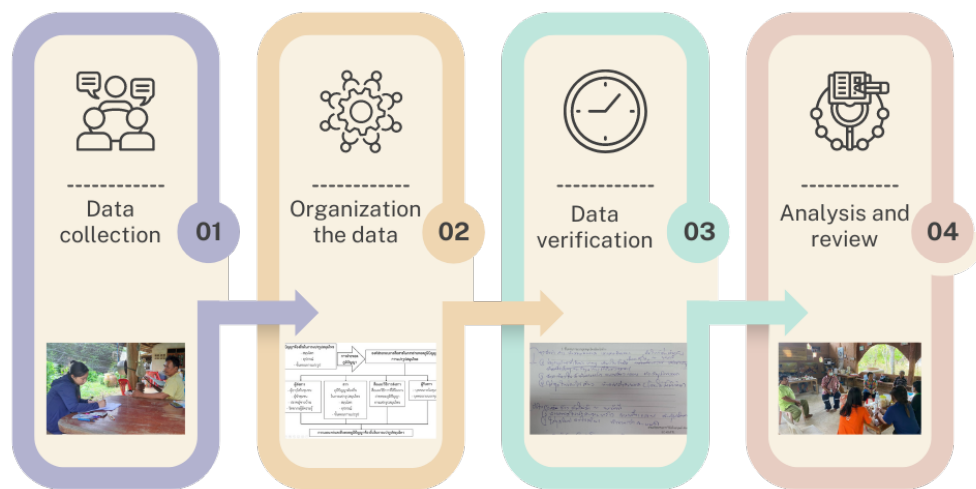
The transmission of local wisdom in herbal processing among members of the Pa wa agroforestry network in Kaeng Hang Maeo district, Chanthaburi province was studied to disseminate this wisdom through field data collection and in-depth interviews, along with observation. It was enable the community to benefit from this knowledge and to serve as a guideline for sustainably preserving and passing down local wisdom in the future. The research process involved the following 4 steps (Ratanachai, 2020).

**Steps 1** Data collection. Conduct in-depth interviews and review various documents to study and gather concepts related to local wisdom in herbal processing.

**Steps 2** Organization of the data. Collect information on the transmission of local wisdom in herbal processing from members of the agroforestry network in the area. Then, classifying the data by typological analysis.

**Steps 3** Data verification. Verify the local wisdom data on herbal processing by holding group meetings to ensure the accuracy and completeness of the information. Analyze the components of communication in transmitting local wisdom, such as the sender, communication channel, content, and receiver.

**Steps 4** Analysis and review. After verifying the data in step 3, the researcher presents the collected information to the informants for accuracy checks. Subsequently, a focus group discussion is conducted in the community to present the data and collaboratively refine the data (Figure 1).



**Figure 1.** Steps for data collection and analysis

## Results

### *The transmission of local wisdom in herbal processing*

Study of local wisdom in herbal processing by the members of the Ph wa agroforestry network group, Kaeng Hang Maeo district, Chanthaburi province. The research findings are presented by analysing the knowledge transmission process based on 4 communication components as Sender/Source, Message, Channel and Receiver.

### ***Sender***

The results found that sender or source of information and transmitters, which included knowledgeable members of the network on herbal properties and processing methods. Educators acquire knowledge from their ancestors, and families. In addition, they also obtain knowledge from the Sanam Chai Khet agroforestry network Chachoengsao province has created a space for members to exchange agricultural skills and experiences, including education and transforming information about its product processing into food. Herbs and daily necessities. Members of Pa wa agroforestry network learn and apply knowledge to adapt to the local community. And impart the above wisdom to family, relatives, neighbours, or those interested in processing herbal products or various specialties and herbal processed products.

### ***Message***

The results found that message or content are medicinal properties of herbs, processing procedures, and packaging methods. Knowledge or local wisdom in herbal processing as *Salvadora persica* mouthwash or Miswak mouthwash, Fangfeng cough syrup or Fangfeng cough medicine, *Piper sarmentosum*, Kaduk leaves or Wild betel leaves, *Pterocarpus* oil or Chantakian oil, Chili oil, Herbal oil with 108 types of herbs, Kaffir lime shampoo or Bergamot lime shampoo and Extraction of essential oils from lemongrass and kaffir lime.

### ***Channel***

The results found that sender or source telling through face-to-face conversations with individuals or groups who come to learn. This teaching method is based on sender direct experience or knowledge involved in demonstrating examples and allowed the learners to engage in hands-on practice, which enhanced to understand as they are actively participated and received guidance during the process. Learners can also ask questions at that time, creating a relaxed and pressure-free learning environment.

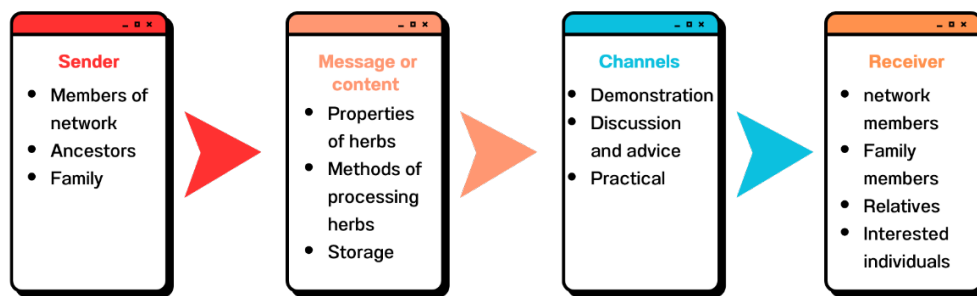
### ***Receiver***

The results found that receiver of the transmitted knowledge, primarily network members, family members, relatives, and interested individuals participating in learning activities. The findings underscored the importance of preserving local wisdom in herbal processing within the community, as it resided

within individuals and could potentially be lost. Therefore, should focus on collecting and storing this knowledge for easier accessibility, to ensure its continuity and potential development in the future.

### *The transmission process of local wisdom in herbal processing*

The transmission process of local wisdom in herbal processing among the members of Pa Wa agroforestry network members, Kaeng Hang Maeo district, Chanthaburi province involved in various methods and media to convey traditional wisdom. This knowledge is passed down from ancestors and within communities which imparted through storytelling, teaching sessions, demonstrations, hands-on practical training, and accompanied guidance. The indigenous wisdom in herbal processing is shared among network members, families, relatives, and interested individuals. This ensured that the rich heritage of herbal processing practices is continued to preserve and utilized effectively within the community (Figure 2).



**Figure 2.** Transmission process of local wisdom in herbal processing of Pa Wa agroforestry network members

### **Discussion**

The transmission of local wisdom in herbal processing relied on knowledgeable community members who is inherited expertise from ancestors and family. Organized networks like the Sanam Chai Khet agroforestry network in Chachoengsao province is found to be play a crucial role by providing spaces for members to exchange agricultural skills and processing techniques. These networks are enabled the blending of traditional wisdom with modern practices, ensuring the adaptability and relevance of local knowledge. Member of networks like the Pa wa agroforestry network is not only applied this wisdom locally but also shared it with family, neighbors, and others interested in herbal processing.

This actively exchange helped to preserve and evolve herbal practices, ensuring they remain sustainable and beneficial for future generations. According to Perbawasari *et al.* (2024) the Sekolah Adat initiative in Kampung Dangieng exemplified how non-formal education can preserve and transmit medicinal plant knowledge through interactive learning methods, ensuring that traditional practices remain vital despite globalization challenges. Similarly, the integration of Project-Based Learning (PjBL) with local wisdom in Talang Duku Village demonstrated the potential for educational models to foster appreciation for local practices while equipping students with essential skills. This active exchange of knowledge is not only sustained the herbal practices but also promoted community welfare and environmental stewardship, ensuring these traditions have evolved and remained beneficial for future generations (Kusuma *et al.*, 2024).

The findings of this study highlighted the rich medicinal properties of various herbs and the traditional knowledge surrounding their processing and packaging. The message or content centers around several key herbal remedies and products, including *Salvadora persica* (Miswak) mouthwash, Fangfeng cough syrup or medicine, *Piper sarmentosum*, Kaduk (Wild betel) leaves, *Pterocarpus* (Chantakian) oil, chili oil, herbal oil blend with 108 types of herbs, Kaffir lime (Bergamot lime) shampoo, and the extraction of essential oils from lemongrass and kaffir lime. This body of knowledge reflected the deep-rooted understanding and practical application of herbal processing techniques that passed down through generations (Al-Saadi *et al.*, 2024).

The transmission of herbal knowledge primarily has occurred through face-to-face interactions, which are found to be essential for effective learning. Research indicated that traditional educational initiatives according to Perbawasari *et al.* (2024) who studied Sekolah Adat in Kampung Dangieng that utilized direct communication methods, including lectures and practical demonstrations, to engage learners actively in the process of herbal knowledge acquisition. This hands-on approach allowed the learners to ask questions and received immediate feedback, fostering a deeper understanding and retention of the material. Additionally, community service programs that focused on training in herbal processing further emphasized the importance of interactive learning, where participants gained the practical skills and knowledge about local medicinal plants. Nikeherpanti *et al.* (2023) and Ouma (2022) stated that intergenerational learning processes of traditional medicinal knowledge and socio-spatial transformation dynamics that despited challenges posed by urbanization and migration, the intergenerational learning processes which remained vital for preserving traditional medicinal knowledge, highlighting the significance of supportive environments for effective knowledge transfer.

Overall, these findings underscored the value of direct, participatory learning methods in the transmission of herbal knowledge.

The receivers of this knowledge are found to be primarily network members, family members, relatives, and other individuals who expressed an interest in learning about herbal processing. The findings emphasized the critical role of these receivers in preserving and continuing the tradition of local wisdom within the community. Research highlighted the role of educational initiatives, such as Sekolah Adat in Kampung Dangi, which serve as repositories for traditional healing practices and medicinal plant knowledge, ensuring intergenerational transmission of this wisdom (Perbawasari *et al.*, 2024). Additionally, the integration of traditional knowledge with modern conservation strategies is found to be an essential for the sustainable use of indigenous medicinal plants, which are faced a crucial for community resilience and economic stability (Zusiphe *et al.*, 2024). Because knowledge is often held by individuals, there is a risk of it being lost if not properly documented and shared. Therefore, it is crucial to focus on the collection, storage, and dissemination of this knowledge to ensure its continuity and potential for further development in the future. Preserving this local wisdom is not only safeguarded the cultural heritage but also provided a foundation for innovation and adaptation in the use of herbal remedies (United Nations Educational, Scientific and Cultural Organization, 2017).

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