



Research Article

Community needs for the development of learning programs based on the philosophy of sufficiency economy in Bang Ban District, Phra Nakhon Si Ayutthaya Province

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Abstract

This study examined and prioritized the competency-development needs of secondary school agriculture teachers in Phra Nakhon Si Ayutthaya Province, Thailand. A quantitative cross-sectional survey design was employed. The population comprised 73 teachers in the Occupational Learning Area, from whom 45 teachers responsible for agriculture or agriculture-related subjects were selected through cluster sampling by school size followed by simple random sampling. Data were collected using a researcher-developed questionnaire covering five core competency domains and six functional competency domains. The questionnaire was evaluated by three experts for content validity using the item-objective congruence index. Data were analyzed using frequencies, percentages, means, standard deviations, and descriptive rankings. The overall need for core competency development was high ($M = 4.32$, $S.D. = 0.21$). Teacher ethics and integrity was the highest-rated core competency and the only domain rated very high ($M = 4.54$, $S.D. = 0.36$), followed by self-development and teamwork. The overall need for functional competency development was also high ($M = 4.26$, $S.D. = 0.21$), with teacher leadership receiving the highest rating ($M = 4.39$, $S.D. = 0.35$), followed by community relationships and collaboration for learning management. Across all 11 domains, teacher ethics and integrity, teacher leadership, self-development, and community collaboration emerged as the leading priorities. The findings demonstrate broad competency-development needs and suggest that professional development programs for secondary school agriculture teachers should integrate professional ethics, leadership, continuous self-development, and school-community collaboration.

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Introduction

Communities worldwide are facing interconnected economic, social, environmental, and technological changes that require people to continuously develop knowledge and skills relevant to their everyday lives. Lifelong learning is therefore regarded as an essential mechanism for enabling individuals and communities to adapt to change, participate in society, and contribute to sustainable development. Sustainable Development Goal 4 emphasizes inclusive and equitable quality education and lifelong learning opportunities for all, while the Marrakech Framework for Action

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reinforces the transformative role of adult learning in creating inclusive, resilient, and sustainable societies (United Nations, 2015; UNESCO Institute for Lifelong Learning [UIL], 2022a).

Effective community learning programs should respond to the circumstances, interests, and priorities of their intended participants. The Fifth Global Report on Adult Learning and Education indicates that participation in adult learning is influenced by the relevance of curricula and the extent to which learning materials reflect learners' interests, needs, and local contexts (UIL, 2022b). A systematic review by Choi and Park (2024) similarly demonstrates that learning needs assessment has become an important foundation for identifying learning gaps, establishing program priorities, and designing educational interventions that are appropriate for particular groups. Consequently, examining community members' needs before developing learning programs can help ensure that program content, instructional formats, resource allocation, and delivery processes correspond to local conditions rather than relying solely on predetermined institutional priorities.

In Thailand, the Philosophy of Sufficiency Economy (SEP) provides a people-centered framework for balanced and sustainable development. Its central principles—moderation, reasonableness, and resilience—operate under the conditions of knowledge and virtue and can be applied at the individual, household, community, organizational, and national levels. The sixth Thailand Human Development Report identifies SEP as a locally grounded approach that can empower individuals and communities, strengthen their capacity to respond to uncertainty, and contribute to the achievement of the Sustainable Development Goals (United Nations Development Programme [UNDP], 2024). Recent empirical studies have also demonstrated the relevance of SEP to sustainable community enterprise management, livelihood development, resource use, and community resilience (Mettathamrong et al., 2023; Prayukvong, 2024).

The importance of locally responsive learning is also reflected in Thailand's current educational policy. The Learning Encouragement Act B.E. 2566 (2023) places emphasis on lifelong learning, learning for self-development, and learning leading to formal qualifications. It assigns local learning centers an important role in providing accessible learning opportunities and encourages the participation of communities, local wisdom holders, educational institutions, and network partners in designing learning that responds to the actual needs of people in each area (Department of Learning Encouragement [DOLE], 2026). Within this policy context, learning programs based on SEP should extend beyond the communication of philosophical principles and provide practical learning experiences that enable participants to apply knowledge to occupations, household economic management, natural-resource conservation, technology use, and community development.

Bang Ban District in Phra Nakhon Si Ayutthaya Province represents a community context in which learning programs based on SEP can support people in strengthening their livelihoods and capacity for self-reliance. However, the usefulness of such programs depends on whether their content and delivery formats correspond to community members' priorities. Programs developed without systematic evidence of local needs may provide content that is conceptually valuable but insufficiently aligned with participants' occupations, experiences, available resources, and preferred modes of learning. In particular, information is needed regarding the subject areas that community members consider important, the types of learning activities they prefer, and their expectations concerning instructors, practical application, and continuing support.

Accordingly, this study examined community needs for the development of learning programs based on the Philosophy of Sufficiency Economy in Bang Ban District, Phra Nakhon Si Ayutthaya Province. It focused on three dimensions: desired program content, preferred program formats, and expectations regarding the organization and delivery of future learning activities. The findings are expected to provide locally grounded evidence for designing relevant, practical, and participant-centered learning programs that strengthen lifelong learning and sustainable community development.

Objectives

To provide locally relevant information for designing future learning programs, this study aimed to:

- Examine community members' needs regarding the content of learning programs based on the Philosophy of Sufficiency Economy.

- Investigate community members' preferred formats for future learning programs.
- Examine community members' expectations regarding the organization and delivery of learning programs based on the Philosophy of Sufficiency Economy in Bang Ban District, Phra Nakhon Si Ayutthaya Province.
- Compare the needs for learning programs based on the Philosophy of Sufficiency Economy between participants engaged in agriculture and those engaged in other occupations.

Method

This study employed a quantitative descriptive survey design to examine community needs for developing learning programs based on the Philosophy of Sufficiency Economy. A survey design is appropriate for systematically describing the characteristics, opinions, and needs of a defined population, while needs assessment provides evidence for identifying priorities and designing contextually relevant learning programs (Choi & Park, 2024; Creswell & Creswell, 2023). Data were collected from community members who had participated in learning programs organized by the Bang Ban District Learning Encouragement Center, Phra Nakhon Si Ayutthaya Province. The methodology comprised the participants and sampling, research instrument, instrument validation, data collection procedure, and data analysis.

Population and Sampling

The population comprised 129 community members who had participated in learning programs based on the Philosophy of Sufficiency Economy organized by the Bang Ban District Learning Encouragement Center, Phra Nakhon Si Ayutthaya Province, during the 2022 and 2023 fiscal years. The required sample size was determined using the table developed by Krejcie and Morgan (1970), resulting in a sample of 97 participants. The participants were selected from the list of 129 eligible program participants using simple random sampling. All 97 completed questionnaires were included in the analysis.

Research Instrument

Data were collected using a researcher-developed questionnaire. For the purposes of this article, only the sections relevant to community learning needs were analyzed. The questionnaire consisted of two main parts. The first part collected participants' demographic information, including sex, age, educational level, community role, occupation, monthly income, household debt status, and the learning program previously attended.

The second part comprised 14 items assessing community needs in three dimensions: (1) five items concerning preferred program content, including economic, social, environmental, cultural, and technological topics; (2) five items concerning preferred program formats, including research- and experiment-based, theory-based, practice-based, innovation-oriented, and community business development activities; and (3) four items concerning expectations for future programs, including useful and practically applicable content, competent instructors, and continuing support from program providers.

Responses were recorded using a five-point rating scale ranging from 1 (*lowest level of need*) to 5 (*highest level of need*). Higher scores indicated stronger needs for the corresponding program content, format, or delivery characteristic. Mean scores were interpreted using five equal-width intervals adapted from Leekitwattana (2012), as presented in Table 1.

Table 1. Interpretation of mean scores for community needs

Scale point	Mean score range	Interpretation
5	4.21–5.00	Highest level of need
4	3.41–4.20	High level of need
3	2.61–3.40	Moderate level of need
2	1.81–2.60	Low level of need
1	1.00–1.80	Lowest level of need

Instrument Validation

The questionnaire was reviewed by three experts to establish its content validity before data collection. The experts examined the relevance, clarity, and alignment of each item with the study objectives. The Index of Item–Objective Congruence (IOC) was used to quantify their judgments, with ratings of +1 for clearly congruent, 0 for uncertain, and –1 for clearly incongruent items (Leekitwattana, 2012).

All demographic questions and the 14 community-needs items included in the present article obtained an IOC value of 1.00, indicating complete agreement among the three experts regarding their congruence with the intended constructs. The questionnaire was subsequently revised in accordance with the experts' comments before being administered to the participants. As the retained research report did not provide a verifiable internal-consistency coefficient for the selected 14-item section, no reliability coefficient is reported in this article.

Data Collection

The researchers obtained an official letter from King Mongkut's Institute of Technology Ladkrabang requesting permission from the director of the Bang Ban District Learning Encouragement Center to collect data. The researchers subsequently coordinated with the center to contact the selected community members who had participated in learning programs based on the Philosophy of Sufficiency Economy during the 2022 and 2023 fiscal years.

Data were collected on-site in Bang Ban District using the validated questionnaire. The researchers explained the purpose of the study and provided instructions for completing the questionnaire. After collection, all questionnaires were checked for completeness and consistency. A total of 97 complete questionnaires were coded and included in the statistical analysis.

Data Analysis

Data were analyzed using statistical software. Frequency and percentage were used to summarize the participants' demographic characteristics. Mean and standard deviation were employed to examine community needs across three dimensions: preferred program content, preferred program formats, and expectations regarding program organization and delivery. The items within each dimension were also ranked according to their mean scores to identify community priorities.

Mean scores were interpreted using the criteria presented in Table 1: 4.21–5.00 indicated the highest level of need, 3.41–4.20 a high level, 2.61–3.40 a moderate level, 1.81–2.60 a low level, and 1.00–1.80 the lowest level (Leekitwattana, 2012). Descriptive statistics were used to address the first three objectives, whereas an independent-samples *t*-test was employed to address the fourth objective.

An independent-samples *t*-test was used to compare the mean need scores between participants engaged in agriculture and those engaged in other occupations. Before conducting the test, the assumptions of normality, independence, and homogeneity of variance were examined. Levene's test was used to assess the equality of variances. Statistical significance was determined at the .05 level. Cohen's *d* was also calculated to indicate the magnitude of the differences between the two occupational groups.

Results

Demographic Characteristics of the Participants

A total of 97 community members participated in the study. As presented in Table 2, most participants were female (74.23%) and were community members without a formal leadership position (92.78%). The largest age group consisted of participants aged 60 years or older (26.80%), followed by those aged 40–49 and 50–59 years (23.71% each). Most participants had completed primary education (35.05%) or lower-secondary education (29.90%). Agriculture was the predominant occupation (68.04%), while 45.36% reported an average monthly income of THB 5,001–10,000. Most participants also reported having household debt (81.44%).

Table 2 Demographic characteristics of the participants (n = 97)

Characteristic	Category	Frequency	Percentage
Gender	Male	25	25.77
	Female	72	74.23
Age (years)	Below 20	3	3.09
	20–29	5	5.15
	30–39	17	17.53
	40–49	23	23.71
	50–59	23	23.71
	60 or older	26	26.80
Educational level	Primary education	34	35.05
	Lower-secondary education	29	29.90
	Upper-secondary education	12	12.37
	Vocational certificate	3	3.09
	Higher vocational certificate	5	5.15
	Bachelor's degree	11	11.34
	Master's degree	3	3.09
Community role	Community member	90	92.78
	Community leader	4	4.12
	Subdistrict administrative organization member	3	3.09
Occupation	Agriculture	66	68.04
	General employment	15	15.46
	Community trading	5	5.15
	Carpentry	5	5.15
	Masonry	3	3.09
	Electrical-appliance repair	3	3.09
Average monthly income	Below THB 5,000	29	29.90
	THB 5,001–10,000	44	45.36
	THB 10,001–15,000	18	18.56
	Above THB 15,000	6	6.19
Household debt	Had household debt	79	81.44
	Had no household debt	18	18.56

Community Needs Regarding Program Content

The first objective examined community members' needs regarding the content of future learning programs based on the Philosophy of Sufficiency Economy. The results are presented in Table 3.

Table 3 Community needs regarding the content of future learning programs (n = 97)

Program content	$\bar{x}$	S.D.	Level of need	Rank
1. Economic development, such as promoting community occupations	4.30	1.03	Highest	1
2. Technology, such as postharvest technology	4.11	1.15	High	2
3. Natural resources and environmental conservation	3.55	1.22	High	3
4. Culture integrated with agriculture	3.31	1.27	Moderate	4
5. Social development and community cooperation	2.76	1.46	Moderate	5
Overall	3.61	0.57	High	—

As shown in Table 3, the participants' overall need for future program content was at a high level ($\bar{x} = 3.61$, $S.D. = 0.57$). Economic-development content received the highest mean score and was rated at the highest level of need ($\bar{x} = 4.30$, $S.D. = 1.03$). Technology ranked second ($\bar{x} = 4.11$), followed by natural resources and environmental conservation ($\bar{x} = 3.55$, $S.D. = 1.22$); both were rated at a high level. Culture integrated with agriculture ($\bar{x} = 3.31$, $S.D. = 1.27$) and social development and community cooperation ($\bar{x} = 2.76$, $S.D. = 1.46$) were rated at a moderate level. Overall, the findings identified economic-development content as the participants' foremost priority for future learning programs.

Preferred Formats for Future Learning Programs

The second objective investigated community members' preferred formats for future learning programs based on the Philosophy of Sufficiency Economy. The results are presented in Table 4.

Table 4. Preferred formats for future learning programs (n = 97)

Program format	$\bar{x}$	S.D.	Level of need	Rank
1. Community business development activities	4.46	0.75	Highest	1
2. Practice-based activities	4.48	0.77	Highest	2
3. Invention- and innovation-oriented activities	4.05	0.93	High	3
4. Theory-based activities	2.90	1.55	Moderate	4
5. Research- and experiment-based activities	2.79	1.54	Moderate	5
Overall	3.74	0.57	High	—

As shown in Table 4, the participants' overall preference for future program formats was at a high level ($\bar{x} = 3.74$, $S.D. = 0.54$). Community business development activities received the highest mean score ($\bar{x} = 4.46$, $S.D. = 0.75$), followed by practice-based activities ($\bar{x} = 4.48$, $S.D. = 0.77$); both were rated at the highest level of need. Invention- and innovation-oriented activities ranked third and were rated at a high level ($\bar{x} = 4.05$, $S.D. = 0.93$). In contrast, theory-based activities ($\bar{x} = 2.90$, $S.D. = 1.55$) and research- and experiment-based activities ($\bar{x} = 2.79$, $S.D. = 1.54$) were rated at a moderate level. These results demonstrate a clear preference for practical and economically oriented learning formats over predominantly theoretical or research-based approaches.

Expectations Regarding Program Organization and Delivery

The third objective examined community members' expectations regarding the organization and delivery of future learning programs based on the Philosophy of Sufficiency Economy. The results are presented in Table 5.

Table 5. Expectations regarding the organization and delivery of future learning programs (n = 97)

Program organization and delivery	$\bar{x}$	S.D.	Level of need	Rank
1. Knowledgeable instructors with professional communication skills	4.31	0.81	Highest	1
2. Practical and comprehensive content	4.27	0.81	Highest	2
3. Continuing assistance and problem-solving support from program providers	4.26	0.90	Highest	3
4. Content applicable to improving quality of life	4.13	0.82	High	4
Overall	4.24	0.48	Highest	—

As shown in Table 5, the participants' overall expectations regarding program organization and delivery were at the highest level ($\bar{x} = 4.24$, $S.D. = 0.48$). The highest-ranked expectation concerned knowledgeable instructors with professional communication skills ($\bar{x} = 4.31$, $S.D. = 0.81$). This was followed by practical and comprehensive content ($\bar{x} = 4.27$, $S.D. = 0.81$) and continuing assistance and problem-solving support from program providers ($\bar{x} = 4.26$, $S.D. = 0.90$), both of which were also rated at the highest level. Content applicable to improving quality of life was rated at a high level ($\bar{x} = 4.13$, $S.D. = 0.82$). These results indicate that community members expected future programs to combine capable instructors, practical content, and continued support beyond the learning activities.

Comparison of Community Needs by Occupational Group

The fourth objective compared the needs for learning programs based on the Philosophy of Sufficiency Economy between participants engaged in agriculture and those engaged in other occupations. The agricultural group consisted of 66 participants, while the other-occupation group consisted of 31 participants. Levene's test was nonsignificant for all comparisons ($p > .05$), indicating that the assumption of homogeneity of variance was satisfied. Independent-samples t -test results are presented in Table 6.

Table 6 Comparison of community needs by occupational group

Dimension	Agricultural occupations (n = 66), $\bar{x} \pm S.D.$	Other occupations (n = 31), $\bar{x} \pm S.D.$	$t(95)$	p	Cohen's d
Preferred program content	3.57 $\pm$ 0.58	3.68 $\pm$ 0.56	-0.84	.401	-0.18
Preferred program formats	3.66 $\pm$ 0.52	3.90 $\pm$ 0.64	-1.90	.061	-0.41
Program organization and delivery	4.29 $\pm$ 0.47	4.14 $\pm$ 0.48	1.49	.138	0.33
Overall community needs	3.81 $\pm$ 0.30	3.89 $\pm$ 0.37	-1.08	.284	-0.23

As shown in Table 6, no statistically significant differences were found between the two occupational groups in preferred program content, $t(95) = -0.84, p = .401$; preferred program formats, $t(95) = -1.90, p = .061$; program organization and delivery, $t(95) = 1.49, p = .138$; or overall community needs, $t(95) = -1.08, p = .284$.

Participants in other occupations reported slightly higher preferences for program content and program formats, whereas participants engaged in agriculture reported slightly higher expectations regarding program organization and delivery. However, none of these differences reached the .05 level of statistical significance. The effect sizes ranged from small to moderate ($|d| = 0.18-0.41$), with the largest difference occurring in preferences for program formats ($d = -0.41$). Overall, the findings indicate that both occupational groups expressed broadly similar needs for future learning programs based on the Philosophy of Sufficiency Economy.

Discussion

This study examined community needs concerning the content, formats, and delivery of future learning programs based on the Philosophy of Sufficiency Economy (SEP). Overall, the findings demonstrate that community members preferred learning programs that were economically relevant, practice-oriented, and supported by knowledgeable instructors. These preferences reflect the principle that community learning should be grounded in learners' actual circumstances and should provide knowledge that can be applied to livelihoods and everyday life. This is consistent with the Fifth Global Report on Adult Learning and Education, which emphasizes that relevant curricula and learning materials tailored to participants' interests and local needs can promote participation in adult learning (UNESCO Institute for Lifelong Learning [UIL], 2022).

Regarding program content, economic development was identified as the highest priority, followed by technology and natural-resource and environmental conservation. This pattern may be associated with the socioeconomic characteristics of the participants: most worked in agriculture, nearly half earned THB 5,001–10,000 per month, and more than four-fifths reported household debt. Therefore, participants may have viewed future learning primarily as a means of strengthening occupations, increasing income, reducing economic vulnerability, and improving household security. This priority is compatible with SEP, which encourages balanced decision-making, prudent resource use, self-reliance, and resilience under conditions of economic and social uncertainty. The sixth Thailand Human Development Report similarly identifies SEP as a people-centered approach capable of empowering individuals and communities while supporting sustainable human development (United Nations Development Programme [UNDP], 2024).

The high level of need for technological content also suggests that community members recognized the importance of applying appropriate technologies to agricultural production, postharvest management, value addition, communication, and marketing. Nevertheless, technology learning based on SEP should not focus merely on acquiring modern equipment. It should help learners evaluate the suitability, affordability, benefits, risks, and local applicability of technologies before adoption. Such decision-making corresponds to the SEP principles of moderation, reasonableness, and resilience, supported by knowledge and virtue (UNDP, 2024). The relatively high demand for natural-resource and environmental content further indicates that community members did not regard economic development as separate from responsible resource management. Future programs should therefore integrate income generation with soil, water, waste, and environmental management rather than treating these topics as unrelated learning areas.

Regarding program formats, participants strongly preferred practice-based activities and community business development, whereas theory-based and research- and experiment-based formats received only moderate ratings. These findings indicate that participants valued experiential learning that could produce visible and applicable outcomes. This finding is also consistent with Pongsuk (2020), who emphasized that the Philosophy of Sufficiency Economy in agricultural education should be translated into practical learning experiences that connect knowledge with reasoned decision-making, self-reliance, responsible resource management, and sustainable development. Therefore, practice-based activities and community business development can provide appropriate contexts in which learners apply the principles of moderation, reasonableness, resilience, knowledge, and virtue to occupational and community situations.

Practice-based programs can also help community members connect SEP principles with occupational planning, production, cost calculation, product development, marketing, and household-resource management. Similarly, community business development can extend learning beyond individual self-reliance to collective production, local value creation, and cooperation. Mettathamrong et al. (2023) found that applying SEP to community-enterprise management can contribute to sustainability when it is connected with management practices and local circumstances. Consequently, future programs should adopt a learning-by-doing approach while embedding essential theoretical knowledge and simple evidence-based inquiry within practical activities rather than presenting them as separate, academically oriented components.

Expectations regarding program organization and delivery were at the highest level. Knowledgeable instructors with professional communication skills were ranked first, followed by practical and comprehensive content and continuing assistance from program providers. These findings suggest that participants expected instructors to serve not only as lecturers but also as facilitators, technical advisers, and problem-solving partners. Adult and community learners bring different experiences, educational backgrounds, occupations, and constraints to learning; instructors must therefore translate technical knowledge into accessible language, provide demonstrations, encourage participation, and adapt activities to local resources. This finding supports the Marrakech Framework for Action, which emphasizes quality, inclusion, learner participation, and responsive adult-learning systems as essential foundations of lifelong learning and sustainable development (UIL, 2022).

The demand for continuing assistance is particularly important because a short training activity may be insufficient for participants to apply new knowledge successfully. Difficulties can arise when learners attempt to obtain materials, adapt a technique, manage production costs, use technology, develop products, or enter markets. Future programs should therefore incorporate follow-up support mechanisms such as consultation sessions, mentoring, demonstration sites, community learning groups, digital communication channels, and partnerships with local agencies. Such arrangements would transform isolated training events into a continuing community-learning process and align with Thailand's policy direction, which emphasizes accessible lifelong learning and community participation in designing learning that responds to local needs (Department of Learning Encouragement [DOLE], 2026).

The comparison by occupational group revealed no statistically significant differences between participants engaged in agriculture and those in other occupations in any dimension or in overall community needs. This finding suggests that the identified priorities were broadly shared across occupational groups. Although participants in other occupations reported somewhat higher preferences for program formats and agricultural participants reported somewhat higher expectations regarding organization and delivery, the differences were not statistically significant. The largest effect was found for preferred program formats and was small to moderate ($d = -0.41$), indicating a possible pattern that could be investigated using a larger and more diverse sample. For current program planning, however, the results support providing a common learning foundation—including SEP principles, livelihood development, practical activities, and continuing support—while allowing flexible examples and assignments suited to different occupations.

Taken together, the findings show that community members did not require SEP to be taught solely as an abstract philosophy. Instead, they expected it to be translated into practical learning experiences related to economic development, technology, community business, natural-resource management, and quality of life. A needs-based approach can help program developers make this translation by connecting SEP principles with participants' livelihoods and local conditions. Learning-needs assessment is therefore essential for establishing priorities and designing programs that are contextually relevant rather than institutionally predetermined (Choi & Park, 2024).

These findings should nevertheless be interpreted within the study's limitations. The participants came from one district and had previously participated in learning programs organized by the district learning center; therefore, the results may not represent residents who had not participated or communities in other areas. The findings were also based on self-reported needs and did not measure actual competency gaps or subsequent program outcomes. Future studies should include participants from multiple communities, incorporate interviews or focus groups, and triangulate

perceived needs with occupational, economic, and environmental information before developing and testing specific learning programs.

Recommendations

Recommendations Based on the Findings

Based on the research findings, the following recommendations are proposed:

- Future learning programs should prioritize content related to occupational and economic development, appropriate technology, community business development, and responsible natural-resource management. The principles of moderation, reasonableness, resilience, knowledge, and virtue should be integrated into practical decision-making activities rather than taught only as theoretical concepts.
- Program providers should emphasize practice-based learning through demonstrations, workshops, community projects, product development, production-cost calculation, marketing activities, and the solution of locally relevant problems.
- Instructors should possess relevant subject-matter knowledge, practical experience, and effective communication skills. They should be able to explain technical content in accessible language and adapt learning activities to participants' occupations, experiences, and available resources.
- Continuing support should be provided after the learning activities through mentoring, consultation, demonstration sites, community learning groups, digital communication channels, and collaboration with relevant local agencies.
- Because participants engaged in agriculture and other occupations demonstrated broadly similar needs, future programs may provide a common learning foundation while using flexible examples, activities, and assignments appropriate to different occupations.
- Program organizers should conduct a brief needs assessment before each program and involve community members in selecting content, scheduling activities, and determining appropriate learning formats. This approach can strengthen program relevance, accessibility, and community ownership.

Recommendations for Further Research

- Future studies should involve participants from multiple districts or provinces and include people who have not previously participated in learning programs. This would improve the diversity of the sample and provide stronger evidence concerning the learning needs of different communities.
- Mixed-methods research should be conducted by combining questionnaires with interviews, focus-group discussions, community forums, or participatory observation. Qualitative evidence would provide a deeper understanding of why community members prioritize particular content and learning formats.
- Future research should develop and test a specific learning program based on the identified needs, particularly one emphasizing occupational development, community business, appropriate technology, and practice-based learning. Its effectiveness should be examined in terms of knowledge, practical skills, application, income-related outcomes, self-reliance, and community resilience.

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