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Current Situation and Solutions for Vocational Training in Extremely Isolated Communes, Lowland and Coastal Areas, and on Islands in Vietnam

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Abstract

This study aimed to analyze the current situation of vocational training for farmers and farmers' needs for vocational training in the next years in extremely isolated communities. The primary data were collected from 480 farmers in 16 communes. The selection of the study sites was based on the list issued in Decision No. 353/QD-TTg dated March 15, 2022 of the Prime Minister. The secondary data on vocational training in the period of 2016-2022 were collected from the Department of Labor, Invalids, and Social Affairs in the study sites. The research results showed that vocational training programs for farmers in the period of 2016-2022 had some achievements. The numbers of courses and trained workers increased every year (except the period of 2020 to early 2022 because of Covid-19), and the contents of the training courses were designed in accordance with the special requirements of local conditions and production and business characteristics. However, the vocational training program for farmers in extremely isolated communes in the period 2016-2022 still had limitations in terms of training contents, training methods, and training duration. It was found that in the 2023-2025 period, 73.5% of surveyed farmers desired to participate in vocational training. Based on the limitations of the vocational training program in the past, some proper solutions were proposed to improve the effectiveness of vocational training and to meet the farmers' expectations.

Keywords

Vocational training, farmers, extremely isolated communes

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Introduction

Vocational training is essential to produce qualified human resources not only nationally but also locally. Especially in poor areas or extremely isolated communes, lowland areas, coastal areas, and

on islands where there are "core poor" areas with rugged terrain, low living standards, poor socio-economic and infrastructure conditions, and a high rate of poor households (Ho Huong, 2022). In these regions, the goals of escaping poverty and developing sustainable poverty reduction systems are two of the primary concerns. Escaping poverty or reducing poverty sustainably, however, can only be achieved successfully when there are sustainable livelihoods for households, and farmers are active in creating jobs as well as responding to their difficult conditions effectively. According to Liu (2013), an anti-poverty program may have more immediate priorities in the short term to reduce poverty but in the long run, poverty needs to be tackled through education. With the same this opinion, Oxfarm (2017) also agreed that education is necessary to improve farmers' (especially poor farmers) knowledge and should be a priority long term solution. Addressing the farmers' needs through training allows each farmer to improve their awareness of poverty reduction. This is also the reason why the Vietnam target program on sustainable poverty reduction for the period 2021-2025 was implemented nationwide, with a focus on poor districts and communes, particularly in isolated communes, lowland areas, coastal areas, and on islands. In fact, the vocational training program for rural workers related to agriculture, forestry, fisheries, and other non-farm sectors (such as handicrafts and services) has been conducted since 2010 according to Decision No. 1956 of the Prime Minister. After more than 10 years of implementation, the program has received positive results, thereby making important contributions to creating jobs, shifting the labor structure, and improving the quality of rural workers (Trinh Xuan Viet, 2023). However, there have been very few studies to evaluate these programs from the perspective of learners and farmers as existing studies and reports are mainly statistical and from the approach of the organizers.

Unfortunately, the findings of Nguyen *et al*. (2022) showed that most vocational training institutions only focus on compiling information and teaching by subject, accounting for 70% of the framework program paying non-soft-skills or spending far too little time on practice according to state regulations, so when implemented for students, the programs take up too much time teaching theory and not enough time on teaching practical skills and providing practice opportunities for students. In their conclusion, the authors stated that the vocational training program in Vietnam has not yet established strict output standards for vocational training levels, and the curriculum only meets the needs of society's employers. In the aspect of rural vocational training, despite of the huge demand for vocational training and job creation in rural areas, the goal has not been met; the structure of vocational training in the agricultural sector is still not suitable for the needs of the agricultural learners' needs (Trinh Xuan Viet, 2023). The research of Pham Thi Kien (2023) also showed that the rural labor source is huge but rural vocational training in general and agricultural vocational training specifically have been done as spontaneous programs instead of following the requests of the national development plan, and thus, the achievements of vocational training as a whole have not met expectations.

Moreover, according to the statistics data of General Statistics Office (2020), the rate of trained farmers (the main workforce in rural areas) with elementary degrees, certificates, or other qualifications in rural areas is 16%, much lower than the rate in urban areas (39.3%) and lower than the national average (24.6%). Up until June 2022, many poor districts and extremely isolated communes, coastal areas, and islands had not escaped particularly difficult situations. The majority of poor and near-poor households were shown to lack livelihoods and jobs, have low and unstable incomes, and lack professional skills (Ho Huong, 2022). Therefore, to achieve the goal of sustainable poverty reduction, vocational training in general and agricultural vocational training in particular need to promote past advantages and overcome existing shortcomings. This was the main reason for conducting this study to analyze the status of vocational training organized by public organizations and the farmers' needs of vocational training in extremely isolated communes, coastal areas, and on islands. Based

on the results, the researchers then proposed some solutions for vocational training programs to meet the farmers' expectations.

Methodology

Analytical framework

Based on the key contents of training activities, with two main participants: the lecturer (or training organizations) and the learner (farmers) (Nguyen *et al.*, 2022), this study approached and evaluated the current situation of vocational training with a focus on the learner's view. According to Maslow (1943), the learners' needs or expectations can be assessed on the basis of their desires and intentions to learn. As such, the desires and intentions of learners were measured according to five indicators, namely (i) their awareness of the necessity of vocational training; (ii) their motivation for participating in the training courses; (iii) the desired content/field of study; (iv) training methods; and (v) training duration.

From the survey data on the training results and farmers' expectations, statistical analyses and comparisons were applied for determining the level of the laborers' assessment on vocational training in order to identify the problems as well as achievements of vocational training. From these analyses, the study proposed solutions to improve the effectiveness of vocational training in extremely isolated communes, lowland and coastal areas, and on islands (hereafter referred to as extremely isolated communes). These contents are summarized in **Figure 1**.

Data collection

To gather information and data for assessing the current situation, the study conducted a sample survey of farmers in extremely isolated communes that were selected following the list issued in Decision No. 353/QD-TTg dated March 15, 2022 of the Prime Minister (containing 54 communes: 11 communes in the North Central region, 10 communes in the South Central region, and 33 communes in the Mekong Delta region). The number of communes in the geographical regions for surveying was determined according to the proportion of communes in each region in the total sample. Consequently, the North Central region had three communes, the South Central region had four, and the Mekong Delta region had nine communes (**Figure 2**). In each geographical

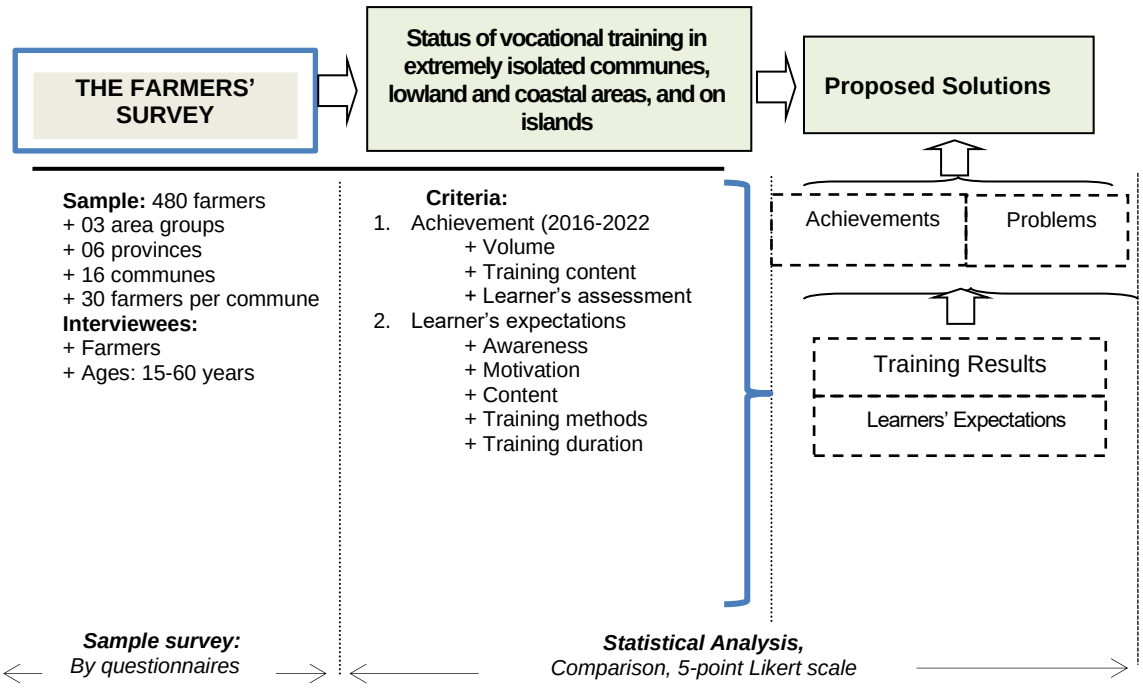

Figure 1. Analytical Framework

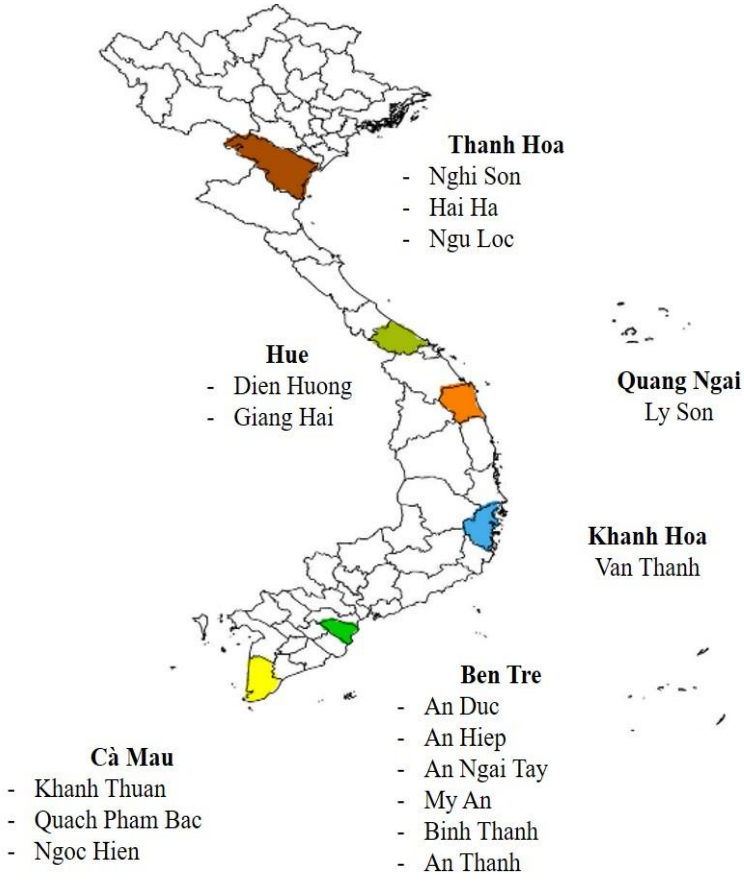

Figure 2. Study sites

region, the provinces selected for the sample survey were chosen based on the following criteria: (1) having a large number of extremely isolated communes and (2) representing various terrains (mountainous, coastal areas, and islands). In each commune, 30 farmers were selected to be interviewed. The total number of survey samples was 480. In addition, secondary data on vocational training results during the period of 2016-2022 were collected from the Department of Labor, Invalids, and Social Affairs in the study areas.

Methods

Descriptive statistics were used to describe the achievements of vocational training during the period of 2016-2022 in the extremely isolated communes. The expectations of farmers in the vocational training were expressed following the five indicators presented in **Figure 1**. In addition, this study also compared the number of leaners and classes by the years, geographical regions and training topics. On these bases, the study aimed to propose solutions to improve the effectiveness of vocational training for farmers in extremely isolated communes in order to meet the needs of the farmers.

Results and Discussion

Characteristics of the survey sample

The results in **Table 1** show that the respondents' average age was quite high, 47.2 years, and varied between 16 and 77 years. This reflects the reality of rural areas in Vietnam in general and in extremely isolated communes in particular, where most working-aged people work away from home or study at educational institutes. Most of the respondents were of an old age and were women. The respondents' average ages in Ca Mau, Ben Tre, and Quang Ngai were quite high. Workers in these provinces mostly worked in industrial parks located in Binh Duong, Dong Nai, and Tay Nguyen. This had a significant effect on the farmers' demand of

Table 1. Characteristics of the survey sample

Criteria	Unit	Min	Max	Mean	SD
Age	Years	16	77	47.2	12.40
Education level	Years	0	12	7.4	3.21
Gender (female)	%			65	
Household size	Persons	1	10	5	1.33
Farmers of a working age	Persons	0	9	3	1.05
Farmers working at the local	Persons	0	8	2	1.18
Land area	m^2	400	20,000	3,197.4	3,781.58
Vocational training status	%			53	

vocational training as well as the effectiveness of vocational training courses in these provinces.

In terms of the educational level, the average number of years of schooling of the respondents was 7.4 years (ranging from 0 to 12 years). The proportion of people who had less than 3 years of schooling and no schooling accounted, respectively, for 11% and 5.6%. Ca Mau and Ben Tre had the lowest averages of years of schooling. This is one of the constraints of implementing vocational training for farmers in those provinces.

Concerning the demographic characteristics of the survey sites, the average household size was 5 persons (varying between 1 and 10 persons). The average number of people of working age was 3 persons. Most people of working age worked in rural areas and in the agricultural sector.

On average, there were 2 people in one household working in agriculture, forestry, or fisheries. In regional comparisons, there were no significant differences in the demographic characteristics. It is worth noting that the number of working aged people who worked in rural areas and the agriculture sector was low, most of them were women, and old people.

The statistics showed that the average agricultural production land area was 3,197m^2 (ranging from 400 to 20,000m^2). Households in the Mekong Delta (such as Ca Mau and Ben Tre) had the largest areas of agricultural production land. **Table 1** also shows that 53% of the interviewees had attended at least one vocational training course.

Vocational training in extremely isolated communes during 2016-2022

Figure 3 shows that during 2016-2022, the number of courses organized in extremely isolated communes was low, accounting for 1.8 courses per year (ranging from 0 to 5 courses). Notably, the provinces in the Central region had more vocational training courses than those in the Mekong Delta. The number of vocational training courses decreased during the 2019-2021 period but was followed by an increase in 2022. Because of Covid-19, in 2020, 6 of the 16 communes did not organize vocational training courses, while others organized only 1-2 vocational training courses.

The average number of farmers participating in vocational training in the survey sites during 2016-2022 was 456 persons per year . The average number of farmers participating in vocational training reached a peak at 1,464 persons in 2018 with a decline after that because of Covid-19 (**Table 2**). In regional comparisons, the number of farmers enrolled in vocational training in the Central region was higher than that in the Mekong Delta. The reasons for these differences were the fewer number of farmers who wanted to enroll in vocational training courses, a lack of funds for vocational training, and the restructuring of the network of vocational training institutes, which resulted in the reduction of the number of vocational training institutes. In addition, many farmers reported that they only took part in vocational training to get financial support from the government, instead of applying to build their awareness of the vocational training topics.

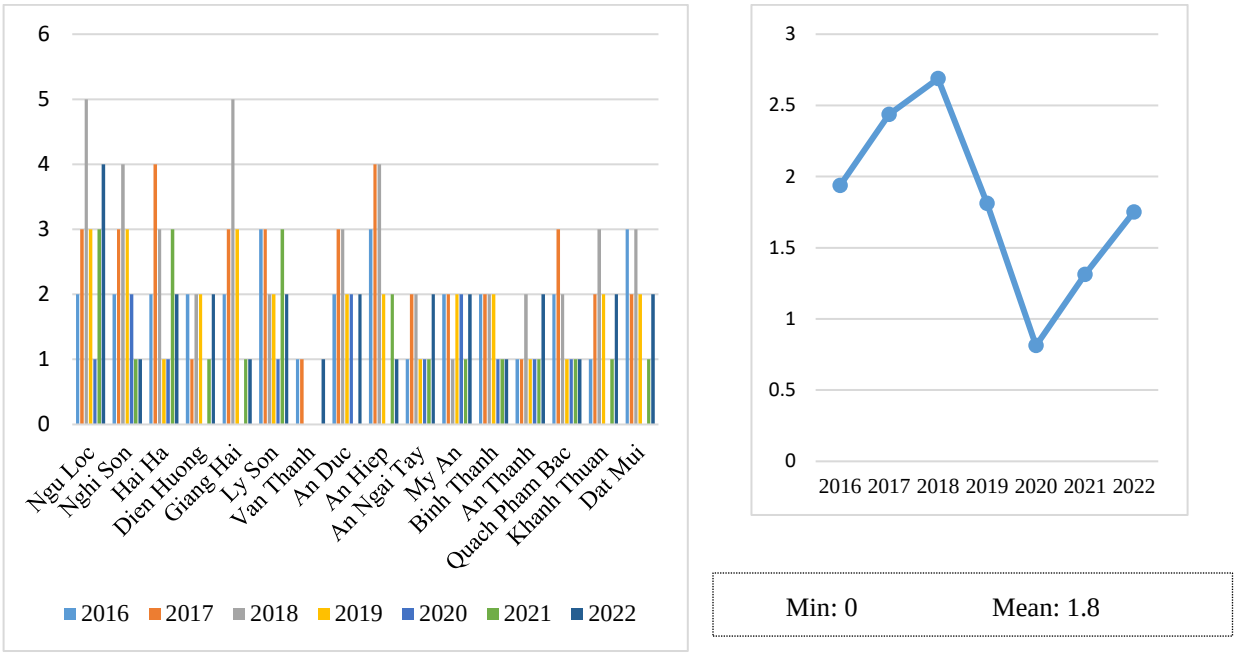

Figure 3. Number of vocational training courses per year in the survey sites during 2016-2022

Table 2. Number of people participating in vocational training during 2016-2022 in the survey area.

Unit: Person

No.	Commune	Province	2016	2017	2018	2019	2020	2021	2022
1	Ngu Loc	Thanh Hoa	78	127	163	101	50	181	200
2	Nghi Son	Thanh Hoa	68	103	121	90	70	50	50
3	Hai Ha	Thanh Hoa	70	137	155	55	50	119	100
4	Dien Huong	Hue	56	32	59	67	0	31	71
5	Giang Hai	Hue	60	86	150	92	0	40	40
6	Ly Son	Quang Ngai	113	126	81	64	30	142	59
7	Van Thanh	Khanh Hoa	40	45	0	0	0	0	38
8	An Duc	Ben Tre	48	98	102	64	59	0	70
9	An Hiep	Ben Tre	72	130	136	73	0	60	40
10	An Ngai Tay	Ben Tre	31	54	69	29	30	30	70
11	Mỹ An	Ben Tre	52	63	34	64	59	27	68
12	Binh Thanh	Ben Tre	48	62	63	56	30	30	40
13	An Thanh	Ben Tre	24	31	68	29	31	21	55
14	Quach Pham Bac	Ca Mau	48	91	57	43	18	43	56
15	Khanh Thuan	Ca Mau	24	73	98	67	0	25	53
16	Dat Mui	Ca Mau	131	71	108	74	0	34	65
	Total		963	1,329	1,464	968	427	833	1,075

The survey results also showed that the training content was very diverse and dependent on the production characteristics and strengths of each region (**Table 3**). Communes near the seaside in Thanh Hoa with a coastline of 42km have favorable national conditions for the development of seafood catching and processing. During 2016-2022, in those communes, there were many vocational training courses which were organized in areas such as seafood

Table 3. Vocational training programs in survey provinces.

No.	Province	Programs
1	Thanh Hoa (Nghi Son, Hau Loc)	Ship Captaining Ship Repair Seafood Processing Embroidering and Sewing Rattan Crafting
2	Thua Thien Hue (Phong Dien, Phu Loc)	Vegetable Growing Technology Mushroom Growing Technology Cooking
3	Quang Ngai (Ly Son)	Vegetable Growing Technology Garlic Growing Technology
4	Khanh Hoa (Van Ninh)	Crop Cultivation
5	Ben Tre (Ba Tri, Phu Thanh)	Giant Freshwater Prawn Farming Technology White-leg Shrimp Farming Technology Disease Management in Aquaculture Cow Farming Coconut Growing Technology Mangrove Rice Cultivation
6	Ca Mau (U Minh, Dam Doi, Ngoc Hien)	Shrimp Farming Technology Crop Planting Technology (Rice, Banana, Orange) Weaving

(fish cakes and fish sauce, etc.), ship captaining, and ship repair. While in the Central Coastal area, vocational training courses focused on agricultural technology including vegetable growing technology, garlic growing technology, and mushroom growing technology, and non-agricultural courses such as cooking, sewing, and tourism.

Ben Tre and Ca Mau are being heavily affected by climate change and saline intrusion. Since 2020, the Communes' Farmer Association, and Agriculture and Aquaculture Extension Central, Department of Agriculture and Rural Development have organized many vocational training courses in giant freshwater prawn farming technology, white-leg shrimp farming technology, and disease management in aquaculture. In addition, there have been vocational training courses in crop cultivation (coconut growing, mangrove rice cultivation), livestock (cow farming), and non-agricultural courses (embroidering, sewing, weaving).

The results of the learners' assessment on vocational training courses is shown in **Table 4**. Overall, the respondents were satisfied with the program of vocational training courses (40% very satisfied and 27% satisfied). Many vocational and technology training courses suitable for the local conditions and the residents' careers were organized. In contrast, the facilities and equipment for the vocational training courses received the lowest rating, accounting for 2.14 on average. The facilities and equipment of the vocational training institutes are outdated and insufficient. There were concerns that the facilities and equipment were not sufficient in scope to conduct hands-on training activities for all learners enrolled in a course, which inevitably resulted in low quality of vocational training. Therefore, it is understandable that the training methods were given a low rating of 2.95.

Table 4 also shows that the respondents were quite satisfied with teachers of the vocational training courses. The attitude of the teachers was the highest-rated score with a rating of 4.6. There was lots of positive feedback on the teachers of the vocational training courses such as the teachers were responsible and enthusiastic, or their training methods were suitable for the level of the learners' knowledge. However, there was a limitation in the practical skills and experience of the teachers, particularly in the

Table 4. Assessment of the respondents about the program and teachers of vocational training

Assessment criteria	1	2	3	4	5	Average	Assessment result
Training content	0	10	23	27	40	3.97	Satisfied
Training methods	0	38	30	30	2	2.96	Neutral
Training documents	0	30	25	30	15	3.3	Neutral
Training facilities and equipment	10	66	14	10	0	2.14	Dissatisfied
Teachers:							
- Attitude	0	0	0	38	62	4.62	Very Satisfied
- Training methods	0	0	14	60	26	4.12	Satisfied
- Technical knowledge	0	0	34	46	20	3.86	Satisfied
- Practical skills and experience	18	34	30	10	8	2.38	Dissatisfied

local culture, language, and traditional agriculture practices. Additionally, the research results showed that although more than 65% of the interviewees believed that they acquired knowledge well or very well, only 20% of them felt they could apply over 80% of the knowledge learned and 57% of them felt they could apply below 50% of what they learned.

The farmers' needs of vocational training in extremely isolated communes in the period of 2023-2025

Farmers' awareness about the necessity of vocational training

As shown in **Table 5**, most of the respondents indicated that vocational training was very necessary. Of the total respondents, 58% perceived that vocational training was necessary while 24% reported that vocational training was very necessary. Only 8% of the total respondents indicated that vocational training was unnecessary. It was found that respondents who were old or who lacked capital and physical resources did not want to participate in vocational training.

In comparisons by province, there were differences in the opinions of respondents about the importance of vocational training. In Ben Tre province, 14% of respondents indicated that vocational training was not necessary. This was the highest proportion as compared to the remaining provinces. The reason for this result was that in this province most of the farmers were old (about 45 years old on average).

In Thanh Hoa, 46% and 42% of the respondents, respectively, indicated that vocational training was necessary and very necessary. Only 5% of the respondents stated that vocational training was unnecessary. It was also found that young people with high educational levels had strong motivation for participating in vocational training to improve their knowledge and skills for their careers.

As shown in **Figure 4**, there were six reasons given for the respondents' needs of vocational training: improvement in knowledge for a career; improvement in skills for a career; improvement in the efficiency of production and business activities; increase in income; creating opportunities for earning money from a new career; and other reasons (for example: encouragement of local authorities and having free time for participation). The proportions of respondents who indicated the above reasons were 15%, 18%, 5%, 43%, 13%, and 6%, respectively. It was clearly shown that most of the respondents expected to participate in vocational training to increase their income.

Farmers' needs of participation in vocational training

Of the total surveyed sample, 75% of the respondents desired to take part in vocational training whereas 27% of the respondents did not intend to participate in the future. In regards to the surveyed locations, the proportions of respondents who desired participation in vocational training in Quang Ngai (90%) and Khanh Hoa (87%) provinces were higher than

Table 5. Farmer's awareness about the necessity of vocational training

Unit: %

Province	Completely unnecessary	Unnecessary	Moderately necessary	Necessary	Completely necessary	No answer
Ben Tre	0	14	3	56	24	3
Ca Mau	2	2	11	55	22	8
Hue	2	5	7	66	20	0
Khanh Hoa	0	8	3	86	0	3
Quang Ngai	0	10	20	60	10	0
Thanh Hoa	1	5	0	46	42	6
Overall average	1	8	5	58	24	4

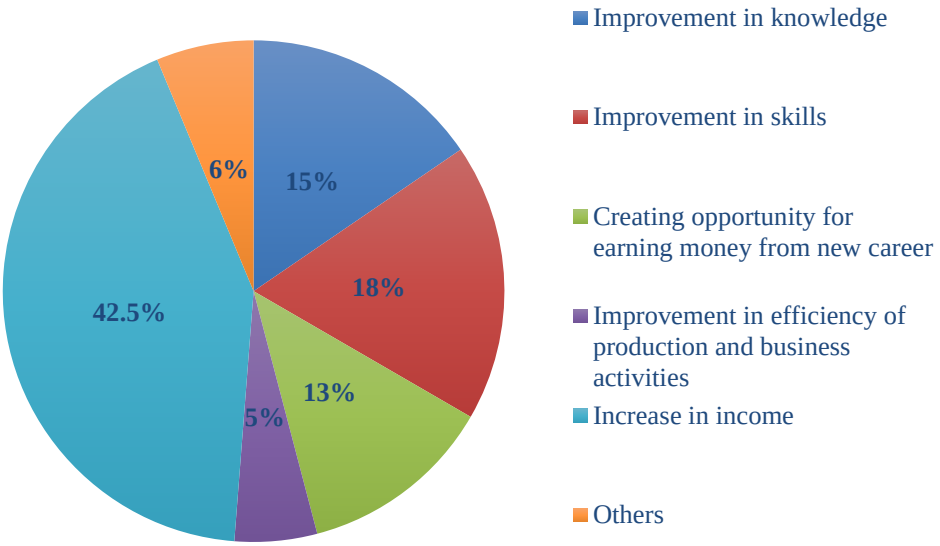

Figure 4. Farmer's motivation for participation in vocational training

those in the remaining provinces. In contrast, the proportions of respondents who did not need to participate in vocational training in Ben Tre, Thanh Hoa, and Ca Mau provinces were 32%, 29% and 25%, respectively. It was found that some main reasons leading to respondents having no intention of participating in vocational training were lack of information about vocational training, inappropriate contents of vocational training, lack of time, earning a stable income from the non-agricultural sector, old age, and other reasons (lack of financial capital to invest in activities related in vocational training, inappropriate schedule of training, etc.). The proportions of respondents who indicated the above reasons were 20%, 21%, 19%, 16%, 2%, and 21%, respectively.

It was also found that among the surveyed locations there were some differences in reasons leading to respondents having no need for participating in vocational training. In Thanh Hoa province, most of the rural laborers have engaged in fishing for a long time. In addition, there is a shortage of agricultural production land area in communes from this province. Therefore, most of the farmers have been persistent in

creating their income from fishing and seafood processing. In the Mekong Delta provinces (Ben Tre and Ca Mau), most of the farmers were of old age and many of them were daily-hire employees. Thus, they did not intend to improve their knowledge in new careers.

Farmers' expectations of vocational training contents

The survey information showed that about 30% of the respondents expected to learn about more than one training topic in the next vocational training. The farmers' expectations of the contents for vocational training were crop cultivation, livestock production, aqua-culture, seafood processing, forestry cultivation, handicrafts, trades and services (motorcycle repair, machine repair), and others (spa services, tour-guide services, make-up services, cooking services). The expectations of the content relating to livestock production, aquaculture, crop cultivation, handicrafts, and trades and services were the dominant opinions. The numbers of responses about the aforementioned contents of the vocational training were 138, 132, 110, 47, and 26, respectively (**Figure 5).**

Figure 6 shows most of the respondents in Thanh Hoa desired to learn about aquaculture. In Quang Ngai, farmers needed to learn about rice, peanuts, and watermelon production in response to climate change as well as learning about models of rotation and intercropping. In Khanh Hoa, farmers expected to learn about growing profitable crops (mango, durian) and vegetables. They also expected to learn about motorcycle and machine repair. In Hue, the farmers' expectations of the vocational training contents were very diverse and covered crop production, aquaculture, handicrafts, and trades and services, among others. In Ca Mau, most of the respondents expected to learn about technical knowledge and skills for shrimp production, and disease treatment in aquaculture. Respondents also needed to improve their knowledge of crop production (such as rotating between rice and fish; rice and vegetable crops), handicrafts, and tour-guide services. In Ben Tre, most of the respondents expected to learn about cattle farming, disease treatment for cattle, shrimp farming, and coconut farming to adapt to climate change.

Farmers' expectation of training methods and duration of vocational training

During vocational training programs, lecturers applied both the lecture method and the experiential learning method. The lecture method, known as the transmissive method, is based on vertical learning, whereby the teacher communicates their knowledge in the form of a presentation, while the trainees take notes. The experiential learning method is an engaging learning process whereby trainees "learn by doing" and by reflecting on the experience provided by opportunities for trainees to practice and deepen their emergent skills. Most of the respondents (85%) expected an improvement in the training methods. In terms of agricultural training programs, on average, the respondents expected that the experiential learning method should be applied to 67% of training contents whereas the lecture method should be used for 33% of training courses. These results can be explained by the fact that agricultural production is the traditional occupation of most of the respondents, therefore they need more practice to not only meet the requirements of new agricultural technology but also to respond to climate change. Thirty-five percent (35%) of respondents proposed the experiential learning method should be applied 70% in training courses. On the other hand, 29% of respondents desired the experiential learning method to be applied 50% in training courses organized for the first time in the study site (**Figure 7**).

Referring to the duration of vocational training programs, most respondents expected the short-term vocational training programs to be organized within 3 months. On the other hand, short training courses should be operated from 7-20 days.

Farmers' willingness to pay tuition fees

It was found that 47% of respondents expressed that they were unable to pay tuition fees due to low income. They expected to participate in the vocational training without any payment for tuition fees or to receive financial support from the government.

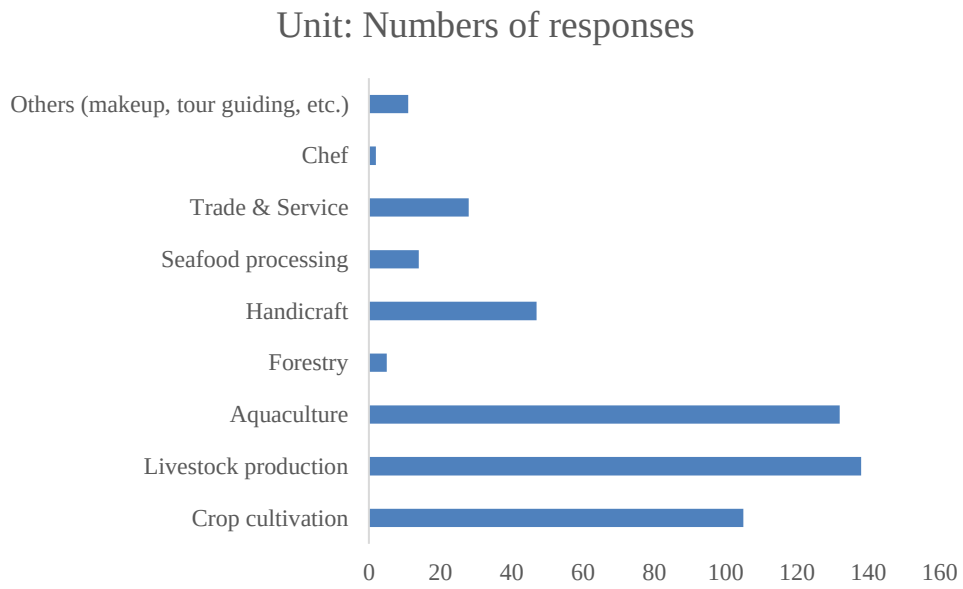

Figure 5. Farmer's expectation of vocational training by contents

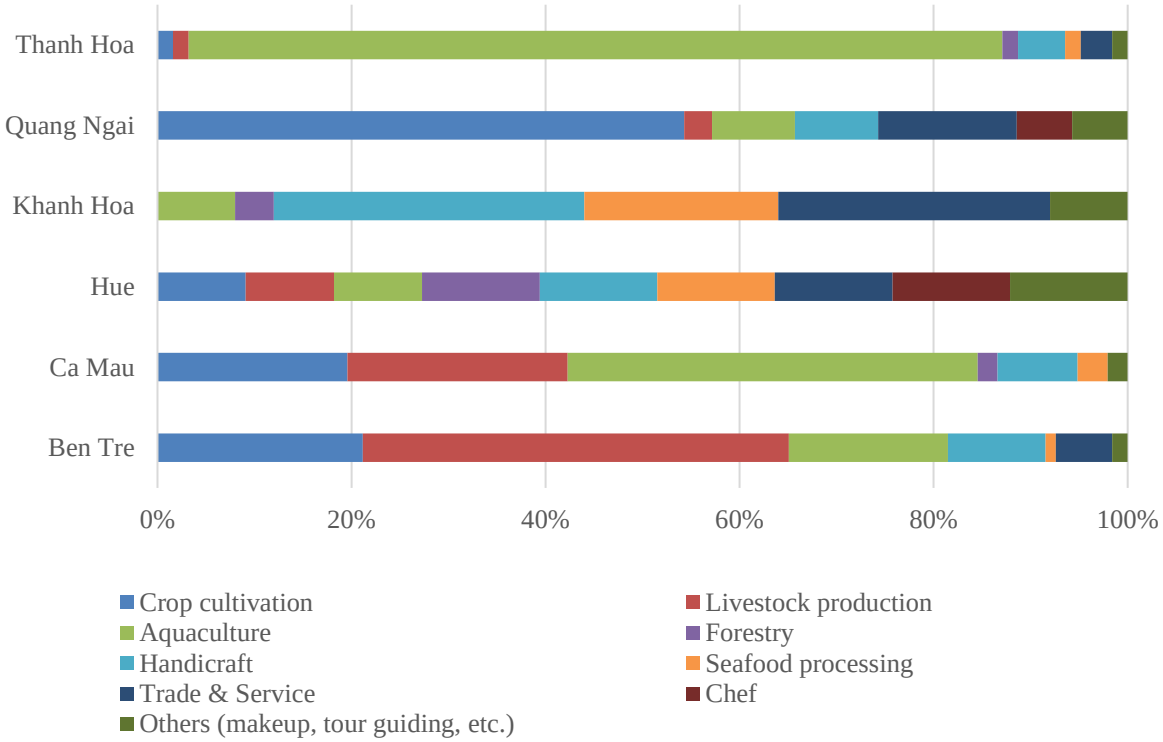

Figure 6. Farmers' expectations of vocational training contents by province

The proportions of respondents who were unwilling to pay tuition fees in Thua Thien, Hue, Ca Mau, and Ben Tre were higher than those of the remaining provinces. On the contrary, in Thanh Hoa and Quang Ngai, the proportions of respondents with a willingness to pay tuition fees were the highest. In Thanh Hoa, the farmers' income is higher than those of the other provinces, therefore the proportions of respondents with a willingness to pay tuition fees

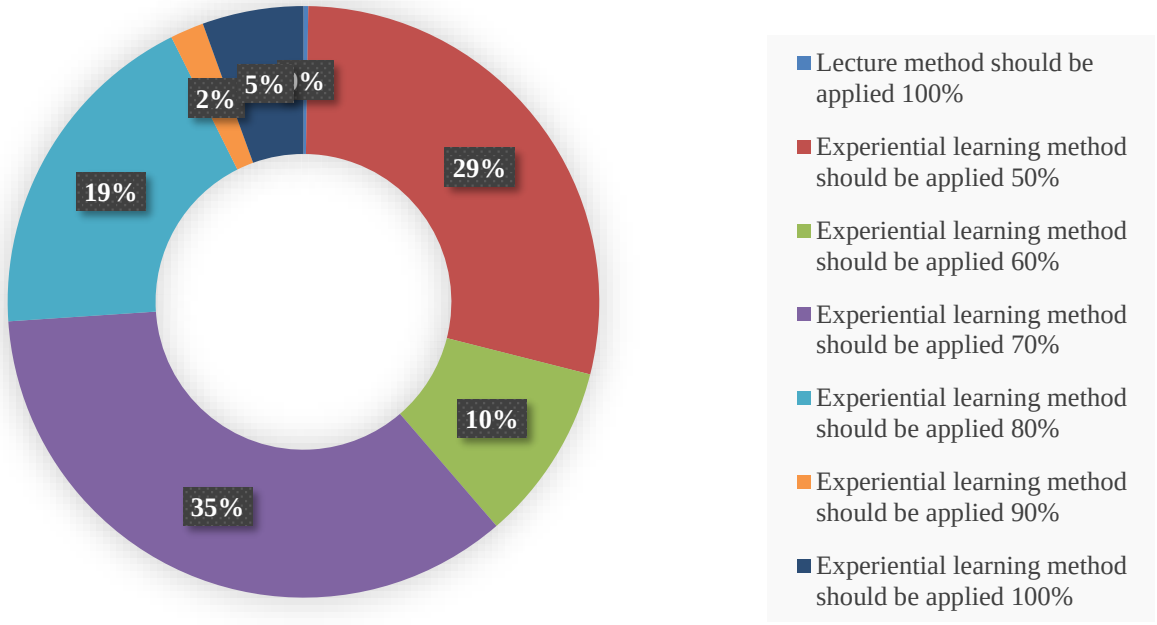

Figure 7. Farmer's expectation of vocational training methods (Unit: %)

of 2-3 million, 1-2 million, and 0.5-1 million were 10%, 29%, and 38%, respectively.

Proposed solutions for vocational training programs to meet the farmers' expectations

Firstly, the farmers' awareness about vocational training should be improved. It was found that 8% of the total respondents indicated that vocational training was unnecessary. Some reasons relating to this situation were the farmers' old age and limited understanding of the importance of vocational training in providing new knowledge and skills for their careers. Farmers should be aware that both the agricultural and non-agricultural sectors have been affected by many factors such as technology development, consumer preferences, and climate change. Therefore, participation in vocational training is necessary to enrich their knowledge and skills to adapt to dynamic situations in production and business.

Secondly, 27% of respondents did not intend to participate in future vocational training partly because they lacked information on vocational training programs. Therefore, in extremely isolated communes with unfavorable physical conditions (poor transportation systems, internet systems, etc.) the local authorities should widely disseminate information on vocational training programs (schedule, contents, and duration, etc.) to farmers.

Thirdly, the perspective on vocational training and diversifying the training contents should be changed. Vocational training should focus on training learners with not only technical knowledge but also fundamental soft skills such as problem-solving skills, critical thinking skills, management skills, and creativity so that learners can move straight into jobs, improve their career development, or set up their own businesses. Moreover, vocational training programs should be diverse and updated with ongoing global developments, for instance, digital transformation, climate change adaptation, and e-commerce.

Fourthly, the training methods and training duration should be improved to meet the farmers' expectations. The experiential learning method should make up a larger portion of the teaching methodologies used in the training courses. Hereby, farmers can learn by doing. In addition, short-term vocational training programs should be organized within 3 months. Short training courses should be operated from 7-20 days.

Fifthly, the mobilization of financial sources to support tuition fees, and transportation fees for farmers should be maintained. Hereby,

poor farmers will be encouraged to arrange their time for participation in training courses.

Lastly, enhancing the linkages between farmers and food processing companies and trading companies should be an important solution that the local authorities should pay attention to. These connections could increase income for farmers, give them the motivation to participate in vocational training, and improve the effectiveness of vocational training.

Conclusions

The research results showed that in recent years, vocational training programs for farmers had some achievements. The numbers of courses and trained farmers increased every year (except 2020 to early 2022 period because of Covid-19), and the training content was appropriate. However, the vocational training program for farmers in extremely isolated communes during the period of 2016-2022 still had limitations, such as the proportion of people lacking information about the vocational training courses was still high, the facilities and equipment were not sufficient, and the level of application of knowledge and skills after training was not high. On vocational training needs, the research results showed that 73.5% of the surveyed farmers had training needs in the 2023-2025 period. The contents of vocational training courses should be designed in accordance with the special requirements of local conditions, in particular those of the production and business characteristics, geography, and social and cultural patterns. In order to enhance the effectiveness of vocational training for farmers in extremely isolated communes, some solutions were proposed, including: raising the awareness of farmers about the importance of vocational training; changing the farmers' perspective on vocational training and diversifying the training contents; increasing the time for practice and internship; organizing training courses during leisure time after harvest; having more flexible lengths of training courses; and providing financial support to farmers.

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References

General Statistics Office. (2020). Report on Results of General Population and House Survey in 2019. Statistics Publishing House. ISBN: 13-978-604-75-1532-5.

Ho Huong (2022). Many localities still have difficulty with infrastructure and lack of basic social services, Retrieved from https://quochoi.vn/tintuc/Pages/tin-hoat-dong-cua-quoc-hoi.aspx?ItemID=67814 on October 14, 2023 (in Vietnamese).

Pham Thi Kien (2023). Improve the quality of vocational training for current rural workers. Retrieved from http://lyluanchinhtri.vn/home/index.php/thuc-tien/item/5005-nang-cao-chat-luong-dao-tao-nghe-cho-lao-dong-nong-thon-hien-nay.html on October 11, 2023 (in Vietnamese).

Liu M. (2013). Education and the roles of the State and the market in poverty eradication. *In:* The Twin Challenges of Reducing Poverty and Creating. Division for Social Policy and Development of the Department of Economic and Social Affairs of the United Nations (UN/DESA): 37-52.

Maslow A. H. (1943). A theory of human motivation. Psychological Review, 50(4): 370-396. DOI: 10.1037/h0054346.

Nguyen T. V., Le H. T. T. & Nguyen H. T. (2022). Evaluating the curriculum of vocational schools in Vietnam. Journal of Advanced Pharmacy Education and Research, 12(2): 57-62. https://doi.org/10.51847/WTZY0lD6Es.

Oxfarm (2017). Improve the effectiveness of vocational training for rural workers to reduce poverty in ethnic minority areas. Summary of survey results in Lao Cai, Hoa Binh, Nghe An, Quang Tri, Dak Nong, Ninh Thuan, Tra Vinh Vietnam. Documents for monitoring and analyzing poverty reduction. Hong Duc Publishing House. Retrieved from https://cng-cdn.oxfam.org/vietnam.oxfam.org/s3fs-public/file_attachments/Oxfam_Day%20nghe_TV_0.pdf on October 13, 2023 (in Vietnamese).

Trinh Xuan Viet (2023). The current situation and solutions for the vocational training of rural agricultural workers in Vietnam. Retrieved from https://tapchicongthuong.vn/bai-viet/thuc-trang-va-giai-phap-dao-tao-nghe-cho-lao-dong-nong-nghiep-nong-thon-viet-nam-hien-nay-103015.htm on October 10, 2023 (in Vietnamese).