



Empowering the Thai Diaspora: Increasing Financial Literacy and Environmental Awareness in Accordance with the Principles of Green Economy Based on Muhammadiyah's Da'wah

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ABSTRAK

The purpose of this community service is to improve financial literacy and environmental awareness of the Indonesian diaspora in Thailand. Situation analysis revealed a low level of knowledge in financial management and green economy practices within the community. The implementation method consisted of visual module-based training, the use of assistive technology (Google Lens), and a dakwah approach rooted in Islamic values. The activity was carried out at Lukmanulhakeem School, Yala, Southern Thailand, involving 24 participants, comprising teachers and students of the school. Pretest and posttest results indicated an increase in the average score from 4.50 to 4.95. More than 83.3% of participants were able to develop personal financial plans, while 87.5% expressed readiness to adopt environmentally compliant financial products. Furthermore, interactive discussions reflected the participants' enthusiasm for adopting green economy principles in daily life. Language barriers were addressed through the use of Google Lens as a translation aid, enabling participants to better understand foreign

terms, module content, and measurement instruments for improved comprehension and skills development. These results demonstrate that the Muhammadiyah dakwah-based approach integrating green economy principles effectively enhanced the financial literacy and ecological awareness of the diaspora, while also building a foundation for the economic and social sustainability of the diaspora community in Thailand

Keywords : sustainable growth, financial literacy, green school, green economy, Southern Thailand

1. Introduction

Improving financial literacy and environmental awareness are two crucial aspects in driving sustainable community growth. A good understanding of financial literacy and the importance of environmental awareness is needed for all community groups, including the Indonesian diaspora in Thailand. The Indonesian diaspora in Thailand, which numbers 4,834 people, consists of various sectors of life, ranging from education, trade, to the informal sector (PWNI 2023; Bangkok, 2023; Chienwattanasook et al., 2023). The increasingly close relationship between Indonesia and Thailand in various aspects, especially trade, education, and diplomacy, this community has also grown rapidly (Harianja et al., 2023; Nabeshima, 2023; Patunru, 2023). Most informants stated that although they had often heard or seen it, they did not yet have knowledge about long-term planning practices, investment, consumption practices, and others. On the other hand, financial literacy based on a green economy has not been a focus (Banchongduang, 2021). Most existing programs only cover basic financial management. These limitations are exacerbated by short-term economic priorities that make many diasporas tend to prioritize daily needs and ignore aspects of long-term financial planning, especially investments in the green economy which actually have the potential to support their economic stability (Kitakogelu & Ozili, 2022; Lakasse et al., 2024).

Meanwhile, low awareness of environmental conservation is caused by consumer habits and lack of social support

for environmentally friendly practices in their communities (Salam et al., 2021). In addition to environmentally unfriendly consumption patterns, low awareness of environmental conservation makes the Indonesian diaspora tend to use products such as single-use plastics or products with a high carbon footprint (Ulya et al., 2023). This influence arises from the practical culture in Indonesia and is reinforced by conditions in Thailand, where access to environmentally friendly products may be limited or require additional costs. In addition, because the concept of a green economy is relatively new to some Indonesians, many diaspora do not (Grohmann et al., 2018) understand the importance of integrating environmental conservation into their daily lives and businesses. As a result, environmentally friendly practices have not been a priority, and contributions to environmental conservation are still minimal (Darlu & Mayaux, 2022).

In order to answer these challenges, this community service is presented in the form of a collaboration between the Muhammadiyah University of Surakarta and the Special Branch of Muhammadiyah PCIM Thailand. This activity is entitled Empowering the Thai Diaspora: Improving Financial Literacy and Environmental Awareness based on the Green Economy principle Based on Muhammadiyah's Da'wah which unites sustainable financial education with an Islamic way of life. This activity includes not only visual module-based training on family financial planning and green investment, but also assistive technology learning such as Google Lens which can make it easier to understand the

language. in line with the research conducted by the community service team. The proposing team has conducted several studies related to improving literacy and access to financial information which will be the basis for determining programs and activities in the international partnership PkM, including improving financial literacy for Indonesian Migrant Workers (PMI) in Malaysia and Hong Kong (Suranto et al., 2023; Suranto, et al., 2024).

Therefore, increasing environmental awareness and financial literacy based on the principles of green economy through the Muhammadiyah da'wah approach is a top priority to help the Indonesian diaspora in Thailand achieve quality of life and have a positive impact on the environment, strengthen a sustainable economy, and contribute to global efforts to create a better future. In the study of Lanciano et al., (2024) showed that sustainable financial literacy can improve investment decisions oriented towards sustainability. In addition, research by (Grohmann et al., 2018) highlighted that sustainable financial literacy education can improve literacy and investment preferences in sustainable financial products. Through the Muhammadiyah da'wah approach, it also

allows the delivery of relevant messages that are well received by the Indonesian diaspora community in Thailand, especially by using Islamic values as a foundation for education that is in accordance with their spiritual needs. By emphasizing ethical financial literacy and environmental awareness based on the green economy, this approach is in line with Muhammadiyah's mission in building a broad-minded and competitive society, as well as promoting sustainable economic growth.

2. Methode

The implementation method of this community service is designed systematically to address the problems faced by the Indonesian diaspora in Thailand, namely low awareness of the importance of environmental conservation and minimal financial literacy. The following steps describe the stages of program implementation, partner participation, implementation evaluation, program sustainability, and the roles and duties of team members. The following is an outline of the methods applied in community service activities related to improving financial literacy for the Indonesian Diaspora in Thailand.

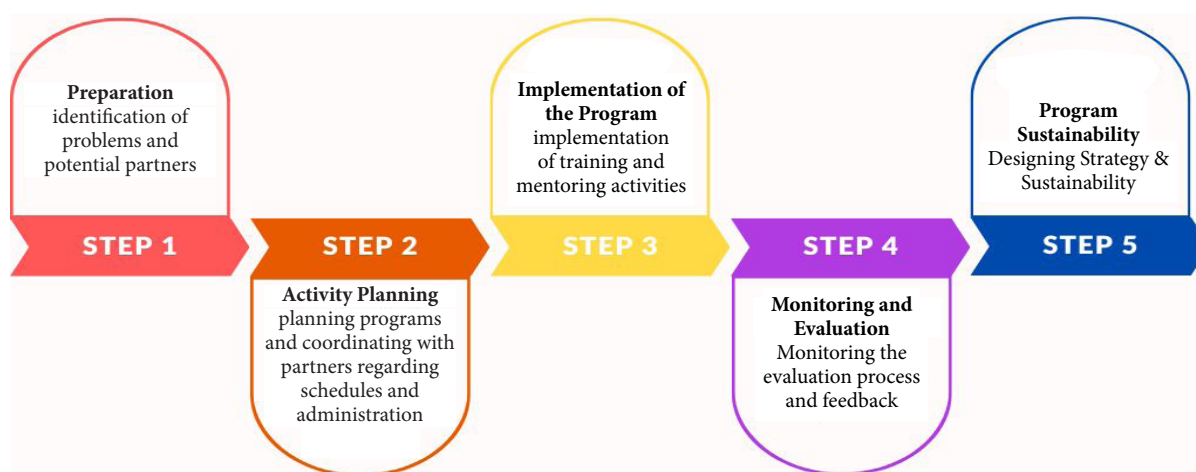


Figure 1. Activity Implementation Method

This community service activity will last for 5 months. The implementation will follow a series of stages as follows:

1. Preparation Stage

The preparation stage begins with data and information collection by collecting

primary and secondary data on the economic, social, and demographic conditions of the Indonesian diaspora in Thailand. This data collection was carried out through surveys, interviews, and direct observation in several diaspora communities. The information collected includes the level of financial literacy from an initial assessment of the diaspora's understanding of financial management, investment, and sustainable financial products and the level of environmental awareness, information on the diaspora's knowledge of environmental issues, attitudes towards environmental conservation, and their consumption habits.

2. Activity Planning Stage

This stage consists of activity planning and coordinating with partners regarding the activity schedule, site review and preparation of administrative documents. The service team first prepares the program or activity to be implemented and chooses a method that suits the needs

of the Indonesian Diaspora community in Thailand. Furthermore, the service team works with the implementing partner (PCIM Thailand) to prepare the schedule and activities. Second, the service team together with PCIM Thailand immediately conducts a survey to the location to assess the physical conditions of the field and ensure the readiness of the partners before starting the service activity. The third step, the community service team takes care of permits and coordinates with implementing partners and target partners (Indonesian Diaspora in Thailand) to implement the community service program.

3. Program Implementation

Training and mentoring activities combine face-to-face (offline) and online activities. Activities are planned to be carried out with an intensity of 3 meetings. The following is presented in Table 3.1, a list of mentoring activities that will be carried out.

Table 2. List of Activities

Number	Solution	Implementation Time	Achievement Indicator (Measurable/Quantitative)
1	Financial Management Training based on the Islamic Life Guidelines for Muhammadiyah Residents (PHIWM)	3rd month	a. Minimum 60% of participants successfully create a budget and personal financial plan. b. Increase in the number of participants who choose environmentally friendly financial products, such as savings based on sustainable investment up to 75%.
2	Green Investment Workshop to Welcome a Sustainable Future	3rd month	a. 60% of participants understand the concept of green investment b. Increase in the number of participants investing in green instruments such as green bonds or environmentally-based mutual funds by 30% in two years
3	Energy Saving and Household Financial Management Education Program	4th month	a. 50% of participants implementing energy saving practices in their households within 2 years. b. Increase in the number of participants reporting a 20% reduction in monthly energy and water spending within 2 years. c. Increase in the number of participants investing in energy saving technologies such as LED lights or water saving devices by 20% within 2 years

4. Monitoring and Evaluation Stage

The results of this community service activity will be evaluated and monitored by the community service team through a pretest and posttest approach based on project evaluation, using basic measures of personal financial management, knowledge of sustainable financial products and awareness of environmental issues and environmentally friendly practices. In addition, the results of the activities applied in the pretest and posttest will be the basis for measuring the increase in capacity and skills of the Indonesian Diaspora in Thailand in financial management and financial literacy awareness based on green economy principles. With a comprehensive pretest and posttest approach, the community service team can ensure that the community service activities carried out have a significant and sustainable impact on the Indonesian diaspora in Thailand.

5. Program Sustainability

The sustainability plan for this program is to create Environmental Awareness and Financial Literacy Based on Green Economy Principles through the formation of an active diaspora community, holding regular workshops and ongoing educational materials, as well as a long-term monitoring and evaluation system to measure the implementation of environmentally friendly practices and financial management. Partnerships with financial institutions and environmental organizations will facilitate participants' access to sustainable products, while public awareness campaigns and mentoring programs can expand positive impacts in the community. Finding funding sources and publishing annual sustainability reports are also important to attract stakeholders and support sustainable efforts, so that the program provides long-term benefits for the diaspora and the surrounding environment.

Tabel 4. Jadwal Pelaksanaan Kegiatan

Number	Activity	Month							
		1	2	3	4	5	6	7	8
1	Preparation Stage	■							
2	Activity Planning Stage		■						
3	Program Implementation			■	■	■			
4	Monitoring and Evaluation Stage						■		
5	Program Sustainability							■	■

3. Results and Discussion

The Community Service Activity of International Partnership (PkM-KI) entitled "Empowerment of Thai Diaspora: Improving Financial Literacy and Environmental Awareness According to the Principles of Green Economy Based on Muhammadiyah Da'wah" in general, succeeded in increasing participants' understanding of the concept of financial planning that is in line with the principles of green economy and Islamic

values contained in the Islamic Life Guidelines for Muhammadiyah Members (PHIWM). This activity was carried out at Lukmanulhakeem School, Yala, Southern Thailand. A total of 24 participants, consisting of teachers and students of the school, participated in this activity enthusiastically. Geographical and mobility limitations caused face-to-face activities to be focused on schools that are actively becoming centers of cross-country educational interaction.

This activity was carried out with a participatory approach based on a visual module entitled “Family Financial Planning” which includes four main parts:

- 1) Part one, introduction to financial planning, Green Economy principles from an Islamic perspective, wallet check simulation, and budgeting and financial goals. In the first part, participants are invited to understand the importance of planning household finances based on current and future needs, and how life risks can affect family finances.
- 2) Part two, through the PHIWM (Islamic Life Guidelines for Muhammadiyah Citizens) value approach, participants are introduced to environmentally friendly financial principles such as saving in Islamic banks, consuming local products, and halal investment.
- 3) Part three, participants are involved in evaluating financial health using three main indicators, namely the size of emergency funds, the ratio of installments to income, and the savings ratio. This simulation is carried out using stationery and paper worksheets.
- 4) Part four, participants set personal financial priorities, including planning children’s education, basic family needs, and weighing between wants and needs. Salah satu tantangan utama dalam penyampaian materi adalah perbedaan bahasa pengantar. Seluruh materi disusun dalam bahasa Indonesia dan aksara Latin, sementara sebagian besar peserta adalah penutur bahasa Melayu Patani dan penutur asli bahasa Thailand dengan literasi aksara Thai. Akibatnya, terjadi beberapa kendala seperti peserta tidak dapat membaca huruf Latin tertentu dengan lancar, frasa penting seperti “*Green Economy*”, “Rasio Menabung”, dan “Dana Darurat” tidak familiar dalam konteks bahasa sehari-hari peserta, dan beberapa terminologi akuntansi sederhana pun

tidak serta-merta dimengerti karena berbeda konteks.

In response to this challenge, the service team facilitated the use of Google Lens as a visual translation aid by showing how to scan module text using an Android phone and automatically translate it into Thai. Participants were taught to open the Google Lens application or the phone camera, point the camera at the text, activate Translate mode, and see the translation results in Thai script. This process proved to be very helpful, especially for teachers and students who were accustomed to using gadgets in their daily lives. In fact, some teachers then applied this method to other textbooks available in Indonesian. This innovation has proven effective in bridging language barriers, while introducing digital technology as a new pedagogical tool in the context of multilingual education.

In addition to the presentation of the material, a discussion session was held between the proposing team and participants (target partners). The discussion session in this activity was very dynamic. Participants showed high enthusiasm, especially when entering the discussion on the application of Green Economy in the context of households, schools, and local communities. This discussion opened up the collective awareness of participants that financial management cannot be separated from ecological and social responsibility, especially for Muslim communities living in environmentally vulnerable areas such as Patani and its surroundings which are close to the coastline and the fisheries sector.

To evaluate the participants’ understanding achievement, a pretest was used before the training and a simulated posttest based on the average increase in training results. Five questions were used to measure participants’ understanding of Islamic financial principles and sustainable financial management. The pretest and posttest instruments for this activity are in Table 7 below.

Table 7. Pretest and Posttest Instruments

Number	Question Items	Answer key
1	Which of the following statements best fits the concept of financial planning and the risks faced in financial management?	Financial planning needs to be done because future needs have unpredictable risks.
2	Characteristics of healthy finances are, except...	Have a large income
3	The principle of Green Economy in family financial planning based on sustainability: which of the following choices best fits the principle?	Investing in companies based on environmentally friendly and halal industries.
4	Mrs. Aisyah is a housewife who wants to apply the Green Economy concept in Islamic-based financial planning. Based on the illustration, which strategy best reflects the concept?	Prioritize the consumption of environmentally friendly products, invest in the halal sector, and save in Islamic banks.
5	Here is a person's financial situation <ul style="list-style-type: none"> Total assets owned: Rp 200,000,000, Total debts owned: Rp 50,000,000, Total emergency funds available: Rp 20,000,000, Based on the information above, which statement is correct?	A person's financial condition is good because total assets are greater than total debts.

Based on Table 8, the average pretest score of participants was 4.50 out of 5.00, while the posttest score increased to 4.95. Participants with maximum scores increased from 10 to 17. The distribution of scores shows that participants experienced significant improvements, especially in answering questions related to financial risk management and identifying healthy financial

characteristics. This increase in scores not only reflects conceptual understanding of the material, but also reflects the effectiveness of the training method that combines a simulation approach, participatory discussion, and the use of digital technology. Figure 2 shows an even increase trend across almost all participants.

Table 8. Pretest and Posttest Score Results

Full Name	Job	Total Pretest Score	Total Posttest Score
Fateeha Alee	Teacher	3	4
Sainah Pataebuenae	Teacher	3	5
Nurainee	Teacher	3	4
Nureenee	ครู	3	4
เสาดิยะ ตะเยาะ	ครูผู้สอน	4	5

Full Name	Job	Total Pretest Score	Total Posttest Score
Rohanee pawae	Teacher	3	5
อายาดี มุหามัดसान	ครู	3	4
Zavvira Sabrinna Al Qatthi	Student	4	5
Sufia perapeh	Student	3	4
Sareena Chetae	Student	3	5
Areena Salaeh	Student	3	4
Nuriman Yaor	Student	3	4
Tasreena kanapeh	Student	3	4
Samseeyah Yelateh	Student	3	4
Adeelah	Students	2	4
Sanita cheuseng	Guru	3	4
มาติฮะห์ ยานยา	ครู	3	5
Nurfatin Deng	Student	3	5
Asmah Pateabenae	Guru	3	5
Nursamiroh Hayihasa	Guru	3	4
Average Score		3.05	4.40

Average Pretest and Posttest Scores

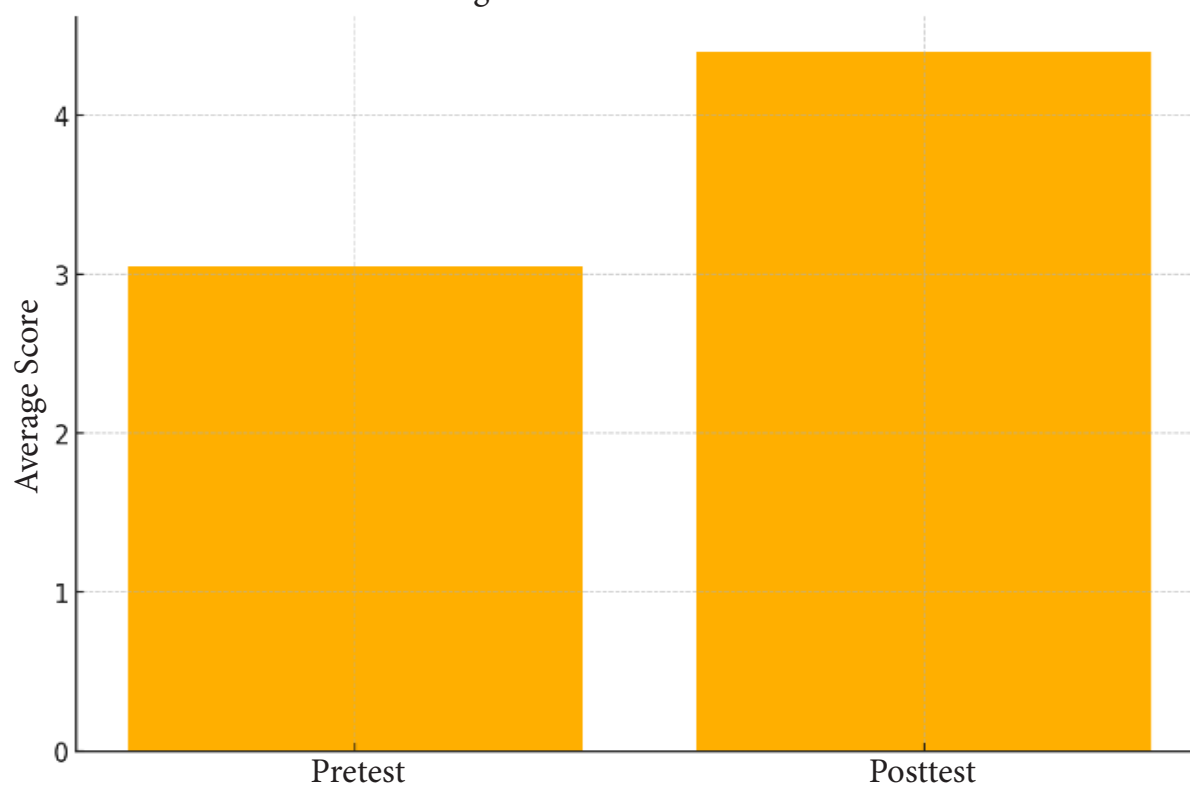




Figure 2. Graph of Increase in Participant Understanding through Comparison of Average Pretest and Posttest Scores

After the posttest was conducted, participants and the proposing team opened a question and answer session through an interactive discussion. The use of digital technology as a translation tool, as well as a simulation approach in learning, is a combination of strategies that have proven effective (Tian, 2024; Vermunt, 2023). Therefore, this activity succeeded in building participants' critical understanding of the importance of financial planning and sustainable living practices (Sari, 2019). This activity also opens up space for future collaboration between Indonesian educational institutions and local educational institutions in Thailand.

In addition to using pretest and posttest instruments filled out online via Google Form, evaluation of participant understanding is also carried out through measuring practical skills in preparing financial plans directly. To support this, each participant is provided with a financial planning pocketbook containing worksheets to record routine expenditure

data, monthly income, debts owned, and the amount of savings available.

Participants are then asked to fill in all the data and conduct a self-evaluation based on three main measures, namely cash size (the amount of cash available directly), debt size (the ratio of liabilities to fixed income), and savings size (the percentage of savings from income). Through this exercise, participants not only understand the concepts presented, but are also able to practice them directly according to their respective personal financial contexts.

Based on Table 9 and Figure 3, more than 60% of participants were able to prepare a personal financial plan and budget, and more than 75% of participants showed interest and readiness to use environmentally friendly financial products, such as saving in sharia-based and sustainability-oriented institutions. Thus, the achievement indicators in the first activity can be stated to have been achieved. The results of this skills evaluation support the results of the posttest and show that

participants have a level of understanding and skills that are in line, especially in the ability to prepare a realistic and sustainable family budget.

These results are in line with the findings of Lanciano et al., (2024) which show that sustainable financial literacy can improve sustainability-oriented investment decisions.

In addition, research by (Grohmann et al., 2018) highlights that sustainable financial literacy education can improve literacy and investment preferences in sustainable financial products. Thus, the increase in understanding and skills of participants in this activity reflects the effectiveness of the training approach applied.

Table 9. Results of Activity 1: Evaluation of Financial Preparation and Interest in Environmentally Friendly Products

Evaluation Indicator	Minimum Target	Actual Achievement Results
Percentage of participants who are able to prepare a budget and personal financial plan	$\geq 60\%$	83,3% (20 dari 24)
Percentage of participants who stated they were ready to use environmentally friendly (sharia/green) financial products	$\geq 75\%$	87,5% (21 dari 24)

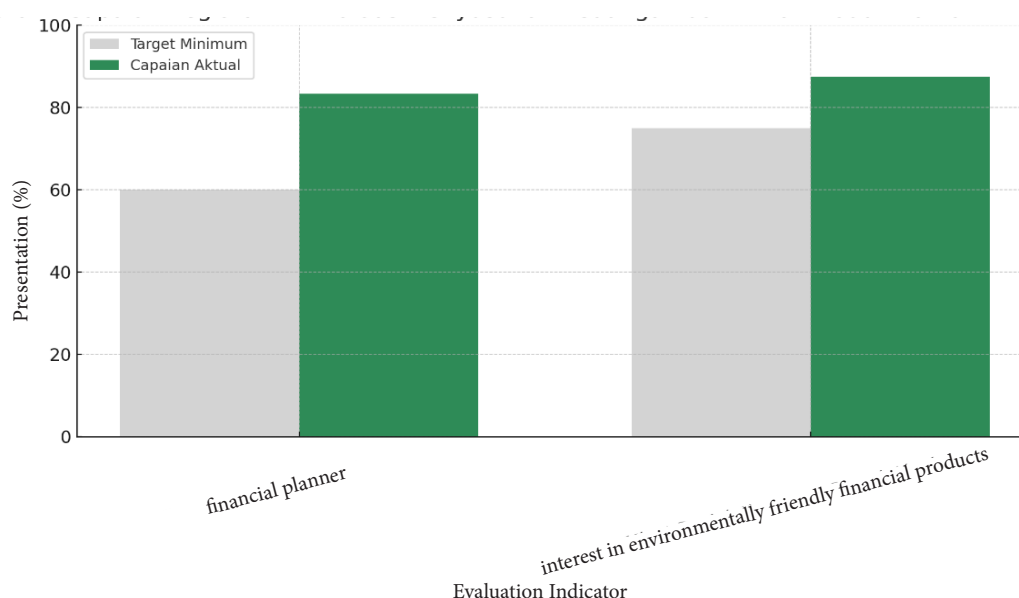


Figure 3. Activity Achievement Graph 1: Evaluation of Financial Preparation and Interest in Environmentally Friendly Products

Overall, the implementation of this activity can be categorized as successful, both in terms of cognitive achievement and practical skills of the participants. The first activity, namely Financial Management Training based on the Islamic Life Guidelines for Muhammadiyah Citizens (PHIWM), has been successfully implemented in its entirety according to plan. All materials have been delivered, and participant participation was very active, both in following the delivery of

materials, filling out pretests and posttests, and in discussion sessions. As a follow-up to the activity, the service team carried out the second activity (Green Investment Workshop to Welcome a Sustainable Future) and the third (Energy Savings and Household Financial Management Education Program), which will be carried out online via the Zoom platform and has been scheduled to be implemented in May to July 2025.

4. Conclusion

Community service activities at Lukmanulhakeem School, Yala, Thailand, have successfully increased financial literacy and environmental awareness for 24 teachers and students. The training materials were delivered in the form of visual PPTs and practical simulations covering family financial planning, green economy principles based on Islamic values, and financial condition evaluation. Language barriers were overcome by using Google Lens as a translation tool that allowed participants to understand foreign terms and module content as well as measurement instruments for improving understanding and skills more easily.

The discussion was interactive, showing the high interest of participants

in implementing environmentally friendly economic principles in everyday life. Participants were invited to see that simple practices such as saving in sharia cooperatives, managing waste, and planting mangroves can be real forms of ecological preaching. Pretest and posttest evaluations showed a significant increase in understanding of financial literacy based on the Green Economy.

5. Acknowledgment

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