

## **Enhancing Financial Literacy and Economic Resilience: A Community-Based Education Initiative for Fish Farmers and Local Enterprises in Tarakan, Indonesia**

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### **ABSTRACT**

*This community service activity aims to enhance community financial literacy through simple financial education for the Fish Farmers Group (Pokdakan) "Raja Ikan" and the Community Group (Pokmas) "Antara Lestari" in Kampung Empat, Tarakan City. The program was carried out as an empowerment initiative for coastal communities to develop basic financial management skills for both household and business purposes. The activity employed a participatory and dialogical approach involving material presentation, interactive discussions, and real-life case analyses relevant to the participants' socio-economic context. The materials focused on separating personal and business finances, understanding cash flow, managing capital, and applying simple bookkeeping practices. The results indicated an improvement in participants' understanding of fundamental financial management concepts and increased awareness of the importance of financial record-keeping in daily business activities. This activity served as an initial step toward fostering sound financial behavior and promoting economic independence among coastal communities in Tarakan City.*

**Keywords:** *Community Empowerment, Financial Education, Financial Literacy, Pokdakan, Tarakan.*

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## INTRODUCTION

Community empowerment is one of the main pillars in the implementation of Tri Dharma Perguruan Tinggi (Three Pillars of Higher Education), which focuses not only on teaching and research but also on making a real contribution to improving the social and economic welfare of the community. Through community service activities, universities act as agents of knowledge transformation and innovation, thereby addressing local issues. These activities serve as strategic platforms for students and lecturers to directly implement their knowledge in community life. In this context, financial literacy is a crucial area to strengthen the economic independence of communities in today's competitive modern era (Suryaningsih et al. 2024)

Financial literacy is generally defined as an individual's ability to understand, manage, and make effective financial decisions (OJK 2022). This literacy covers the aspects of budgeting, savings, investment, and risk management. Unfortunately, a national survey shows that the level of financial literacy among Indonesians is still 49.68%, which means that many people do not understand the basic concepts of personal and business finance. This condition has implications for the low ability of the community to manage income sources productively and sustainably, especially for groups working in informal and fishing sectors (Suryaningsih et al. 2025)

Various studies show that improvements in literacy finance can have a significant impact on the welfare economy of households. Prakoso et al. (Prakoso et al. 2024) confirmed that individuals with literacy good finances tend to be financially positive, such as ability to save in a way consistent and manageable income with wise. (Awaluddin et al. 2025) add that the approach of literacy based finance community has proven more effective because capable adaptation method learning with needs and context social public local approach kind of this is very relevant for community economy productivity in the area, including public coastal areas and fish farmers, which are local bone back economies (Suryaningsih et al. 2024)

Tarakan is one of the regions in North Kalimantan and has great potential in the aquaculture sector. One form of fisheries-based economic empowerment in the surrounding area is demonstrated through the optimization of mackerel processing into high-value processed products in Tanah Kuning Village, which has been proven to increase the income and skills of coastal communities (Suryaningsih et al., 2024). Community activities in this region are not limited to fish farming for consumption but also include household economic activities such as fish processing and other micro-businesses. However, observations show that most communities still face obstacles in financial management, at both the individual and group levels. A lack of understanding of financial record keeping, business planning, and capital management often prevents businesses from developing optimally. In addition, time management and productivity skills are also important aspects in supporting efficient and sustainable business management As stated by Awaluddin, Suroso, and Mardiah (2024) improving time management skills plays a direct role in the operational effectiveness of MSMEs and has an impact on the financial stability of business actors.

One of the communities that is the focus of this activity is the Fish Farmers Group (Pokdakan "Raja Ikan") located in Kampung Empat Village, Tarakan City. This Pokdakan has around 12 active members and eight supporting workers who regularly carry out catfish farming activities in an area of ±1 ha. This group has a network of

regular customers such as food stalls and culinary businesses in Tarakan. However, financial management is still conducted without structured data. This hinders the group's ability to manage cash flows, assess business profits, and allocate capital for cultivation development.

In addition to Pokdakan, this activity also involves community groups (Pokmas) that focus on community-based socio-economic activities in the Kampung Empat Village. Efforts to empower communities based on creative and digital economies have proven to be able to increase the independence of local businesses in Tarakan, as evidenced by the results of the Mudapreneur activity developed through digital marketing training for young MSMEs (Hidayat & Chulsum, 2025). Pokmas play an important role in driving productive activities such as environmental cleanliness, waste management, and household businesses. The synergy between Pokmas and Pokdakan is important for strengthening the socio-economic structure of the community. Both face similar challenges, such as a lack of financial literacy and a weak financial recording system, in both productive businesses and social group activities. Thus, the empowerment of these two partners is a strategic step towards creating broader and more sustainable economic changes. This is in line with the results of community services in Tanah Kuning Village, which shows that improving financial literacy through intensive training and mentoring can strengthen the economic independence of coastal communities and reduce their dependence on informal loans (Suryaningsih et al., 2024).

This community service activity was conducted as part of the Community Empowerment Program by the Student Executive Board (BEM) of the University of Borneo Tarakan, funded by the Ministry of Higher Education, Science, and Technology. In the context of strengthening community capacity, financial literacy also needs to be accompanied by digital literacy, such as social media marketing training that equips communities with online promotion skills in the digital age (Suryaningsih et al., 2024). This program is a concrete implementation of collaboration between students, academics, and the government to support sustainable development based on higher education. This activity is part of a series of BEM agendas focused on strengthening the community's economic capacity through financial literacy and practical business management.

The simple financial education program held on October 4, 2025, was designed with a participatory approach, where partner communities were not only participants but also played an active role in the learning process. This educational approach has proven effective in increasing financial awareness and encouraging wiser financial behavior, as demonstrated in educational activities on the dangers of online loans for students, which has successfully changed consumptive mindsets and strengthened the financial literacy of the younger generation (Yulasmama et al., 2025). The educational material covers the separation of personal and business funds, understanding business capital, capital turnover, cash management, and how to manage profits wisely, and discusses various case studies that often occur in the community. The methods used included interactive counseling and question-and-answer discussions. This approach is expected to enhance the understanding of the Pokdakan and Pokmas members regarding the importance of regular and efficient financial management.

In addition to financial education, this activity strengthens the values of collaboration and community independence through training in business management and the utilization of local resources. This empowerment is aimed at enabling the community to develop independent small business models using transparent accounting systems. Thus, this activity not only improves individuals' financial capabilities but also strengthens economic institutions at the community level. Collaboration between students, the community, and the local government is a tangible form of synergy that strengthens a knowledge-based local economy.

Overall, this activity aims to foster financial awareness and improve the community's ability to manage businesses sustainably. This activity is expected to become an empowerment model that can be replicated in communities in other regions. Through increased financial literacy, the community is expected to not only understand the importance of economic planning but also be able to apply this knowledge to their daily lives, thereby creating an independent, productive, and competitive community.

## METHOD

This simple financial education activity was conducted using participatory and dialogic methods, which focused on the direct interaction between resource persons and partner communities. This approach was chosen so that the learning process would not be one-sided but would encourage active participation by participants in understanding and relating the material to their own financial experiences. A community-based participatory learning approach enables a more effective knowledge transfer process because it is adapted to the local social and cultural contexts (Awaluddin et al., 2025).

This activity involved two partner groups, namely the "Raja Ikan" Fish Farmers Group (POKDAKAN) and the "Antara Lestari" Community Group (POKMAS) in Kampung Empat Village, Tarakan City. The education was conducted on October 4, 2025, by the Community Empowerment team from the Student Executive Board (BEM) of the University of Borneo Tarakan, with the support of supervising lecturers from the Faculty of Economics. The method consisted of three main stages material delivery (interactive counseling), question and answer discussions, and discussion of real case studies that often occur in the community.

### A. Interactive Counseling

The first stage was conducted through the direct delivery of materials by resource persons to the activity participants. The material was delivered using a simple, communicative approach tailored to the level of understanding of the partner community. The materials cover:

- Separating personal and business funds,
- Understanding business capital and cash flow,
- How to manage profits wisely, and
- Simple financial planning and record keeping.

Counseling uses everyday language that is easy to understand and is accompanied by concrete examples of community economic activities such as fish

farming management, sales, and feed purchases. The presentation was carried out using simple visual media (presentation slides and sample financial tables) so that participants could clearly follow the flow of the explanation.

This counseling method is based on the principles of andragogy, in which adults learn most effectively when the material is presented in accordance with their experiences and needs (Malcolm, 1973). This approach allows participants not only to receive information but also to relate it to the realities of their daily lives.

#### **B. Question and Answer Discussion**

The second stage consisted of an open discussion and question-and-answer session between the speakers and participants. At this stage, the community was allowed to convey the financial problems they faced in their economic activities and household financial management. The discussion was active and dialogical, with speakers providing guidance and practical solutions based on the basic principles of financial management.

Some of the topics that arise in this session include:

- Difficulties in separating personal money from business money,
- Lack of neat daily transaction records,
- Use of business profits for consumptive needs, and
- Confusion in managing business capital when raw material prices rise.

Through this session, the community can discuss directly with the implementation team to gain a more contextual understanding relevant to their individual financial situations. The discussion approach has proven effective in increasing financial awareness because it encourages reflection and behavioral change (Prakoso et al., 2024).

#### **C. Discussion of Real Case Studies**

The third stage involves a discussion of several case studies taken from situations commonly encountered in partner communities. Each case was discussed together to obtain rational and applicable solutions. For example:

- A case where proceeds from fish sales are used for personal needs without setting aside capital.
- A case in which a household business does not have clear records of expenses makes it difficult to determine profits and losses.
- A case of errors in distributing profits among group members.

In this process, resource personnel guide participants to analyze problems, determine financial priorities, and develop realistic solutions according to their capabilities. Through case analysis, participants learned how financial principles can be applied in the real context of their lives, not just in theory.

This case-based learning method directs participants to develop critical and adaptive thinking patterns towards local financial issues (Creswell & Creswell, 2018). In addition, this activity encourages collaboration and the exchange of experiences among group members, strengthening the sense of mutual learning within the community.

#### **D. Evaluation and Reflection**

The activity was evaluated simply by directly observing the level of participation, understanding, and response of the participants during the activity. The results of the reflection showed that most participants began to understand the importance of recording cash flows and separating personal and business money. This evaluation serves as the basis for future assistance plans, particularly for groups that want to consistently implement a simple financial recording system.

## RESULTS AND DISCUSSION

### A. Implementation of Simple Financial Education

Simple financial education activities were carried out on October 4, 2025, in Kampung Empat Village, Tarakan City, involving the Fish Farmers Group (POKDAKAN) "Raja Ikan" and the Community Group (POKMAS) "Antara Lestari" as main partners. There were 20 participants, consisting of members of a catfish farming group and household business owners.

The main objective of this activity was to improve the financial literacy of the community, particularly the management of small businesses and household finances. The activity was carried out through the provision of materials, question and answer discussions, and case studies that are often encountered by the community, such as the mixing of personal and business finances, errors in capital management, and the habit of not keeping financial records.

Participatory methods were used, and participants were actively involved in the discussion process. This is in line with the view (Malcolm, 1973) that adult learning is effective when directly related to the real experiences of participants. This approach also supports the principle of community-based education, which, according to Awaluddin et al. (2025), strengthens the relevance and impact of empowerment activities.

The participants showed great enthusiasm during the activities. Some participants related the material to their daily business experience, such as calculating fish harvest yields, purchasing feed, and business capital turnover. This reinforces the fact that people can understand simple financial concepts when they are directly related to their economic activities (Prakoso et al., 2024).



Figure 1. Socialization of Simple Financial Education

## B. Main Models and Outcomes of Activities

The outcome of the activities is a simple community-based financial education model that emphasizes three main aspects:

1. Basic conceptual understanding of finance,
2. Application through local case studies, and
3. Reflection through group discussions.

This model falls under the categories of social engineering and community education, as it focuses on changing financial behavior through a collective learning process. A similar approach was applied to coastal community empowerment activities in Tanah Kuning Village through training in processing mackerel into value-added products, which has been proven to increase the economic capacity of fishing households (Suryaningsih et al., 2024). Observations show an increase in participants' knowledge of basic financial concepts, such as separating personal and business finances and the importance of cash flow recording.

These findings are in line with the results of a survey (OJK, 2022) that confirms that increased financial literacy can encourage people to be wiser in managing economic resources, especially in the small and medium-sized business sector.

## C. Strengths and Weaknesses of the Activity

Simple financial education activities have several strengths, including:

1. Contextual and easy to implement. The material was compiled based on the economic reality of coastal communities, making it easier to understand and implement.
2. Participatory approach. Questions and answer sessions and case studies encouraged participants to actively engage rather than passively listen.
3. Encourages changes in financial behavior. Several participants reported that they began to separate their personal and business finances after the activity.
4. Replicable. The activity model is simple and does not incur significant costs, making it applicable to other community groups.

However, the activity also had several weaknesses:

1. The short duration of the activity meant that the participants did not have time to practice routine financial recordings. Similar community service activities that focus on improving technical skills, such as product packaging training for MSME actors, have been proven to strengthen the economic competitiveness of local communities and to expand product marketing opportunities (Usman et al., 2023). Time constraints are a common challenge in community service activities; therefore, a sustainable training strategy with more systematic time management is required to improve learning effectiveness (Awaluddin et al., 2024).
2. Differences in education levels meant that some participants required more intensive assistance.
3. There has been no systematic follow-up such as further training or monitoring of the application of the material in the field.

These limitations form the basis for the next community service plan, which aims to develop a follow-up program in the form of community-based financial record-keeping assistance. This is in line with the principle of continuous community development (Creswell & Creswell, 2018), which states that the sustainability of community service programs requires a process of repeated learning so that the social impact can be long lasting.



Figure 2. Discussion and Evaluation of Simple Financial Education Socialization

#### D. Level of Difficulty and Sustainability Opportunities

Based on the evaluation results, the level of difficulty in implementing these activities is relatively low, as these activities do not require special tools or technology. The main challenge lies in the resource persons' ability to simplify economic terms so that they can be easily understood by the community.

The sustainability opportunities for the activity are very high because:

- The community has shown enthusiasm for learning advanced financial record keeping skills. Technology and social media support can also strengthen sustainability, as demonstrated by the Mudapreneur program in Tarakan, which utilizes Instagram-based digital marketing training to promote community economic independence (Hidayat & Chulsum, 2025).
- Kampung Empat Village and the university support this activity as a sustainable program; and
- The activity model can be replicated for other productive economic communities in Tarakan City.

Thus, this activity not only provides conceptual understanding but also shapes new financial awareness in society as an important prerequisite for local economic independence (Awaluddin et al., 2025). This success is in line with the findings of Suryaningsih et al. (2024), who emphasize that community-based financial literacy, when carried out contextually and sustainably, can build a culture of economic independence at the village level.

The results of this activity are in line with the findings of (Nursia et al., 2024), who confirm that community service activities based on capacity building for coastal communities can have a significant economic impact when directed towards the productive management of local resources. In the context of this simple financial education activity, strengthening the community's ability to manage income, maintain financial records, and understand cash flow

is the first step in fostering economic independence, as seen in the coastal community of Tanah Kuning Village, which has gained added value through fish processing innovations. Improving financial capacity through financial literacy plays a similar role in improving technical capacity in fish processing, namely expanding community access to sustainable economic opportunities and improving household welfare. Thus, simple financial education can be seen as a form of knowledge-based empowerment that complements business skills development activities in's rakan the coastal areas.

## CONCLUSION

Simple financial education activities carried out in the Kampung Empat community, particularly among the Raja Ikan Fish Farmers Group (POKDAKAN) and the Antara Lestari Community Group (POKMAS), have made a real contributed to improving the basic understanding of business and household financial management. This is in line with entrepreneurship training activities for MSME actors in Pantai Amal Village, which also focus on increasing the economic capacity of the community through the development of small and medium enterprises (Usman et al., 2022). Through a participatory approach involving the provision of materials, question-and-answer discussions, and case study discussions, the partner community was able to understand important concepts such as the separation of personal and business finances, cash planning, and prudent profit management. This activity proves that financial literacy can be effectively improved through contextual education relevant to the local community s economic activities.

Qualitatively, this activity succeeded in raising financial awareness among the community and motivating them to implement simple financial record keeping in their daily business activities. These results reinforce the view that strengthening financial literacy not only plays a role in improving individual capabilities but also has an impact on sustainably strengthening a community's economic structure. Thus, this activity is a concrete example of the implementation of Tri Dharma Perguruan Tinggi (the Three Pillars of Higher Education) in the field of community service oriented towards economic empowerment and independence.

A suggestion for future activities is the need for follow-up in the form of continued assistance and periodic monitoring of the implementation of financial record keeping by the community. This is important to ensure that the financial behavior changes that have formed can continue consistently. In addition, it is necessary to develop simple digital learning media, such as application-based financial record sheets or Excel templates, so that the community can easily record and monitor their finances. Further research is also recommended to evaluate the long-term impact of financial education activities on improving the economic welfare of the community in the coastal area of Tarakan.

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The successful synergy between academia, government, and the community in this project exemplifies the practical realization of Tri Dharma of Higher Education, specifically in the pillar of community service. We hope that this collaborative model will inspire and sustain future empowerment.

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