

# Leadership analysis of the Bengkuring Karya Fish Farming Group in East Sempaja Subdistrict, Samarinda City

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## ABSTRACT

*Leadership is a fundamental element that significantly determines the operational success and achievement of a group's vision. The success of an organization or business group, including fish farming groups, largely depends on the effectiveness of its leader in managing available human resources. This effectiveness is also influenced by the socio-economic characteristics of group members, which may affect the dynamics of cooperation and communication within the group. This study aims to examine the socio-economic characteristics of members and to analyze the leadership style implemented in the Bengkuring Karya Fish Farmers Group (Kelompok Pembudidaya Ikan, Pokdakan), located in East Sempaja Subdistrict, Samarinda City. The study employed a descriptive quantitative approach with a total sampling technique involving the entire population of 12 respondents, consisting of group administrators and active members. Data analysis was conducted using descriptive analysis to interpret respondents' responses, as well as DeVito's leadership theory to identify the leadership style applied. The results show that the majority of group members are aged between 36–45 years, have completed senior high school/vocational education, have low participation in non-formal education, possess low to moderate income levels, have been members of the group for approximately four years, and most are married. Based on the analysis, the dominant leadership style is democratic leadership, characterized by member participation in decision-making processes as well as open and collaborative communication between the group leader and members.*

## INTRODUCTION

Samarinda City, located along the Mahakam River and its tributaries, holds significant potential for freshwater aquaculture development. The sector has recorded a production volume of 35,433 tons across 894 hectares, with catfish (*Clarias*), tilapia (*Oreochromis*), and pangasius (*Pangasius*) as the main commodities (BPS East Kalimantan, 2023). Despite this promising output, the contribution of aquaculture to the local economy remains suboptimal due to limitations in infrastructure, market access, and innovation.

Fish Farmer Groups (Pokdakan) play a strategic role in managing aquaculture enterprises. One example is Pokdakan Bengkuring Karya in East Sempaja, which demonstrates how collective organization can strengthen production and sustainability. Leadership style within these groups is a critical factor influencing group effectiveness and member satisfaction. Relaxed leadership tends to enhance satisfaction, while authoritarian approaches often reduce it (Northouse, 2018).

In addition, the socioeconomic characteristics of Pokdakan members—such as education level, income, and livelihood background shape their responses to leadership practices. These factors determine how members perceive authority, collaboration, and decision-making processes, thereby influencing the overall performance of the group (Todaro & Smith, 2020). Understanding these dynamics is essential for identifying leadership strategies that align with the social and economic realities of aquaculture communities.

This study aims to examine the relationship between leadership styles and the socioeconomic characteristics of Pokdakan members in Samarinda. The objective is to formulate effective leadership strategies that can improve group performance, strengthen the aquaculture sector, and contribute to local economic development and food security.

## METHODOLOGY

This research was conducted from January to June 2025 at the Bengkuring Karya Fish Farming Group (POKDAKAN), located in East Sempaja Subdistrict, Samarinda City. East Sempaja Subdistrict is one of the administrative villages within North Samarinda District, Samarinda City. Geographically, East Sempaja Subdistrict has a total area of 35.34 km<sup>2</sup>, consisting of 54 neighborhood units (RT) and 7,050 households.

The research process began with field surveys, proposal preparation, and concluded with the final thesis writing stage. The study employed a mixed methods approach using a convergent parallel design. According to Creswell (2018), a convergent parallel mixed methods design involves the simultaneous (concurrent) collection of both quantitative and qualitative data, which are then analyzed and integrated.

The data in this study consisted of primary and secondary data. Primary data were collected through structured interviews using questionnaires, while secondary data were obtained from relevant institutional documents.

### **Sampling Method**

The sampling technique used in this study was total sampling. According to Taherdoost (2016), total sampling is applied when the population size is relatively small and can be fully accessed, allowing all population members to be included as research samples to improve data accuracy. The total number of respondents in this study was 12 individuals.

### **Data Analysis Method**

Data analysis was conducted to process the data obtained from the research in order to draw meaningful conclusions regarding the studied phenomenon. The analytical methods used in this study are as follows:

#### ***Characteristics of Group Management and Members***

The analysis of fish farming group dynamics begins with identifying the individual characteristics of both managers and members. Assessment was conducted using a Likert scale as proposed by Sekaran (1992), which is an interval measurement scale. Each respondent's answer to the given statements was scored from 1 to 3 and classified into three categories: low (score 1), medium (score 2), and high (score 3).

The characteristics analyzed include:

- a. Age
- b. Level of formal education
- c. Participation in non-formal education (such as training or extension programs)
- d. Income level
- e. Length of membership in the group
- f. Marital status

The analysis of these variables aims to understand the socio-economic and educational background of members and the extent to which these characteristics influence group dynamics and leadership effectiveness.

**Perceptions of Leadership Style of Group Management**

To measure members’ perceptions of the leadership style applied by group managers, the study used DeVito’s (1997) leadership theory. Respondents were asked to answer 34 statement items representing various leadership style indicators. The response options consisted of five categories: Never (TP), Rarely (J), Neutral/Undecided (RR), Often (S1), and Always (S2). Each response was assigned a numerical score to identify the dominant leadership style.

The results were classified into several leadership styles as follows:

- a. **Laissez-faire style** (score 1): characterized by minimal leader involvement in decision-making and task execution.
- b. **Relaxed style**: characterized by high interpersonal orientation but low task orientation.
- c. **Authoritarian style**: characterized by high task orientation but low interpersonal relations.
- d. **Democratic style**: characterized by a balance between interpersonal relations and task achievement, as well as member involvement in decision-making.

According to Patton et al. in DeVito (1997), the data processing rules for leadership style analysis are as follows:

1. Circle the item numbers 1, 4, 7, 13, 16, 17, 18, 19, 20, 23, 29, 30, 31, and 34.
2. Place an “X” in front of circled items that receive responses of “Rarely” and “Never.”
3. Place an “X” in front of non-circled items that receive responses of “Often” and “Always.”
4. Circle the “X” for items 3, 5, 8, 10, 12, 15, 17, 19, 22, 24, 26, 28, 30, 32, and 34.
5. Count the circled Xs to determine Task Orientation (T).
6. The remaining uncircled Xs represent Relationship Orientation (H).
7. The results are then mapped into a leadership style matrix as shown below:

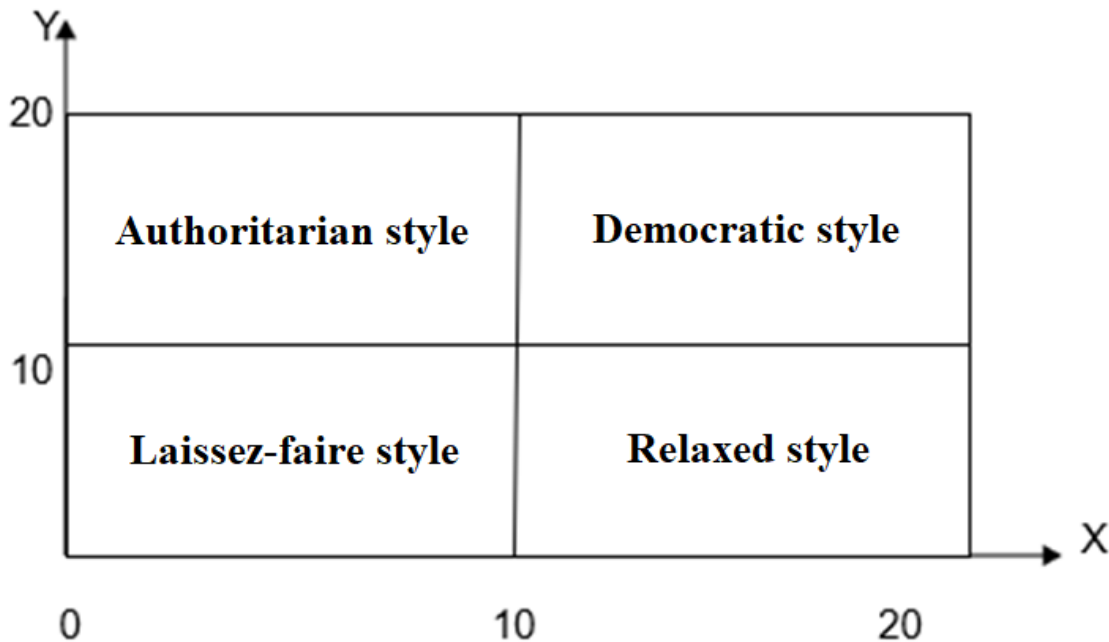


Figure 1. Leadership Style Matrix

**RESULT AND DISCUSSION**

**Respondent Characteristics**

Respondent characteristics refer to the identity attributes of respondents, which may include age, formal education, non-formal education, income, length of membership, and marital status. The description of respondent characteristics is presented as follows:

**1. Age**

Age refers to the age of respondents at the time the research was conducted. The distribution of respondents based on age is presented in Table 1 below:

Table 1. Respondent characteristics based on age of group managers and members

Age Category (Years)	Number of Respondents (Persons)	Percentage (%)
A (26–35)	4	33
B (36–45)	5	42
C (46–55)	3	25
Total	12	100

**2. Formal Education**

Formal education refers to the highest level of formal education completed by respondents. This information is important to describe the basic knowledge capacity of group members in carrying out aquaculture activities. The distribution of respondents based on formal education is presented in Table 2 below:

Table 2. Respondent characteristics based on formal education level of group managers and members

Formal Education Level	Number of Respondents (Persons)	Percentage (%)
A (Primary School)	2	17
B (Junior High School)	0	0
C (Senior High School/Vocational School)	6	50
D (Bachelor’s Degree/S1)	4	33
Total	12	100

Based on Table 2, the formal education levels of respondents vary from primary school (SD) to undergraduate level (S1). Overall, most respondents fall within an education category that is considered adequate to support aquaculture activities.

The largest proportion of respondents are senior high school/vocational school graduates, totaling 6 individuals (50%). This group is generally equipped with basic knowledge and skills required in the workforce, including the fisheries sector. Secondary education also provides greater opportunities for individuals to understand innovations and more modern aquaculture techniques, thereby improving household business productivity.

Furthermore, respondents with a bachelor’s degree (S1) account for 4 individuals (33%), indicating improved access to higher education among fisheries business actors. This is highly positive, as higher education can broaden perspectives, strengthen analytical skills, and enhance business competitiveness in a globalized environment. Meanwhile, respondents with primary school education number 2 individuals (17%), who generally face limitations in access to information and technology.

### 3. Non-Formal Education

Non-formal education refers to educational activities obtained outside the formal school system, such as training, seminars, extension services, and other structured yet flexible learning activities. The characteristics of respondents based on the level of non-formal education are presented in Table 3 below:

Table 3. Respondent Characteristics Based on Non-Formal Education Level of Group Managers and Members

Non-Formal Education Level	Number of Respondents (Persons)	Percentage (%)
A (Low)	6	50
B (Medium)	3	25
C (High)	3	25
Total	12	100

Table 3 shows that, on average, respondents participated in approximately 1 to 5 non-formal education activities. This indicates that most respondents fall into the low category in terms of participation in extension programs, training sessions, and other forms of non-formal learning.

The low participation category is the most dominant, accounting for 50% or 6 respondents. Meanwhile, 3 respondents (25%) fall into the medium category, and another 3 respondents (25%) are classified in the high category.

### 4. Income

According to Suryahadi et al. (2015), household income in Indonesia can be classified into three main categories: low, middle, and high income. Low income is generally defined as earnings below IDR 1,500,000 per month, middle income ranges from IDR 1,500,000 to IDR 2,500,000 per month, while high income refers to earnings above IDR 2,500,000 per month. The respondent characteristics based on income level are presented in Table 4 below:

Table 4. Respondent characteristics based on income of group managers and members

Income Category	Number of Respondents (Persons)	Percentage (%)
A (Low Income)	6	50
B (Middle Income)	6	50
C (High Income)	0	0
Total	12	100

Table 4 shows that six respondents fall into the low-income category, with monthly earnings ranging from IDR 1,000,000 to IDR 1,500,000. This category generally reflects individuals who are still struggling to meet basic needs and have limited investment capacity in fisheries activities.

The middle-income category consists of six respondents with monthly earnings between IDR 1,500,000 and IDR 2,500,000. This income level indicates improved economic capacity, allowing respondents to access better resources and invest in business development.

Finally, no respondents fall into the high-income category, defined as earnings above IDR 2,500,000 per month. The absence of respondents in this category is attributed to the fact that all respondents have additional occupations outside aquaculture activities.

**5. Length of Membership**

Length of membership refers to the duration since respondents joined the Bengkuring Karya Fish Farming Group. This variable is important to assess the level of involvement and experience of members in group activities. Information regarding respondent characteristics based on length of membership is presented in Table 5 below:

Table 5. Respondent characteristics based on length of membership of group managers and members

Length of Membership	Number of Respondents (Persons)	Percentage (%)
A (2 years)	2	17
B (3 years)	6	50
C (>4 years)	4	33
Total	12	100

Table 5 shows that the length of membership among respondents in the Bengkuring Karya Fish Farming Group ranges from 2 to more than 4 years. Respondents with 3 years of membership represent the largest group, consisting of 6 individuals (50% of the total respondents). Meanwhile, 4 respondents (33%) have been members for more than 4 years, and 2 respondents (17%) have joined for 2 years.

These findings indicate that most members have relatively long experience in group activities, which may positively contribute to the sustainability and effectiveness of aquaculture activities within the group.

**6. Marital Status**

Marital status is an important aspect in understanding social dynamics and decision-making within fish farming groups, as it may influence social responsibilities and members' involvement in group activities. Detailed data on the distribution of marital status is presented in Table 6 below:

Table 6. Respondent characteristics based on marital status of group managers and members

Marital Status	Number of Respondents (Persons)	Percentage (%)
Married	9	75
Single	3	25
Total	12	100

Table 6 illustrates the characteristics of respondents based on marital status in the Bengkuring Karya Fish Farming Group. The majority of respondents are married, totaling 9 individuals (75%). This indicates that most group members already have families, which may influence their level of responsibility and engagement in group activities.

Meanwhile, only 3 respondents (25%) are unmarried. This condition shows that the group is dominated by members who already have family responsibilities, which may contribute to greater social stability in jointly managing aquaculture activities.

**Leadership Style of the Bengkuring Karya Fish Farming Group**

Perception is a cognitive process of recognizing and interpreting the leadership style of the head of the Bengkuring Karya Fish Farming Group through sensory experience, allowing individuals to consciously receive external stimuli within the context of East Sempaja Subdistrict.

Based on interviews with the management and members of the Bengkuring Karya Fish Farming Group, data were obtained regarding members' perceptions of the leadership style of the group leader. The responses are presented in Table 7 below:

Table 7. Members' perceptions of the leadership style of the group leader

No	Task Orientation (T)	Relationship Orientation (H)	Leadership Style
1	10	11	Relaxed
2	12	9	Authoritarian
3	12	11	Democratic
4	11	12	Democratic
5	10	11	Relaxed
6	10	11	Relaxed
7	10	9	Laissez-faire
8	12	12	Democratic
9	11	12	Democratic
10	11	12	Democratic
11	12	9	Authoritarian
12	8	12	Relaxed

Based on Table 7, the interview results reveal several key findings:

1. The leader tends to show a higher orientation toward relationships than tasks. This indicates an effort to maintain harmony and comfort among members, although task achievement is not strongly emphasized. This reflects a relaxed working atmosphere, but with limited task direction.
2. The leader is highly focused on task achievement and work efficiency, but pays less attention to interpersonal relationships. This style is typically firm, directive, and top-down, with minimal member participation.
3. Both orientations are high, indicating a balanced leadership style in which task accomplishment is emphasized without neglecting interpersonal relationships. This style promotes collaboration, open communication, and active participation.
4. The leader demonstrates high relationship orientation while still maintaining task effectiveness. This reflects a participative approach that encourages discussion, shared decision-making, and a healthy group atmosphere.
5. This leadership style emphasizes comfort and a family-like working environment. Tasks are still completed, but without high pressure, making it suitable for informal and flexible settings.
6. The leader prioritizes interpersonal relationships. Although tasks are considered, the leadership approach is not highly demanding or forceful, resulting in warm and friendly communication among members.
7. Both task and relationship orientations are low, indicating passive leadership with minimal direction and limited attention to group dynamics. As a result, members may feel less organized or lack clear direction.
8. High scores in both orientations represent an ideal leadership style. The leader is able to balance task demands with social relationships, resulting in a productive and cohesive group.
9. The leader maintains a balance between task completion and relationship building. This encourages member participation and fosters a supportive and trust-based working environment.
10. This leadership style reflects openness and strong communication. The leader focuses not only on results but also on the psychological well-being of members, making it suitable for strong teamwork development.
11. Similar to case number 2, this leader emphasizes control and task execution over relationship building. While effective in situations requiring firmness and quick decisions, it may create emotional distance.

12. The leader strongly emphasizes interpersonal relationships but pays limited attention to task achievement. In the long term, this may lead to comfort among members but reduce optimal productivity.

Based on interviews with 12 respondents regarding their perceptions of the leader’s leadership style, the classification of leadership styles within the Bengkuring Karya Fish Farming Group in East Sempaja Subdistrict, Samarinda City is presented in Figure 2.

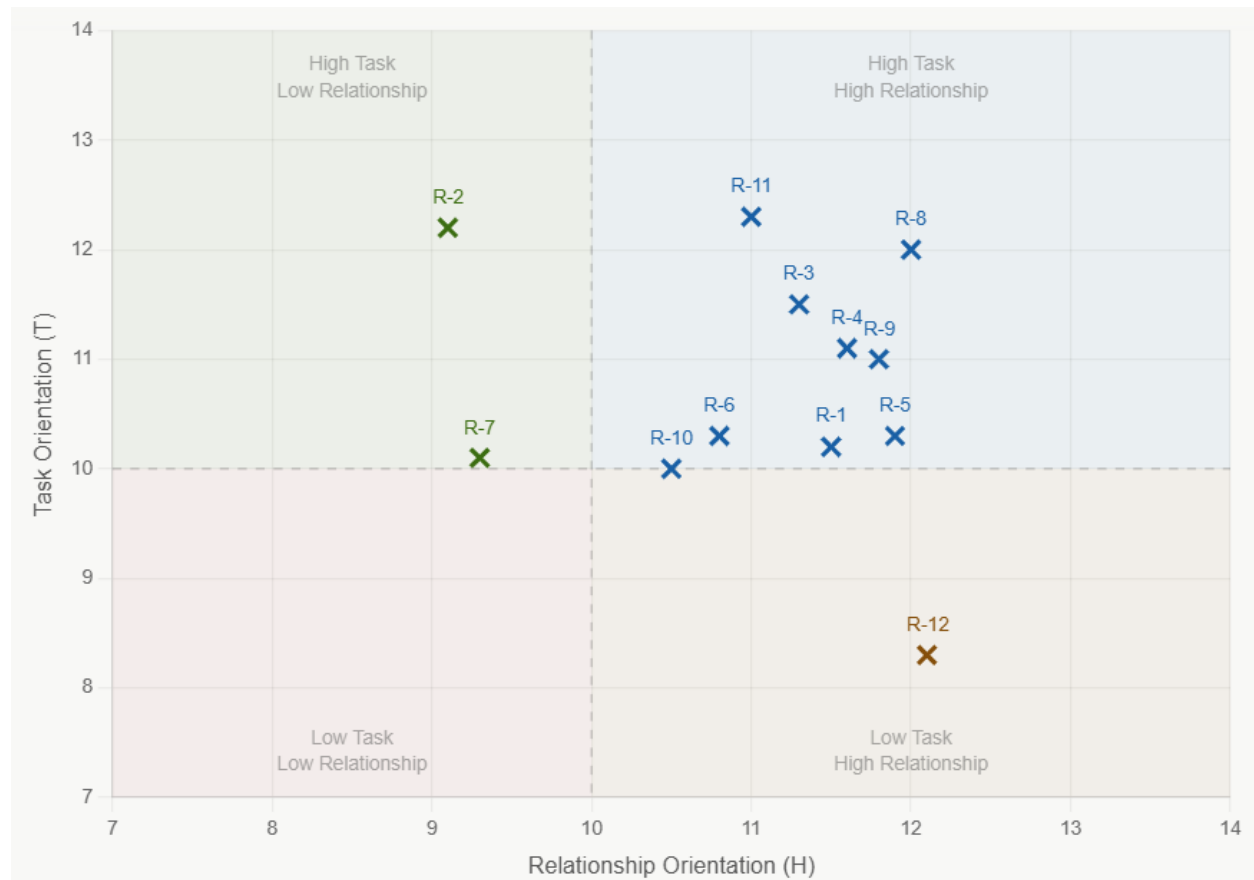


Figure 2. Quadrant of members’ perceptions of the group leader’s leadership style

Figure 2 shows that, based on the recapitulation of members’ perceptions of leadership style, the highest proportion is the **democratic leadership style**, accounting for **42% (5 respondents)**. This is followed by the **relaxed style** at **33% (4 respondents)**, the **authoritarian style** at **17% (2 respondents)**, and the **laissez-faire style**, which was selected by only **8% (1 respondent)**. Therefore, the dominant leadership style in the Bengkuring Karya Fish Farming Group is democratic leadership.

According to DeVito (1997), democratic leadership is characterized by active participation of members in the decision-making process. The leader provides space for members to express ideas, take responsibility, and be directly involved in achieving shared goals. This style creates a supportive and open working environment and enhances members’ sense of ownership toward the organization.

Based on the leadership perception results in the Bengkuring Karya Fish Farming Group, the leadership orientation demonstrates a relatively high task orientation while still maintaining relationship orientation. As a result, group tasks are carried out effectively, while interpersonal relationships between members and management remain well maintained, indicating a balanced condition.

The democratic leadership style implemented by the group leader is reflected in the way members are involved in decision-making processes. Group meetings are held regularly and openly, allowing every member to express suggestions, criticism, and opinions regarding the agenda discussed. Members' inputs are not only heard but also collectively considered before final decisions are made. This is consistent with Lewin (1939), who stated that democratic leadership provides participatory space for members and generates higher emotional involvement compared to other leadership styles.

The democratic leadership style applied by the leader of the Bengkuring Karya Fish Farming Group is highly relevant to the group's social, economic, and cultural characteristics. These characteristics serve as an important foundation in determining the effectiveness of leadership implementation. As a community-based group, Bengkuring Karya consists of members with diverse educational backgrounds, varying levels of farming experience, and strong social ties within the same residential area.

First, the diversity in education level and experience among members requires open communication and an inclusive decision-making process. Democratic leadership strongly supports this condition by enabling each member to express their views and participate in group policy formulation. According to DeVito (1997), member involvement in organizational communication increases a sense of ownership and loyalty toward the group.

Second, strong social bonds among members create the need to maintain harmony and solidarity. In this context, democratic leadership is highly suitable because it emphasizes deliberation and collective agreement as the basis for decision-making. This aligns with local cultural values of mutual cooperation and collectivism. Robbins and Coulter (2016) state that participative leadership can strengthen interpersonal relationships within work groups.

Third, the group's technical and collective activities, such as pond management, seed distribution, and aquaculture training, require flexible coordination. With a democratic approach, task distribution can be carried out fairly and adjusted to each member's capacity and availability. The leader acts as a facilitator and guide rather than a sole controller, strengthening members' independence and shared responsibility.

Fourth, the non-hierarchical and relatively flat organizational structure requires a non-authoritarian leadership style. In such a structure, democratic leadership allows all members to feel equal, freely express their aspirations, and actively participate in activities. According to Lewin (1939), democratic leadership not only improves productivity but also enhances psychological satisfaction within organizations.

Finally, the flexibility of democratic leadership also supports the group's adaptation to external dynamics, such as government policies or changes in the fish market. The leader can involve members in analyzing situations collectively and formulating participatory strategies. When quick decisions are needed, the leader can still take initiative wisely without neglecting transparency.

Considering these characteristics, it can be concluded that the democratic leadership style is the most appropriate approach for the Bengkuring Karya Fish Farming Group. This style promotes participation, increases trust, and strengthens group solidarity, ultimately enhancing work effectiveness and the sustainability of the group.

## CONCLUSION

The socioeconomic characteristics of members of the Bengkuring Karya Fish Farming Group (Pokdakan) in East Sempaja Subdistrict, Samarinda City reflect a relatively diverse profile. The majority of respondents fall within the productive age range of 36–45 years, with senior high school or vocational school as the most common level of formal education. In terms of income, members are evenly distributed between the low and middle categories, with none reaching the high-income bracket, largely due to aquaculture serving as a secondary rather than primary livelihood. Participation in non-formal education remains limited, with half of the respondents classified in the low category. These characteristics

collectively shape how members engage with group activities and respond to leadership practices within the organization.

Based on the analysis of members' perceptions using DeVito's (1997) leadership framework, the dominant leadership style applied by the leader of the Bengkuring Karya Fish Farming Group is the democratic style, as perceived by 42% of respondents. This is followed by the relaxed style (33%), authoritarian style (17%), and laissez-faire style (8%). The prevalence of democratic leadership reflects a balanced orientation toward both task achievement and interpersonal relationships, fostering open communication, collective decision-making, and active member participation. Regular group meetings and inclusive discussions have reinforced members' sense of ownership and commitment to shared goals, consistent with the principles outlined by Lewin (1939) and DeVito (1997).

The democratic leadership style demonstrated by the group leader is well-aligned with the social, cultural, and economic characteristics of the Bengkuring Karya Fish Farming Group. Given the diversity in members' educational backgrounds, the strength of local social bonds, and the collective nature of aquaculture activities, a participative and inclusive leadership approach proves most effective in maintaining group cohesion and operational sustainability. This style not only enhances productivity through fair task distribution and flexible coordination, but also strengthens psychological satisfaction and interpersonal trust among members. Therefore, it is recommended that the democratic leadership style be maintained and further developed as the foundational approach for guiding the group toward improved aquaculture performance and greater contribution to local food security and economic development.

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