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Household Income Potential Through Fish Farming In Abandoned Yard Ponds: A Case Study In Pasang Village, Enrekang Regency

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Abstract

Fish ponds constructed by the village government in Pasang Village, Enrekang Regency, have not been optimally utilized and are largely abandoned. This study aims to analyze the potential for increasing household income through fish farming in abandoned yard ponds and to identify the supporting and inhibiting factors. A mixed methods approach, combining qualitative descriptive and quantitative analysis, was employed. Data were collected through interviews, questionnaires, and field observations conducted in Pasang Village, Maiwa District, Enrekang Regency. The findings indicate that revitalizing abandoned ponds has significant potential to enhance household income. However, several key constraints were identified, including limited capital, lack of technical knowledge in fish farming, and low community participation in sustainable pond management. Strengthening technical assistance and institutional support is essential to maximize the economic benefits of these underutilized resources.

INTRODUCTION

Rural economic development remains a key priority in improving community welfare. In this context, the Pasang Village Government in Enrekang Regency has implemented a yard pond development program as part of its household economic empowerment strategy. Yard utilization programs inherently hold significant potential as alternative income sources while simultaneously supporting household food security.

However, empirical conditions reveal that many of the constructed ponds remain underutilized and abandoned. This phenomenon reflects not only the lack of program sustainability but also shortcomings in post-construction assistance, knowledge transfer, and community managerial capacity. In fact, properly managed yard ponds could serve as a practical solution for improving household economic conditions.

From a development economics perspective, unutilized productive assets such as abandoned ponds represent inefficiency in resource allocation. When managed through structured fish farming practices, these ponds can generate added value in the form of increased household income and small-scale employment opportunities at the village level.

Therefore, this study aims to:

1. Analyze the potential of household income through fish farming in abandoned yard ponds.
2. Identify supporting and inhibiting factors in the development of yard pond fish farming.

METHODS

Research Approach

This study employs a mixed methods approach, combining qualitative and quantitative techniques. The qualitative approach is used to explore socio-economic conditions, community motivations, and constraints, while the quantitative approach focuses on financial analysis, including production costs, income potential, and profit projections.

Research Location and Time

The research was conducted in Pasang Village, Maiwa District, Enrekang Regency, South Sulawesi. The study took place from December 2025 to July 2026, covering preparation, data collection, analysis, and reporting phases.

Research Subjects

The subjects include households owning yard ponds, both active and abandoned. A purposive sampling technique was applied to select respondents directly related to pond ownership and management.

Data Collection Techniques

Data were collected through:

1) In-depth interviews
2) Structured questionnaires
3) Field observations

Primary data were obtained directly from respondents, while secondary data were collected from village documents, literature, and government reports.

Data Analysis

1) **Qualitative analysis:** Used to identify community motivations, challenges, and socio-economic conditions.
2) **Quantitative analysis:** Used to estimate production costs, potential income, and comparative income projections between active and abandoned ponds.

RESULTS AND DISCUSSION

Field observations and interviews revealed that the majority of yard ponds constructed under the village program are currently abandoned. This condition is primarily caused by several interrelated factors:

1. Limited financial capital
2. Lack of technical knowledge in fish farming
3. Weak post-construction assistance from local authorities

Quantitative analysis demonstrates that actively managed ponds provide significant income potential compared to abandoned ponds, which generate no economic return. These findings align with previous studies indicating that integrated yard farming systems contribute substantially to food security and household income. The dominant factors contributing to pond abandonment include financial limitations, insufficient technical knowledge, and the absence of continuous institutional support.

Economically, revitalizing abandoned ponds offers a strong opportunity to increase household income. Simple fish farming systems—such as catfish or tilapia cultivation—can generate meaningful additional income. This reinforces the argument that neglected productive assets represent inefficiencies that must be addressed.

Moreover, successful pond utilization is influenced not only by technical factors but also by socio-economic aspects, including:

1. Community motivation
2. Institutional support
3. Market access

Conclusion and Recommendations

Conclusion

This study concludes that abandoned yard ponds in Pasang Village have substantial potential to serve as alternative sources of household income. The main constraints include limited capital, lack of technical knowledge, and insufficient post-development support. Revitalizing these ponds through structured fish farming practices can significantly enhance household income while contributing to rural food security.

Recommendations

1. The village government should implement continuous assistance programs, including:
    1) Technical training in fish farming
    2) Access to financial capital
    3) Market linkage development
2. Future research should explore institutional models, such as village-based fishery cooperatives, to support program sustainability.
3. Further studies on simple and environmentally friendly technologies—such as biofloc and aquaponics systems—are recommended to improve productivity.

Implications and Limitations

Implications

This study contributes to expanding the discourse on abandoned productive assets, particularly yard ponds, which are often overlooked in rural development research. The findings highlight the importance of revitalizing such assets to generate tangible economic benefits for households.

Limitations

The study is limited to a single village, which restricts the generalizability of the findings. Future research involving broader geographic coverage and longer observation periods is necessary to strengthen the conclusions.

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