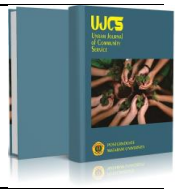
UJCS 6(3) (2025)

Unram Journal of Community Service

https://jurnalpasca.unram.ac.id/index.php/UJCS



Assistance of Catfish Feed Management in Fish Farmer Groups Tanjung Seteko Village, Indralaya, Ogan Ilir

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Received: August 3, 2025
Revised: August 31, 2025
Accepted: September 23, 2025
Published: September 30, 2025

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DOI: 10.29303/ujcs.v6i3.1137

Abstract: One of the obstacles in catfish farming is the high price of artificial feed or commercial feed. One solution is proper feed management, which can increase fish growth and production. The purpose of this activity is to improve the understanding of catfish farmers about feed management. This activity will be carried out in Tanjung Seteko Village, Indralaya, Ogan Ilir. The implementation method involves counselling, training, and technical assistance, as well as production through the empowerment of active participation by partners. This is achieved by transferring knowledge and technology about catfish feed management, which includes proposing lecturers, students, and partners. The results of this activity show an increase in knowledge about feed management.

Keywords: Catfish, Feed Management, Farmer Groups.

Introduction

Fish farming is currently being developed to support food security in Indonesia, particularly in South Sumatra. One area of aquaculture that continues to be promoted is freshwater fisheries. Within this area, catfish is a leading commodity, with production levels continuing to increase, especially in South Sumatra. In 2020, catfish production in South Sumatra reached 86,230.92 tons, then increased to 86,401.56 tons in 2021 (Ministry of Maritime Affairs and Fisheries, 2023). Catfish are widely farming due to their rapid growth and high environmental tolerance (Sitompul et al., 2012). Setyastuti & Kurniawati (2025) added that catfish have several advantages, including rapid growth, a better feed conversion ratio, disease resistance, and high environmental adaptability. However, catfish farming productivity in Talang Pangeran Ulu Village, West Pemulutan District, remains relatively low, thus unable to meet demand. One of the obstacles in catfish farming is a lack of knowledge about feed management. Feed is a crucial element in aquaculture activities, supporting the growth and survival of farmed fish. Catfish fry can grow if the amount of feed nutrients digested and absorbed by the fish exceeds the amount required for body maintenance (Dewi & Tahapari, 2017).

Feed in aquaculture is generally commercial feed, which accounts for approximately 60-70% of total production costs (Mukti, 2021). Therefore, feeding must be effective and efficient so that catfish can utilize the input optimally for their growth. One solution is proper feed management to enhance fish growth and increase production.

Feed management aims to balance fish nutritional needs, feed quality, and the appropriate timing of feeding. Proper feeding timing in fish farming can contribute to the success of aquaculture, while inefficient or excessive feed use and feeding at different times can lead to losses. Ineffective feeding can lead to suboptimal fish growth because it does not meet the fish's needs

How to Cite:
Mukti, R. C., Jubaedah, D., Amin, M., Marsi, & Yulisman. (2025). Assistance of Catfish Feed Management in Fish Farmer Groups Tanjung Seteko Village, Indralaya, Ogan Ilir. *Unram Journal of Community Service*, *6*(3), 671–674. https://doi.org/10.29303/ujcs.v6i3.1137

(Hanief, 2014). According to Kurniawan (2019), feed management aims to minimize losses due to inefficient/excessive feed use.

Feed is a determining factor in the success of fish farming. The feed provided is tailored to the fish's needs. The larger the fish, the less feed is given; the smaller the fish, the more feed is given. Smaller fish require more feed because they have a more extended growth period than larger fish (Cahyani & Hafiludin, 2022). This community service aims to address the issue of low catfish productivity in Tanjung Seteko Village, Ogan Ilir Regency, by providing technical training in feed management to enhance catfish growth and increase production.

Method

The method used in this community service activity empowers active partner participation by transferring knowledge and technology on catfish feed management, involving the proposing lecturer, students, village officials, and partner members. The stages of the community service activity include preparation, outreach/material delivery, training on catfish feed management, and assistance.

The preparation phase begins with coordination and a survey of the community service activity proposing team, partners, and village officials, as well as the preparation of tools and materials. Coordination with partners aims to inquire about the problems faced by partners and to solicit their willingness to collaborate.

The extension and training phase will be conducted at partner locations according to a mutually agreed schedule. Prior to the presentation, farmers will be asked to complete a questionnaire (pre-test) to assess their initial understanding of catfish farming management. Following the presentation and training, farmers will also be asked to complete the same questionnaire (post-test) to assess their understanding after the extension. The extension and training process will be implemented through lectures and hands-on practice to transfer knowledge and technology on catfish feed management.

The assistance phase for implementing science and technology will be conducted through demonstration plots, providing partners with opportunities to practice the material presented in the extension and training phase in catfish farming, accompanied by technical staff, namely university students, as part of the Field Practice program. This mentoring activity will last for 30-60 days (per fish production).

Result and Discussion

The socialization and training activities were conducted at the partner's location and attended by the partner and the PKM team, consisting of lecturers and students from the Aquaculture Study Program, Sriwijaya University. The socialization and training activities commenced with a welcoming speech and opening ceremony by the Partner Chair (Figure 1), followed by a presentation on catfish feed management. This presentation applied various fish farming technologies developed from research results of lecturers from the Aquaculture Study Program, Sriwijaya University (Figure 2).

Figure 1. Greetings from the Partner Chair

Figure 2. Course presentation

This community service activity involved technology diffusion among fish farmers. According to Annur (2013), technology diffusion is the process by which new ideas are communicated within a social system, emphasizing specific forms of communication related to the dissemination of messages containing new ideas. Technology diffusion in this community service

program aimed to improve farmers' understanding of fish farming.

Before the presentation of the material, farmers were asked to complete a questionnaire (pre-test) to determine their initial understanding of catfish farming. Similarly, after the presentation and training, farmers were also asked to complete the same questionnaire (post-test) to determine their understanding after the socialization and training. This aligns with Wardani & Andika (2021), who stated that pre- and post-tests are used to evaluate participants' understanding and abilities before and after training to determine the extent to which they benefit from the training. The questionnaire assessment was based on Yoto et al., (2018), which used a Likert scale assessment score consisting of a score of 1 indicating a poor assessment, a score of 2 indicating a sufficient assessment, and a score of 3 indicating a good assessment. The results of the pre-test questionnaire are presented in Figure 3.

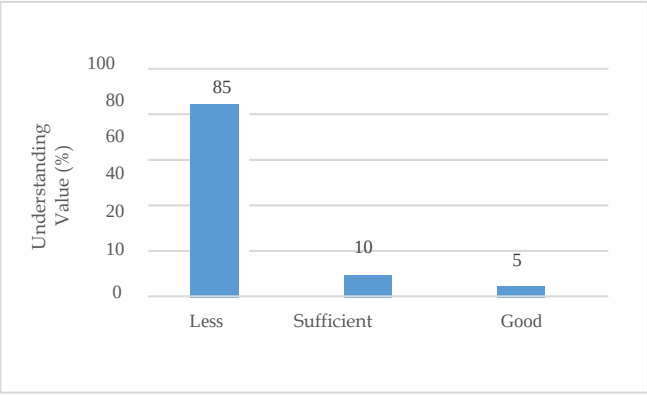

Figure 3. Pre-test results

After conducting the catfish feed management training, the results are presented in Figure 4.

Figure 4. Catfish feed management training

After the training, farmers were asked to complete a questionnaire (post-test) to assess their level of understanding following the socialization and training. This aligns with Wardani & Andika (2021) statement that both pre- and post-tests are used to evaluate participants' understanding and abilities before and after the training, thus determining the extent to which they benefited from the training. The post-test results are presented in Figure 5.

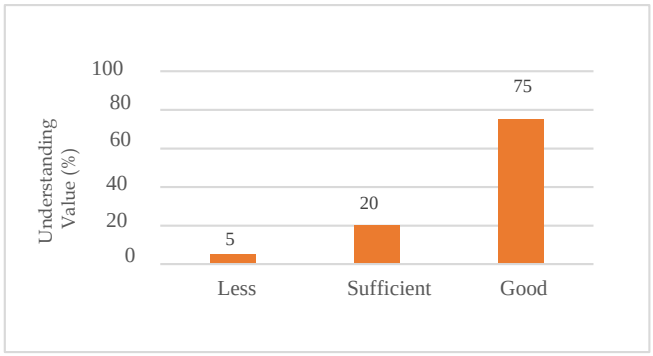

Figure 5. Post-test results

The socialization and training activities concluded with the handover of several tools and materials from the PKM team to the partners, followed by a group photo of the community service team and participants. The group photo is shown in Figure 6**.**

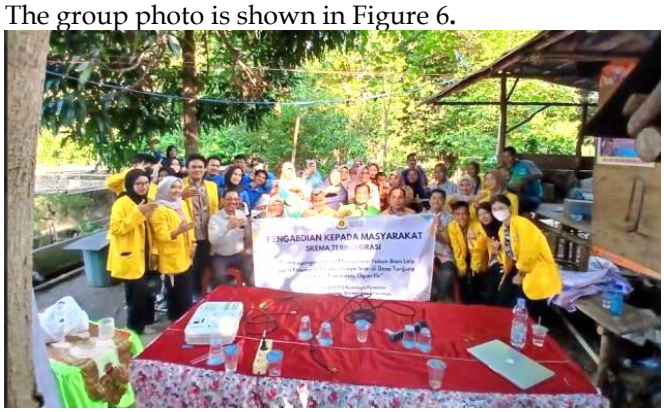

Figure 6. Group photo

The final stage of the Community Service Program (PKM) activities is assistance. This stage is conducted through demonstration plots (demplots), providing partners with the opportunity to practice of fish farming using the material presented during the socialization and training phase, accompanied by technical staff, university students, as part of a Field Practice activity. According to Setyaningrum et al., (2020) field practice is conducted to apply theoretical knowledge and provide a concrete introduction to the theoretical knowledge presented, thereby achieving the desired technology transfer goals.

Assistance activity lasts for 30-60 days. Assistance activities start from preparing fish seeds, preparing feed, and maintaining fish by applying fish feeding management carried out at partner locations. Assistance activity presented in Figure 7.

Figure 7. Fish farming assistance

Conclusion

The implementation of this training activity demonstrated an increase in participants' understanding of catfish feed management. It is hoped that from this activity, the community can apply fish feed management in catfish farming.

Acknowledgments
We want to thank the Community Research Institute (LPPM) of Sriwijaya University for the community service grant provided by the DIPA of the Public Service Agency of Sriwijaya University in 2024 through the Rector's Decree 0006/UN9/SK.LP2M.PM/2023 dated June 20, 2023. We also express our gratitude to our partners for their cooperation in this activity.

References

Annur, A.M. (2013). Difusi Dan Adopsi Inovasi Penanggulangan Kemiskinan (Studi Difusi dan Adopsi Inovasi dalam Layanan "Mbela Wong Cilik" Unit Pelayanan Terpadu Penanggulangan Kemiskinan (UPTPK) di Kabupaten Sragen. *Journal of Rural and Development.* 4(1): 69-82

Cahyani, L. R., & Hafiludin, H. (2022). Feeding Management on Pearl Catfish Enlargement (*Clarias gariepinus*) In Karamba Tancap Pamekasan Fish Seed Center. *Juvenil: Jurnal Ilmiah Kelautan Dan Perikanan*, 3(2), 19-26.

Dewi, R. R. S. P. S., & Tahapari, E. (2017). Utilization of commercial probiotic in African catfish (*Clarias gariepinus*) farming. *Jurnal Riset Akuakultur*, 12(3), 275-281.

Hanief, M. A. R. (2014). The Effect Of Feeding Frequencies On The Growth And Survival Rate Of Java Barb Juveniles (*Puntius javanicus*). *Journal of Aquaculture Management and Technology,* 3(4), 67-74.

Kementerian Kelautan dan Perikanan, (2023). Produksi Perikanan dan Kelautan. https://statistik.kkp.go.id/ [Diakses pada 4 Juni 2023].

Kurniawan, D. W. (2019). Analisa pengelolaan pakan ikan lele guna efisiensi biaya produksi untuk meningkatkan hasil penjualan. IQTISHA Dequity Jurnal Manajemen, 2(1).

Mukti, R.C., Amin, M. & Yulisman., (2021). Utilization of alternative ingredients as combination feed on the growth of catfish (*Clarias* sp.). *IOP Conference Series: Earth Environmental Science*, 819,

Setyaningrum, N., Sugiharto, S., & Sukmaningrum, S. (2020). Peningkatan produksi ikan lele dumbo dengan pemberian suplemen vitamin C. *Dinamika Journal,* 2(1), 1 – 7.

Setyastuti, A. I., & Kurniawati, A. (2025). Specifik Growth Rate (SGR), Feed Convertion Ratio (FCR) dan Survival Rate (SR) Ikan Lele (*Clarias* sp) yang Dipuasakan Secara Periodik. *Media Akuatika: Jurnal Ilmiah Jurusan Budidaya Perairan*, 10(1).

Sitompul, S. O., Harpani, E., & Putri, B. (2012). Influences Of Azolla Sp. Density To Water Quality Parameters And Growth Of African Catfish (*Clarias gariepinus*) In Water Closed System *Jurnal Rekayasa dan Teknologi Budidaya Perairan*, 1(1): 17-24.

Wardani, N. W., & Andika, I. G. (2021). Pelatihan mengaktifkan pembelajaran daring dengan memanfaatkan aplikasi mentimeter, whatsapp dan pembuatan video pembelajaran untuk inovasi mengajar dengan keterbatasan bandwidth internet. *JURPIKAT (Jurnal Pengabdian Kepada Masyarakat*), 2(2), 342-352.

Yoto, Y., Widiyanti, W., & Solichin, S. (2018). Meningkatkan kemampuan dan keterampilan manajemen bengkel melalui pelatihan bagi guru SMK Turen Kabupaten Malang. *Jurnal Karinov*, *1*(1).