RAINBOW FISH MARKETING TRAINING: BUSINESS OPPORTUNITIES OF RAINBOW FISH CULTIVATION FARMING DURING A PANDEMIC ERA (COMMUNITY SERVICE OF FISHERIES MANAGEMENT MASTER PROGRAM OF UNIVERSITAS TERBUKA)

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Abstract

During this pandemic, many businesses collapsed and were unable to get back up, especially in the micro-economy and MSME sectors. MSMEs during this pandemic need to be assisted through mentoring and training to strengthen their businesses, so that they are able to deal with the current situation well. The purpose of this community service is to improve and develop the ornamental fish fishery business for MSMEs and groups of ornamental fish farmers in the Ciseeng District by providing intensive assistance and training on how to cultivate ornamental fish properly at the business location, namely in Ciseeng District, Bogor Regency. The type of ornamental fish being developed is the type of rainbow boesemani (Melanotaenia boesemani) originating from Papua or people generally know it by the name rainbow fish. This community service activity was carried out in Ciseeng District by involving Open University students, ornamental fish entrepreneurs in Ciseeng and Mount Sindur Districts. It is hoped that with this community service activity and assistance to these ornamental fish actors, they will be able to overcome the constraints of limited business capital and obstacles in obtaining broodstock and be able to apply good and correct methods of cultivating ornamental fish supported by appropriate marketing methods so that these MSME businesses can be more empowered.

Keywords: Ciseeng, Market Place, Ornamental Fish, Rainbow Fish.

INTRODUCTION

Small and Medium Enterprises (MSMEs) during this pandemic need to be assisted through mentoring and training to strengthen their businesses, so that they are able to deal with the current situation well. Fishery centers (consumable fish and ornamental fish) in Ciseeng District have also experienced a significant impact due to the pandemic, it is necessary to carry out development and innovation efforts, one of which is to develop new varieties/species of ornamental fish that are expected to be accepted and liked by the community (consumers).). Community innovation according to Munawir et al (2021) explains that community involvement in developing cultivation techniques or innovations

with joint training can create change in society.

Regional development always has an impact on society (Munawir et al. 2017). One of the main impacts on the fisheries sector and MSMEs in Ciseeng Regency has also reduced, with a number of businesses declining during this pandemic. In fact, in the midst of economic difficulties due to the pandemic, the ornamental fish business can be a promising solution. For small communities with limited capital and education, ornamental fish business can be a new way of life. An aquarium fish shop operated by one of the startup companies, Omega Outlets, is also feeling the impact of the pandemic.

This ornamental fish farming business has just started with the aim of developing rainbow fish cultivation. This business operates on a family scale and the problems faced by Omega Outlet are the difficulty in finding quality breeders, limited business funds for business development, and getting the right market. As is known, the Covid-19 pandemic has had an impact and has had a significant impact on various aspects of people's lives, both in terms of health and the economy. This condition also affects businesses managed by ornamental fish cultivators, especially if the business has just been started. So the purpose of writing this article is to provide training to ornamental fish farming business actors on effective methods of marketing ornamental fish in conducting marketing and market penetration.

Bogor Regency is one of the Regencies that contributes ornamental fish in West Java Province as much as 32.6%. As shown by data from the Central Bureau of Statistics for Bogor Regency (2022), ornamental fish production in Bogor Regency in 2022 will reach 315 882.66 thousand heads (Re) with a total number of Fishery Households (RTP) 919 Re. Geographically, Ciseeng District is close to Parung District, which has an ornamental fish market. Many buyers come from various regions to the Parung ornamental fish market. In addition, easy mobility in sending fish to suppliers and exporters. Both of these are high business opportunities in the ornamental fish market. One type of freshwater ornamental fish that has business opportunities is rainbow fish.

IMPLEMENTATION METHOD

The dedication method is Active and Participatory Learning (Nursyamsu, 2018; Munawir et al. 2022a). This method includes discussion activities with ornamental fish farming business actors about the importance of effective techniques in marketing and market penetration. The object of the service activity is the ornamental fish farming business actor mitra Outlet Omega, Ciseeng District, Bogor Regency. Minimum target is 30 people.

The stages of implementing community service activities are as follows:

- Monitoring of training progress and achievements
- Evaluation of training activities
- Preparation of final report documents
- Publications





- Training on good and correct fish farming methods (CBIB) to produce quality broodstock and ornamental fish
- Explanation of broodstock spawning, larval rearing, and how to grow fish
- Explanation of water quality management (how to measure water quality parameters)
- Introduction of biofloc technology
- Training on the use of market place and social media
- Initiation plan for formation of KUB



- PkM Contract
- Initial preparation and coordination with partners
- Training preparation

Figure 2. Implementation of community service activities

RESULTS AND DISCUSSION

A. Maintenance of 'Rainbow' Ornamental Fish

The community service activity carried out by the Open University FST Community Service Team together with Omega Outlet partners is a productive activity in the form of ornamental fish hatchery which is a small-scale productive business or UMKM that is cultivated and initiated by UT students. The location of this community service activity is only approximately 8 km from UT, so this condition is an ideal location to carry out community service activities so that UT's contribution as an institution can be felt by the community around UT's environment.

Training on good and correct fish farming methods (CBIB) to produce quality broodstock and ornamental fish, namely with related explanations and practices:

- a) How to breed broodstock, rearing larvae, and how to grow fish
- b) Water quality management (how to measure water quality parameters)
- c) Introduction of biofloc technology

The rainbow fish produced must be of good quality, so the price will be higher. One of the ways to achieve good fish quality is choosing healthy brooders that are ready for spawning. Healthy rainbow fish parents are parents who are not disabled and are not infected with disease. The male parent is said to be mature when the genitals (testicles) are visible, while the female parent looks enlarged in the abdomen.



Figure 2. Rainbow Fish Maintenance Conditions

Maintenance of rainbow fish can be done using tarpaulin ponds, aquariums, fiber tubs and other containers so that it can be done on a household scale. In maintaining rainbow fish, it is necessary to pay attention to the feed given, must use feed with the right quantity and good quality (Arief, et al., 2011; Afriyanto, et al., 2005; Mufidah, et al., 2009; Munawir et al. 2022b). This is done to obtain good fish growth. Water quality also has an important role in maintaining rainbow fish. Good water quality for keeping rainbow fish should be a temperature range of 24-27°C and a pH of 6.5-7.0 (Jubaedah et al., 2020). Poor water quality will affect growth and disease in fish. Therefore, it is necessary to prevent fish disease to reduce the number of deaths in Rainbow fish. In order to produce rainbow fish with good quality and quantity, because currently the market demand for rainbow fish is quite high.

B. Training on the Application of the Biofloc System for SMEs and Farmer Groups

The results of training on the application of the biofloc system to MSMEs and fish farmer groups in Ciseeng District, in Figure 2 below shows assistance in the management of ornamental fish hatcheries.





Figure 3. Bioflux system application training

After providing training on good and correct fish farming (CBIB), the next training is how to market ornamental fish by providing training on using market places and social media in marketing and market penetration. To provide insight into the knowledge of fish farmers, practitioners of ornamental fish cultivators who have experience in marketing ornamental fish for both domestic and foreign markets are presented. This training invited 30 participants (fish farmers, community groups, and business groups).





Figure 4. fish farmer training participants, community groups, and business groups

The expected outcome of this training is that fish cultivators can see the market potential, that apart from consumption fish farming, ornamental fish farming also has a promising market and economic prospects. This opportunity must be seized by these business actors by

implementing a strategy for selecting the right type of fish and in demand by the market, both the local (domestic) market and the foreign market.

In addition, the criteria for the size and quality of the ornamental fish to be produced must be healthy, have attractive colors, and be easy to maintain. The accuracy when the fish is delivered to the consumer is also a concern and the process when the fish is on its way to the customer is maintained satisfaction and this needs to be a concern for the cultivators. This is done so that the fish is received in good condition according to the order and the customer is satisfied because the order is in accordance with what he wants. Because for lovers or collectors of ornamental fish they are willing to pay more as long as the fish they want is in accordance with what they expect.

CONCLUSION

- 1. Revitalization of fish hatcheries is carried out in stages by preparing the sites using the biofloc system.
 - a) Provision of training on how to breed broodstock with the spawning process using shelters in aquariums, how to raise larvae in revitalized ponds, including dry banana leaves and shelters with the aim that fish are not stressed, increase fertility, health and brightness of fish color.
 - b) Management of water quality by measuring pH parameters 7.5 8 with a temperature of 24 26°C.
 - c) It is hoped that KUB will carry out well with the strategy of equalizing the vision from the start, determining leaders from the start (although basically all members have the same rights), making rules regarding operational standards, so that work discipline the rights and obligations of each can be maintained and maintained.
- 2. Understanding of the use of market place and social media in conducting marketing and market penetration to ornamental fish farming business actors to expand the marketing network.

REFERENCES

- Arief, M., Pertiwim D.K. dan Cahyoko, Y. 2011. Pengaruh Pemberian Pakan Buatan, Pakan Alami dan Kombinasinya Terhadap Pertumbuhan, Rasio Konversi Pakan dan Tingkat Kelulushidupan Ikan Sidat (Anguilla bicolor). Jurnal Ilmiah Perikanan dan Kelautan, 3(1), 1-6. https://doi.org/10.20473/jipk.v3i1.11625, https://e-journal.unair.ac.id/JIPK/article/view/11625
- Afriyanto, E. & E. Liviawaty. 2005. Pakan Ikan. Yogyakarta: Kanisius.
- BPS [Biro Pusat Statistik] Bogor. (2022). Kabupaten Bogor dalam angka 2022. Bogor: BPS Kabupaten

 Bogor

 https://bogorkab.bps.go.id/publication/2022/02/25/a22c6fe95afedd64d9ad2599/kabup

 aten-bogor-dalam-angka-2022.html
- Jubaedah, D., Marsi, M., Wijayanti, M., Yulisman, Y., Mukti, R.C., Yonarta, D. dan Fitriana, E.F. 2020. Aplikasi Sistem Resirkulasi Menggunakan Filter Dalam Pengelolaan Kualitas Air Budidaya Ikan Lele. Jurnal Akuakultura, 4 (1), 1-5. p-ISSN: 2579-4752, e-ISSN: 2620-7397. https://doi.org/10.35308/ja.v4i1.2436
- Munawir, A. 2017. Kajian Dampak Lingkungan Kegiatan Penambangan Tanah Timbun di Kota Kendari. Hasanuddin Student Journal. Vol. 1 No. (2): 109-119, Desember 2017P-ISSN: 2579-7859, E-ISSN: 2579-7867. Universitas Hasanuddin.
- Munawir A, June T, Kusmana C, Setiawan Y. 2021. Environmental Institution Improvement Using Interpretative Structural Modeling (Ism) Techniques In Lore Lindu National Park (Llnp), Central Of Sulawesi Province-Indonesia. Plant Archives 21(supplement 1). DOI: 10.51470/PLANTARCHIVES.2021.v21.S1.395
- Munawir A, Panggabean D, Bachtiar, Muna SUN, Rusdiyanto E, Nirmala SD. 2022a. Traditional Cultivation Techniques Of Cocoa Plants And The Utilization Turmeric Extract Become Vegetable Pesticides For Managing Vascular Streak Dieback (Vsd). ABDI DOSEN, Jurnal Pengabdian Pada Masyarakat. LPPM UIKA Bogor DOI: https://doi.org/10.32832/abdidos.v6i4.1516
- Munawir A, Nurhasanah, Rusdiyanto E, Muna SUN. 2022b. Kebijakan Pemanfaatan Hutan Mangrove Berkelanjutan dengan Teknik Interpretative Structural Modeling di Taman Nasional Rawa Aopa, Sulawesi Tenggara. Buletin Ilmiah Marina Sosial Ekonomi Kelautan dan Perikanan. DOI: http://dx.doi.org/10.15578/marina.v8i2.11693 http://ejournal-balitbang.kkp.go.id/index.php/mra.
- Mufidah, N.B.W., Raharjda, B., dan Satyantini, W.H. 2009. Pengkayaan Daphnia sp. Dengan Viterna Terhadap Kelangsungan Hidup Dan Pertumbuhan Larva Ikan Lele Dumbo (Clarias gariepinus) .Jurnal Ilmiah Perikanan dan Kelautan, 1(1), 59-65. https://www.researchgate.net/publication/330781109_Pengkayaan_Daphnia_spp_Dengan_Viterna_Terhadap_Kelangsungan_Hidup_Dan_Pertumbuhan_Larva_Ikan_Lele_Dumbo_Clarias_gariepinus
- Nursyamsu, R. (2018). Pelatihan Peningkatan Kapasitas Pemuda Dan Pembuatan Program Kerja Pada Organisasi Pemuda Desa Cibinuang, Kabupaten Kuningan. Empowerment: Jurnal Pengabdian Masyarakat. https://doi.org/10.25134/empowerme.nt.v1i02.1572