

Gold fish (*Cyprinus carpio*) development business at UPTD Fish Seed Center (BBI) Gajah Tanang Padang Panjang City, West Sumatra Province

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Received : 22 January 2023

Revised : 29 January 2023

Accepted : 21 February 2023

ABSTRACT: The objectives of the paper that have been implemented: (1) To increase insight into the business of developing Goldfish Fry (*Cyprinus carpio*) at UPTD Fish Seed Center (BBI) Gajah Tanang Kota Padang Panjang West Sumatra Province; (2) To improve knowledge, skills and work experience for writers about the business of developing Goldfish Fry (*Cyprinus carpio*) at UPTD Fish Seed Center (BBI) Gajah Tanang Kota Padang Panjang West Sumatra Province; and (3) To acquire student skills to become an independent person and responsive in solving problems and making decisions while working. The internship practice was held from January 7, 2023 to 2 Feb 2023 which took place at UPTD Fish Seed Center (BBI) Gajah Tanang Kota Padang Panjang West Sumatra Province. Goldfish business development is all forms of activities that increase or aim to increase profits, production, or the company's service potential. The stages of hatchery activities at UPTD Fish Seed Center (BBI) Gajah Tanang Kota Padang Panjang include maintenance consisting of preparation for maintenance, spawning, and spawning, and spawning and further spawning kan Mas, p endederan dan panen benih. Based on the internship activities that the author has carried out at UPTD Fish Seed Center (BBI) Padang Panjang, the author has achieved the goals that have been formulated, namely knowing the production factors in the carp seed development business, knowing and understanding strategies in the fish seed business. In developing a business we must understand about the business development strategy which includes Product Development Strategy, Market Development Strategy, Concentrated Development Strategy, Innovation Strategy and Horizontal Integration Strategy.

Keywords: BBI, business, gold fish

Citation:

I Noviana, L Bathara. 2023. Carp fry (*Cyprinus carpio*) development business at UPTD Fish Seed Center (BBI) Gajah Tanang Padang Panjang City, West Sumatra Province. *Economic, Management, and Social Sciences*, (ECOMANS). 02(1), 29-35. DOI: <http://dx.doi.org/10.56787/ecomans.v2i1.29>.



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INTRODUCTION

Indonesia is a large country with a large water area and a wealth of natural resources of the sea and earth are very abundant. Indonesia has potential natural resources that can be an opportunity to advance the economy. Indonesia is an archipelagic country with an area of 5.8 million km² (consisting of 3.25 million km² of ocean and 2.55 million km² of Exclusive Economic Zone (EEZ)) and a coastline of 81,000 km and has 17,499 islands (Saktiawan et al., 2019; Setiawinata et al., 2019). This makes Indonesia has enormous fisheries potential both in terms of quantity and diversity Its strategic geographical location and diversity of marine life are comparative advantages that are not possessed by several other countries (Cahyati, 2022; Pratiwi, 2022; Sidqi, 2022). According to (Cahyati et al., 2022; Sofyani & Yolandika, 2021; Yolandika, 2016) business is a whole series of activities to invest in existing resources that can be done both individually and in groups, to meet daily needs and improve living standards by creating goods or services in order to get the maximum profit / profit (Azzahra & Hindun, 2022)

In the fish farming business, a fairly wide aquatic environment is an added value owned by Indonesia. In this case, increasing carp farming is usually used as an alternative effort to fulfill nutrition and food as well as efforts to improve people's living standards. The consumption fish farming business is one of the promising businesses. In addition, the need for food supply is very high, the fish farming business is also developing well in line with changes in people's mindsets to live healthier (Hutasoit, 2022; Natalia et al., 2022).



Development is a planned effort carried out by the government, the business world / business and the community through the provision of guidance, information and strengthening direction to grow and improve capabilities Business, knowledge and skills to become a strong and independent Bisnis. Business development is an institution that produces goods and services needed by the community, if the needs of the community increase, business institutions will also increase their development to meet these needs while obtaining profits (Hendri et al., 2022; Yolandika et al., 2016).

Fish hatchery is a way of producing fish faster than enlargement. Hatchery activities are an effort to raise brood, spawn, raise larvae until they are ready to be stocked or sold (Anggraini, Berliana, et al., 2022; Hardiyanti, 2022; Yolandika, Berliana, et al., 2021). The availability of seeds is a factor that affects the sustainability of ikan Mas cultivation. Mas hatcheries are generally through natural spawning. This fish can spawn all year round, especially in the rainy season. Goldfish can be cultivated on an industrial scale and on a household scale (Anggara et al., 2022; Anggraini, Anggara, et al., 2022).

Goldfish (*Cyprinus carpio*) is one type of freshwater consumption fish that has important economic value. Goldfish fry that are superior in quality and quantity cannot be separated from the role of hatchery activities. Without seeding, other activities will not run like enlargement activities that really need good seeds. The hatchery process also requires good handling so that the goldfish fry produced can grow optimally so that they can meet sales standards (Wulandari & Warningsih, 2022; Yama & Unteawati, 2022).

Internship practice is an opportunity to gain real experience as a form of application of knowledge that has been learned in college and learn details about the ins and outs of professional work standards. This experience then becomes a provision in living the real career path.

Based on this description, the author, who is a student of the Department of Fisheries Socioeconomics, Faculty of Fisheries and Marine Affairs, Riau University, Pekanbaru, is interested in taking the title of internship practice on the Business of Seed Development Ikan Mas (*Cyprinus carpio*) at UPTD Fish Seed Center (BBI) Gajah Tanang Kota Padang Panjang West Sumatra Province.

The objectives of the paper that have been implemented: (1) To increase insight into the business of developing Goldfish Fry (*Cyprinus carpio*) at UPTD Fish Seed Center (BBI) Gajah Tanang Kota Padang Panjang West Sumatra Province; (2) To improve knowledge, skills and work experience for writers about the business of developing Goldfish Fry (*Cyprinus carpio*) at UPTD Fish Seed Center (BBI) Gajah Tanang Kota Padang Panjang West Sumatra Province; and (3) To acquire student skills to become an independent person and responsive in solving problems and making decisions while working.

METHOD

Time and Place

Carp fry (*Cyprinus carpio*) development business at UPTD Fish Seed Center (BBI) Gajah Tanang Padang Panjang City, West Sumatra Province

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The internship practice was held from January 7, 2023 to 2 Feb 2023 which took place at UPTD Fish Seed Center (BBI) Gajah Tanang Kota Padang Panjang West Sumatra Province.

Internship Practice Method

The practical method used in the implementation of this workshop is a participatory observation method (Berliana et al., 2018; Handayani et al., 2017), which is where internship participants are directly involved in business activities in the development of cry fish (*Cyprinus carpio*) at UPTD Fish Seed Center (BBI) Gajah Tanang Kota Padang Panjang West Sumatra Province. Method (participatory observation) is a person's ability to use his observations through the work of the five senses with other five senses (Yolandika et al., 2022) (Bathara et al., 2021)

Data Collection

Data collected in internship practice include primary data and secondary data. According to (Hendrik et al., 2021; Yolandika et al., 2017a), primary data is a data source that directly provides data to data collectors. Primary data sources are obtained through interviews with research subjects and by observation or direct observation in the field, then the results of direct testing (Yolandika, Anggraini, et al., 2021). Meanwhile, according to (Sutarni et al., 2019; Yolandika et al., 2015) secondary data is a source of data obtained by reading, learning and understanding through other media sourced from literature, books, and document (Anggraini, Yolandika, et al., 2022; Yolandika et al., 2017b).

RESULT AND DISCUSSION

Goldfish Hatchery Business

Goldfish Hatchery Investment Cost

Investment costs are the main costs incurred when starting a hatchery production activity to provide the equipment needed. Use is not consumable at least in one year of production process and for a long period of time. The total investment of this enlargement activity is 45 percent . 232,000 with the following breakdown

Table 11. Investment in Tilapia Mas Hatchery Activities

No	Description	Vol	Unit price (IDR)	Total price (IDR)	Technic al age (year)	Depreciati on value (IDR)	Shrinkagen cycle (IDR)
1.	Quarantine tub	8	2.000.000	16.000.000	5	3.200.000	535.000
2.	Spawning trough	4	1.500.000	6.000.000	5	1.200.000	200.000
3.	Maintenance body	4	3000.000	12.000.000	5	2.400.000	400.000
4.	Water and pipe machines	4	1.500.000	6.000.000	5	1.200.000	200.000
5.	Oxygen cylinder	1	600.000	600.000	5	120.000	20.000
6.	Washbasin	2	25.000	50.000	1	50.000	8.300
7.	Water dipper	2	10.000	20.000	1	20.000	3.300
8.	Gulp	3	30.000	90.000	1	90.000	15.000
9.	Scales	2	150.000	300.000	5	100.000	16.700
10.	Bucket	3	35.000	105.000	1	105.000	17.500
11.	Bucket Grading	6	35.000	210.000	1	210.000	35.000
12.	Scoop net	5	30.000	150.000	1	150.000	25.000
13.	Seed net	-	2.000.000	1.000.000	5	200.000	33.300
14.	What is the seed reservoir	2	500.000	1.000.000	5	200.000	33.300
15.	Master net		1.500.000	1.500.000	5	300.000	50.000
Total				45,232,000		9.586. 400	1.597. 300

Based on Table 1 1. above that the depreciation value of investment per year is IDR 9. 586.400 and depreciation value per cycle IDR 1.597.300. The depreciation value used in the analysis of the Goldfish hatchery business is the depreciation value per cycle. This depreciation of investment costs is included in fixed costs in the carp hatchery business.

Fixed Cost of Goldfish Hatchery

Fixed costs are costs incurred in the cultivation business, whether there are production activities or none. The fixed cost incurred by UPTD Fish Seed Center (BBI) Gajah Tanang Kota Padang Panjang in the Goldfish (*Cyprinus carpio*) farming business is IDR 3,210.400. Details of the fixed costs of Goldfish hatcheries can be seen in Table 12.

Table 12. Fixed Cost of Goldfish Hatchery Activities

No	Description	Volume	Unit	Price (IDR)	Total price (IDR)
1.	Depreciation of means	-	-	-	1.590.400
2.	Fixed staff salary	1	person	1.500.000	1.500.000
3.	Electricity costs	1	Moon	120.000	120.000
Total					3.210.400

Variable Cost of Goldfish Hatchery

Variable costs are costs that are only incurred if carp farming production activities are ongoing. The variable cost incurred by UPTD Fish Seed Center (BBI) Gajah Tanang Kota Padang Panjang in the carp

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farming business is IDR 1,376. 200. Details of the variable costs of Goldfish hatchery activities can be seen in Table 13.

Table 13. Variable Costs of Goldfish Hatchery Activities

No	Description	Vol	Unit	Unit price (IDR)	Total price (IDR)
1.	Pellet Prima Feed 0	1	Kg	20.000	20.000
2.	Pellet Prima Feed 500	1,2	Kg	25.000	30.000
3.	Evergreen 102 Pellets	2,4	Kg	13.000	31.200
4.	Seed Medicines	150	Gr	225.00	337.500
5.	Seed Vitamins	450	Gr	185.00	277.500
6.	Electricity	1	Moan	120.000	120.000
7.	Tohor Fertilizer	30	Kg	7.000	210.000
8.	Feeding material (Plastic and rubber)	1	Bks	150.000	150.000
9.	Other fees			200.000	200.000
Total				945.000	1.376.200

Total Receipts (TR)

Revenue is the amount of money earned from the sale of fish to consumers. Based on the results of Goldfish hatcheries in one cycle can produce 24,000 fry, Goldfish fry that are ready to be harvested measure 8-12 cm. The price of Goldfish fry at this time is IDR 400 / cm. So the total imagination in the Goldfish hatchery business can be formulated as follows:

$$\begin{aligned} \text{TR} &= \text{Total production/cycle} \times \text{Price of fish products/cm} \\ &= 24,000 \text{ heads} \times \text{IDR } 400/\text{cm} \\ &= \text{IDR } 9,600,000 \end{aligned}$$

Total Cost of Production (TC)

Total cost is the sum of fixed costs and variable costs incurred in one year of goldfish production. The total production costs incurred by UPTD Fish Seed Center (BBI) Gajah Tanang Kota Padang Panjang in the Goldfish farming business are:

$$\begin{aligned} \text{TC} &= \text{Fixed costs} + \text{variable costs} \\ &= \text{IDR } 3,210.4 \text{ 00} + \text{IDR } 1,376.2 \text{ 00} \\ &= \text{IDR } 4,586.600 \end{aligned}$$

Profit (Profit/loss analysis)

Profit / loss analysis is an activity to analyze profits or losses obtained in the cultivation business, so that the level of profit / loss can be known in that period. A cultivation activity is said to be successful if it gains profit. Profit is obtained from the difference between total revenue and total production costs.

$$\begin{aligned} \text{Profit} &= \text{TR} - \text{TC} \\ &= \text{IDR } 9,600,000 - \text{IDR } 4,586.600 \\ &= \text{IDR } 5,013,400 \end{aligned}$$

The profit obtained by UPTD Fish Seed Center (BBI) Gajah Tanang Kota Padang Panjang in Goldfish hatchery activities in 1 year with 6 cycles is IDR 5,013,400.

CONCLUSION

Goldfish business development is all forms of activities that increase or aim to increase profits, production, or the company's service potential. The stages of hatchery activities at UPTD Fish Seed Center (BBI) Gajah Tanang Kota Padang Panjang include maintenance consisting of preparation for maintenance, spawning, and spawning, and spawning and further spawning kan Mas, p endederan dan panen benih. Based on the internship activities that the author has carried out at UPTD Fish Seed Center (BBI) Padang Panjang, the author has achieved the goals that have been formulated, namely knowing the production factors in the

carp seed development business, knowing and understanding strategies in the fish seed business. In developing a business we must understand about the business development strategy which includes Product Development Strategy, Market Development Strategy, Concentrated Development Strategy, Innovation Strategy and Horizontal Integration Strategy.

REFERENCE

- Anggara, R. W., Anggraini, N., Lurrohman, K., Sitanggang, R., & Fransiska, W. F. (2022). Marketing and financial aspects of balado banado chips processing business in Bandar Lampung city. *Economic Management and Social Sciences Journal (ECOMANS)*, 1(1), 1–7. <https://doi.org/10.56787/ecomans.v1i1.4>
- Anggraini, N., Anggara, R. W., Lurrohman, K., Sitanggang, R., & Fransiska, W. F. (2022). Production Management of Balado Banado Chips Processing Business in Bandar Lampung City. *Economic Management and Social Sciences Journal (ECOMANS)*, 1(2), 45–49. <https://doi.org/10.56787/ecomans.v1i2.3>
- Anggraini, N., Berliana, D., & Yolandika, C. (2022). The Strength of Motives in Food Choosing Behaviour in Fishermen Based on Social Layers in the Coastal area of Bandar Lampung, Indonesia. *IOP Conference Series: Earth and Environmental Science*, 1012(1), 012007. <https://doi.org/10.1088/1755-1315/1012/1/012007>
- Anggraini, N., Yolandika, C., Utoyo, B., & Irawati, L. (2022). PROSES PENGAMBILAN KEPUTUSAN KONSUMEN DALAM PEMBELIAN PRODUK LADA DI PROVINSI LAMPUNG. *Jurnal Agrisep*, 23(1), 43–51.
- Azzahra, S., & Hindun, S. (2022). Marketing plan of Dago Dreampark , Bandung , West Java , Indonesia. *Economic Management and Social Sciences Journal (ECOMANS)*, 1(3), 75–80.
- Bathara, L., Nugroho, F., Yolandika, C., & Hamzah, G. (2021). Livelihood Assets of Small-Scale Fisherman in Tanah Merah District, Indragiri Hilir Regency, Riau Province, Indonesia. *IOP Conference Series: Earth and Environmental Science*, 934(1), 012042. <https://doi.org/10.1088/1755-1315/934/1/012042>
- Berliana, D., Yolandika, C., & Anggraini, N. (2018). Supply Chain Performance of Banana Chip Industry in Bandar Lampung. *International Journal of Sustainable Biomass and Bioenergy*, 2 (1), 1–6.
- Cahyati, N. (2022). Marketing efficiency of pepper order in Bukit Kemuning Village. *Economic Management and Social Sciences Journal (ECOMANS)*, 1(3), 60–67.
- Cahyati, N., Fitriani, Berliana, D., & Fatih, C. (2022). Financial Feasibility Pepper Order in Bukit Kemuning Village North Lampung. *Economic Management and Social Sciences Journal (ECOMANS)*, 1(2), 55–59. <https://doi.org/10.56787/ecomans.v1i2.6>
- Handayani, S., Fitriani, & Yolandika, C. (2017). *Pengantar Koperasi untuk Perguruan Tinggi* (Edisi ke 1). UB Press.
- Hardiyanti, F. (2022). Management and procurement of sweet orange production input research center for orange plants and subtropical fruit (Balitjestro), Batu city, East Java. *Economic Management and Social Sciences Journal (ECOMANS)*, 1(1), 8–14. <https://doi.org/10.56787/ecomans.v1i1.1>
- Hendri, R., Yulinda, E., & Yolandika, C. (2022). Halal Practices on the Shrimp Paste Processing Industries for Business Development in Rokan Hilir , Riau Indonesia. *International Journal of Halal Research*, 4(1), 14–18.
- Hendrik, H., Hendri, R., & Yolandika, C. (2021). Impact of the Covid-19 Pandemic on Activities Socio-Economic Floating Net Cages (FNC) Business in the Koto Panjang Hydropower Reservoir, Riau

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- Province IOP Conf. Ser. Earth Environ. Sci. 934 012037 Impact of the. *IOP Conference Series: Earth and Environmental Science*, 934(1), 012037. <https://doi.org/10.1088/1755-1315/934/1/012037>
- Hutasoit, M. F. (2022). Human Resource Management of Pt. Nestle Indonesia Panjang Factory Lampung, Indonesia. *Economic Management and Social Sciences Journal (ECOMANS)*, 1(2), 36–44. <https://doi.org/10.56787/ecomans.v1i2.2>
- Natalia, D., Pratiwi, E. H., Andika, M. G., Nur Rahmah, S., & Ivana, V. W. (2022). Cost analysis of semi organic spinach (*Ipomoea aquatica* L) cultivation in Lampung State Polytechnic Agricultural Land. *Economic Management and Social Sciences Journal (ECOMANS)*, 1(1), 21–25. <https://doi.org/10.56787/ecomans.v1i1.10>
- Pratiwi, D. (2022). Analysis of Indonesia national rice availability towards self-support with a dynamic model approach. *Economic Management and Social Sciences Journal (ECOMANS)*, 1(3), 91–101.
- Saktiawan, M. E., Sondakh, S. J., & Andaki, J. A. (2019). FAKTOR SOSIAL EKONOMI DAN NILAI TUKAR PEMBUDIDAYA IKAN (NTPI) DI DESA WARUKAPAS KECAMATAN DIMEMBE KABUPATEN MINAHASA UTARA. *Ejournal.Unsrat*, 7(2), 1311–1322.
- Setiawinata, anangga pratama, Wahyudi, B., & Purba, priza audermando. (2019). Pengaruh produksi hasil tangkapan, pengeluaran rumah tangga dan aksesibilitas lembaga keuangan formal terhadap nilai tukar nelayan di muara anke jakarta utara tahun 2018. *Jurnal Ekonomi Pertahanan*, 5(2), 209–228.
- Sidqi, F. (2022). Wine production management at Srikandi Vineyard , Jati Agung District , South Lampung Regency. *Economic Management and Social Sciences Journal (ECOMANS)*, 1(3), 68–74.
- Sofyani, T., & Yolandika, C. (2021). *Tingkat Kesejahteraan Rumah Tangga Generasi Kedua Pemukim Kembali di Desa Koto Mesjid Kecamatan Kampar Provinsi Riau*. 2(April), 1–6.
- Sutarni, S., Irawati, L., Unteawati, B., & Yolandika, C. (2019). Proses Pengambilan Keputusan Pembelian Sayuran Hidroponik Di Kota Bandar Lampung. *Journal of Food System & Agribusiness*, 2(1), 17–24. <https://doi.org/10.25181/jofsa.v2i1.1107>
- Wulandari, F., & Warningsih, T. (2022). Marketing Management of Catch Fish in Cold Storage At the Bungus Padang Ocean Fishing Port (Pps) West Sumatra Province. *Economic Management and Social Sciences Journal (ECOMANS)*, 1(2), 50–54. <https://doi.org/10.56787/ecomans.v1i2.5>
- Yama, N. N. S., & Unteawati, B. (2022). Production Activities and Procurement of Input Research Center for Orange and Subtropical Fruit City of Batu, East Java. *Economic Management and Social Sciences Journal (ECOMANS)*, 1(2), 32–35. <https://doi.org/10.56787/ecomans.v1i2.1>
- Yolandika, C. (2016). *Analisis Supply Chain Management Brokoli CV. Yan's Fruits and Vegetable di Kabupaten Bandung Barat*. IPB University.
- Yolandika, C., Anggraini, N., & Berliana, D. (2021). Food Security Level of Fisherman Household in Bandar Lampung, Indonesia. *IOP Conference Series: Earth and Environmental Science*, 934(1), 012047. <https://doi.org/10.1088/1755-1315/934/1/012047>
- Yolandika, C., Berliana, D., & Anggraini, N. (2021). Efisiensi Kinerja Rantai Pasok Ikan Patin di Pringsewu , Lampung Pangasius Supply Chain Performance Efficiency in Pringsewu , Lampung. *Journal of Food System & Agribusiness*, 5(2), 107–115.
- Yolandika, C., Lestari, D. A. H., & Situmorang, S. (2015). Keberhasilan Koperasi Unit Desa (KUD) Mina Jaya Kota Bandar Lampung Berdasarkan Pendekatan Tripartite. *Jurnal Ilmu-Ilmu Agribisnis*, 3(4), 385–392.

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- Yolandika, C., Nurmalina, R., & Suharno. (2016). Marketing Analysis of Broccoli in Lembang West Java Indonesia (Case Study: CV. Yan's Fruits and Vegetables, Lembang, West Java). In A. Rifin, M. P. van Dijk, D. P. de Boer, H. Mudde, J. van Rooyen, & S. Jahroh (Eds.), *Strengthening Indonesian Agribusiness: Rural Development and Global Market Linkages* (pp. 241–250). IPB University. <http://agribisnis.ipb.ac.id/wp-content/uploads/2017/04/Husnul-Khotimah-Stefan-Von-Cramon-Taubadel-dkk-VERTICAL-MARKET-INTEGRATION-PERFORMANCE-OF-INDONESIAN-RICE-MARKET-CHAIN.pdf>
- Yolandika, C., Nurmalina, R., & Suharno, S. (2017a). Analisis Nilai Tambah Brokoli Kemasan Cv. Yan'S Fruits and Vegetable Di Kecamatan Lembang Bandung Barat. *Journal of Food System & Agribusiness*, 1(1), 30–37. <https://doi.org/10.25181/jofsa.v1i1.84>
- Yolandika, C., Nurmalina, R., & Suharno, S. (2017b). Rantai Pasok Brokoli di Kecamatan Lembang Kabupaten Bandung Barat dengan Pendekatan Food Supply Chain Networks. *Jurnal Penelitian Pertanian Terapan*, 16(3), 155–162. <https://doi.org/10.25181/jppt.v16i3.93>
- Yolandika, C., Sofyani, T., Mursyid, H., Anggraini, N., & Berliana, D. (2022). The competitiveness of Indonesia ' s frozen shrimp exports in international market. *IOP Conf. Series: Earth and Environmental Science*. <https://doi.org/10.1088/1755-1315/1118/1/012074>