International Applied Science
UMJember Proceeding Series (2024) Vol. 3 No 2: 79-85

Proceedings of the SEMARTANI 3 2024

Analysis Of The Profitability Of Terasi Agroindustrial Businesses In Puger District, Jember District

Achmad Ramadhani[1*], Fefi Nurdiana[1], Anisa Nurina Aulia[1]
[1] Universitas Muhammadiyah Jember; grayaji17@gmail.com

*Correspondence: Achmad Ramadhani
Email: ahmadramadhani879@gmail.com

Published: Juli, 2024

Abstract: Fisheries management is all activities related to the utilisation of fish resources and the environment ranging from pre-production, production, processing to marketing processes carried out in a fisheries business system. One form of diversification of fishery products that is widely practised in Puger Wetan and Kulon villages in Puger District, Jember Regency is terasi product. The average profit of terasi agro-industry in Puger Kulon and Wetan villages in Puger District, Jember Regency has received a profit of Rp 45,121,274.91. The average break-even unit (BEP) of the shrimp paste fishing industry in Puger Kulon and Wetan villages in Puger District, Jember Regency is 219 Kg. The average break-even point (BEP) and the average break-even point (BEP) of acceptance of the shrimp paste fishing industry in Puger Kulon and Wetan villages in Puger District, Jember Regency is Rp 67,000,000.00 per production. The break-even point unit and acceptance (BEP) are above the break-even point and it can be concluded that the fishing industry in Puger Kulon and Wetan villages in Puger District, Jember Regency is profitable. In the agro-industry business of shrimp paste in the village of Puger Kulon and Wetan Puger District, Jember Regency has reached efficient. Based on the results of the R / C ratio analysis which shows that the average efficiency value, the production of agro-industry shrimp paste in the village of Puger Kulon and Wetan Puger sub-district is 3.16.

Keywords: BEP Analyst, Cost Efficiency, Profit Analysis

INTRODUCTION

Indonesia is the largest archipelagic country in the world with approximately 17,491 islands in Indonesia, and 16,671 islands registered with the UN. The large territorial waters of Indonesia are also proven by the fact that all provinces in Indonesia have beaches. This indicates the large maritime potential in Indonesia, especially the fisheries sector. Fisheries is a branch of agriculture in a broad sense. The development objectives of the fisheries sub-sector include (1) increasing production to meet food needs including improving nutrition, (2) improving the standard of living and welfare of fish farmers, (3) improving the social status of fishermen/farmers fish, (4) absorb labor. This goal is achieved by carrying out fisheries intensification, extensification and diversification activities. Fishing businesses are basically divided into (1) marine fisheries businesses, (2) land fisheries cultivation and (3) fisheries businesses in public waters, of which the three businesses have their own problems (Lestari et al., 2014)

Fisheries management is all activities related to the utilization of fish resources and the environment, starting from pre-production, production, processing to the marketing process carried out in a fisheries business system. Fisheries management can also be defined as human activities related to the management and utilization of aquatic biological resources. The marine fisheries business is an effort to diversify fisheries products which aims to create added economic value to fishery products. This is intended so that economically it will

be very helpful in the welfare of these business actors, especially for coastal communities who have the potential to utilize the abundant natural resources of marine fisheries (Fatahillah, 2015).

One form of diversification of fishery products that is widely cultivated in Puger Wetan and Kulon Villages, Puger District, Jember Regency is shrimp paste products. Processed products from marine fisheries whose main raw material is rebon shrimp are in great demand by the public, especially people from outside the city who visit Jember Regency. Those who deliberately visit or are just passing through Jember Regency will always have a reason to take the time to visit Puger District just to buy authentic shrimp paste typical of the Puger area, even though the price offered will be quite expensive. The Coastal Area in the Southern part of Jember Regency, namely Puger Wetan and Puger Kulon Villages, is a coastal area where the majority of people work in the production of aquatic and marine natural resources, either as fishermen or owning home-based agro-industry businesses for processed fish and shrimp products. This profitable natural potential means that coastal communities in Puger District, especially in Puger Wetan and Puger Kulon Villages, have many home-based agro-industry businesses processing marine fishery products, one of which is the Terasi Agro-industry. Processing shrimp and fish into shrimp paste products can extend shelf life and reduce production yields. One of the home-scale shrimp paste agroindustry that is widely developed in Puger District.

The aim of the research is to calculate the profit value, break-even point and analyze cost efficiency in the shrimp paste agro-industry business, so that in this research the shrimp paste agro-industry business craftsmen can know how to calculate the profit value, break-even point and analyze cost efficiency.

METHOD

The method used in this research is descriptive and analytical methods. The descriptive method is a research method that is intended to describe systematic, actual and accurate research results through sample or population data as they are. The analytical method is a way to obtain in-depth data, data that contains meaning and can significantly influence the substance of the research (Tanjung & Nababan, 2016)

The sampling technique in this research used the Total Census/Sampling technique. This Total Census/Sampling technique is where samples are taken using all members of the population. So the sample in this research is all shrimp paste agro-industry craftsmen in the villages of Puger Wetan and Kulon in Puger District, Jember Regency. The reason for taking the Total Census/Sampling Technique is because the population is less than 100. So the number of samples in this research is 5 craftsmen (Oktaviani & Putra, 2021)

The data used for this research are primary and secondary data. Primary data was obtained through direct observation and interviews with shrimp paste agro-industry entrepreneurs in Puger District, Jember Regency using previously prepared questions in the form of a questionnaire. Meanwhile, secondary data was obtained through searching various documents and relevant literature in the form of journals and books and based on data collected from relevant agencies, namely the Central Statistics Agency.

The data analysis methods used in this research to test this hypothesis are the profit analysis method, break-even analysis and cost efficiency analysis.

To answer the first objective, namely measuring the profits of the shrimp paste agro-industry business, profit analysis is used. Profit is the difference between total revenues and costs incurred. According to Apriyani (2019), mathematically the profit analysis can be written as follows.

$$\Pi = TR - TC$$

Description:

Π = Profit

TR = Total Revenue

TC = TC is the total cost.

To test the first hypothesis using the decision-making criteria decision-making criteria as follows:

a. If TR>TC, then the shrimp paste agro-industry in Puger Sub-district, Jember Regency is profitable.
b. If TR<TC, then the shrimp paste agro-industry in Puger Sub-district, Jember Regency is disadvantageous.
c. If TR=TC, then the shrimp paste agro-industry in Puger District, Jember Regency breaks even.

To answer the second objective, namely the determination of the break-even point of the shrimp paste agro-industry in Puger Subdistrict, the break-even point analysis is used. (Tangeren1 & , Jullie J. Sondakh2, 2018), mathematically it can be written as follows:

Unit BEP and price BEP can be formulated as follows:

BEP yield or product = (Total Cost)/"(Product Price@)

BEP price = (Total Cost)/(Expected total product)

Revenue Break-even Point (RP)

BEP (Revenue) = BEP unit x BEP price

Description:

TC = Total production costs of Terasi agro-industry

Q = Number of Terasi agro-industry packaging products

P = Selling price/unit of Terasi

To test the second hypothesis using decision-making criteria, namely if TR = TC then the Terasi agro-industry in Puger District, Jember Regency is in a break-even condition, that is, no loss and no profit.

To answer the third objective, namely measuring the Cost Efficiency margin of the shrimp paste agroindustry business in Puger District, Jember Regency, (Utami, 2019). then the following formula is used.

$$R C \square (Py.Y)/(FC+VC)$$

Description:

TR = total revenue

TC = total cost

Py = output price/unit

Y = output

FC = fixed cost

VC = variable cost

To test the third hypothesis, the following decision-making criteria were used

decision-making criteria as follows:

R/C ratio > 1, means that the agro-industry business is efficient.

R/C ratio = 1, meaning that the agro-industry business breaks even.

R/C ratio < 1, means that the agro-industrial business is not efficient.

RESULTS AND DISCUSSION

Profit is the difference between revenue and total production costs. The amount of profit generated by agribusiness entrepreneurs is not only determined by the level of production, but also by the selling price and total production costs incurred.

The goal of business is to achieve maximum profit. The amount of profit achieved depends not only on the volume of production, but also on prices and total production costs. Therefore, it can be said that production levels, prices, and total production costs affect the profit earned by a company. The average amount of profit of the terasi agro-industry in Puger Kulon and Wetan villages in Puger Sub-district, Jember Regency can be seen in the following table:

Table 1.1 Average Profit of Terasi Agroindustry

No	Component Cost	Unit	Value
1	Production	Pcs	670
2	Price	Rp/pcs	100.000.00
3	Revenue	Rp.	67.000.000.00
4	Production Cost	Rp.	21,938.725
Advantages		**Rp**	**45061274,91**

Source: Primary Data Analysis Results, (2024)

It can be seen that the average production of shrimp paste per production carried out by craftsmen in the fishing industry in Puger Kulon and Wetan villages in Puger District, Jember Regency is 45,061,274.91 pcs/production or 670 kg of shrimp paste. The average selling price of shrimp paste in Puger Kulon and Wetan villages in the agro-industry of Puger District, Jember Regency is IDR 100,000 per piece. The average income of terasi entrepreneurs in Puger kulon and wetan villages in Puger District Jember Regency is Rp 67,000,000.00 per production. The average production cost of terasi fishing industry is Rp 21,938,725 per production. This shows that the profit obtained by terasi agro-industry craftsmen in Puger Kulon and Wetan villages in Puger District Jember Regency is Rp 45,061,274.91 per production.

The production process of shrimp paste in the fishing industry in Puger Kulon and Wtan villages in Puger District, Jember Regency is not carried out every day. The production process takes place when the raw material for shrimp is available and the shrimp paste product is not available. The average production process of the shrimp paste fishing industry in Puger District Jember Regency produces 5 to 6 times per month by providing a profit of Rp 45,061,274.91.

Break-even point (BEP) is a state in which an agro-industrial enterprise receives the same amount as the total production costs incurred at the level of production or sales. The break-even point indicates the minimum number of products that an enterprise must produce to make a profit. An enterprise breaks even when total revenue equals total costs (TR=TC). If the total sales achieved are above the break-even point then the company is in the profit zone and if the total sales achieved are below the break-even point then the company is in the loss zone. The break-even point obtained by the terasi agroindustry business in Puger Kulon and Wetan villages in Puger District, Jember Regency can be seen in the table below.

Table 1.2 Average break-even point of shrimp paste agro-industry

No	Description	Unit	Value
1	BEP (unit)	Kg	219
2	BEP (revenue)	Rp	21.878.725

Source: Primary Data Analysis Results, (2024)

Based on Table, it is known that the average break-even point (BEP) of the Terasi fishing industry in Puger Kulon and Wetan villages in Puger District, Jember Regency is 219 kg. The average break-even point (BEP) and the average break-even point (BEP) of Terasi fishing industry receipts in Puger Kulon and Wetan villages in Puger District, Jember Regency is Rp 21,878,725 per production. The price and revenue break-even point (BEP) are above the break-even point and it can be concluded that the Terasi fishing industry in Puger Kulon and Wetan Villages, Puger District, Jember Regency is profitable.

Based on the results of the calculation of the break-even point (BEP), it can be concluded that the Terasi fishing industry is feasible because the BEP price and BEP selling value are greater than the quantity and amount of sales achieved.

Efficiency is the ratio of revenue and total costs incurred during the production process of fish farming in agriculture. The level of production costs in agriculture has a significant influence on the level of profit. The level of efficiency of production cost utilisation in aquaculture in Pugar sub-district can be calculated using R/C. R/C is the ratio of total sales of a job and total production costs. High efficiency can be achieved by increasing production volume and reducing production costs incurred. A value of R/C > 1 indicates the utilisation of production costs in the aquaculture farming industry is efficient, and a value of R/C ≤ 1 indicates the utilisation of costs in the aquaculture farming industry is inefficient. The efficiency obtained by the agro-industry terasi business in Puger Kulon and Wetan villages in Puger District, Jember Regency can be seen in the table below.

Table 1.3 Average Cost Efficiency of Terasi Agroindustry

No	Description	Cost Efficiency R/C Ratio	
1	Revenue	Rp	67.000.000
2	Total Production Cost	Rp	21.878.725
	Total		**3,16**

Source: Primary Data Analysis Results, (2024)

It can be seen that the average efficiency value per production cost during the peak season of fish harvesting in the aquaculture farming industry of Pugar sub-district in 2024 is efficient for crafters. This can be seen from the R/C value of 3.16 which is greater than 1 (R/C > 1). This means that the second hypothesis regarding the achievement of production cost efficiency in the aquaculture farming industry in Pugar District is accepted.

To achieve the goal of cost optimisation, the goal is to use a production cost of 670.00/kg of raw materials. To achieve maximum profit, the price of the main raw material such as rebon shrimp is not inclined because rebon shrimp is usually only available in August-September. In addition, another goal of this cost optimisation effort is to maintain the stability, sustainability, and future development of the shrimp paste production operation.

CONCLUSION

The average profit of the shrimp paste agro-industry in Puger Kulon and Wetan villages in Puger District, Jember Regency, which has received a profit of Rp 45,121,274.91.

The average break-even unit (BEP) of the shrimp paste industry in Puger Kulon and Wetan villages in Puger District Jember Regency is 219 Kg. The average break-even point (BEP) and the average break-even point (BEP) of acceptance of the shrimp paste industry in Puger Kulon and Wetan villages in Puger District Jember Regency is Rp 67,000,000.00 per production. The unit and revenue break-even point (BEP) are above the break-even point and it can be concluded that the shrimp paste farming industry in Puger Kulon and Wetan villages in Puger District, Jember Regency is profitable.

In the business of agroindustry shrimp paste in the village of Puger Kulon and Wetan Puger District Jember Regency has achieved efficient. Based on the results of the R / C ratio analysis which shows that the average value of production efficiency of agro-industry terasi in puger kulon village and wetan puger sub-district is 3.16.

REFERENCES

Agus, A. (2018). Marine/Fisheries Resource Using (Case Study Ternate Manucipality, North Molucca). *TO-RANI: Journal of Fisheries and Marine Science*, *1*(2), 93–102. https://doi.org/10.35911/torani.v1i2.4511

Apriyani, A. (2019). Analisis Harga Pokok Produksi, Nilai Tambah Dan Keuntungan Agroindustri Keripik Tempe Di Kota Metro. *Duke Law Journal*, *1*(1).

Arrazy, M., & Primadini, R. (2021). Potensi Subsektor Perikanan Pada Provinsi-Provinsi Di Indonesia. *Jurnal Bina Bangsa Ekonomika*, *14*(1), 1–13.

Assegaf, A. R. (2019). Pengaruh Biaya Tetap Dan Biaya Variabel Terhadap Profitabilitas Pada Pt. Pecel Lele Lela Internasional, Cabang 17, Tanjung Barat, Jakarta Selatan. *Jurnal Ekonomi Dan Industri*, *20*(1), 1–5. https://doi.org/10.35137/jei.v20i1.237

Bps Indonesia. (2022). Produksi Perikanan Laut Yang Dijual Di TPI (Ton), 2019-2021. In *Badan Pusat Statistik*. https://www.bps.go.id/indicator/56/496/1/produksi-perikanan-laut-yang-dijual-di-tpi.html

BPS Jawa Timur. (2021). Produksi dan Nilai Produksi Perikanan Budidaya Menurut Kabupaten Atau Kota dan Komoditas Utama di Provinsi Jawa Timur 2019. *Jatim.Bps.Go.Id*, 2631.

Camila, N. N. F., Utami, S. N., & Adita, M. D. (2021). Home Industrial Return Analysis Shrimp Cap Obor Tegal City: Analisis Keuntungan Home Industri Terasi Udang rebon Cap Obor Kota Tegal. *Journal of Agribusiness and Community Development (AGRIVASI) UMUS*, *1*(2), 103–113. http://jurnal.umus.ac.id/index.php/AGRIVASI/article/view/708%0Ahttp://jurnal.umus.ac.id/index.php/AGRIVASI/article/download/708/669

Fallis, A. . (2013). Analisis Efisiensi Biaya Operasional Melalui Pengelolaan Tunjangan Makan Dan Jaminan Pemeliharaan Kesehatan Pada Perusahaan Jasa Outsourcing. *Emba*, *53*(9), 1689–1699.

Fatahillah, K. 2018. (2015). *Analisis Efisiensi Biaya Dan Strategi Pengembangan Agroindustri Terasi Di Desa Puger Wetan Keacamatan Puger Kabupaten Jember*.

Karim, F., Swastawati, F., & Anggo, A. (2014). Pengaruh Perbedaan Bahan Baku Terhadap Kandungan Asam Glutamat Pada Terasi [The Effect of Different Raw Material to Glutamic Acid Content in Fish Paste]. *Jurnal Pengolahan Dan Bioteknologi Hasil Perikanan*, *3*(4), 51–58. https://ejournal3.undip.ac.id/index.php/jpbhp/article/view/7778/7533

Lestari, W., Hartadi, R., & S., A. F. (2014). Kajian Efisiensi Biaya Budidaya dan Pola Pemasaran Ikan Gurami serta Strategi Pengembangannya. *Berkala Ilmiah Pertanian*, 1–14. http://repository.unej.ac.id/handle/123456789/69974

Maflahah, I. (2013). Kajian Potensi Usaha Pembuatan Terasi Udang Studi Kasus Desa Bantalan , Kecamatan Batu Putih , Kabupaten Sumenep Korespondensi : Jln Raya Telang PO BOX II Kamal , Email : Pangky2004@yahoo.com (by product). Lebih lanjut , usaha ini juga merupakan upaya u. *Jurnal AGRO-INTEK*, *7*(2), 99–102. https://journal.trunojoyo.ac.id/agrointek/article/view/2056/1688

Marsudi, H. (2013). *Kajian Agroindustri Berbasis Masyarakat… Hidup Marsudi*. *4*, 21–44.

Ni'mah, N. F. (2020). Artikel Ilmiah Artikel Ilmiah. *STIE Perbanas Surabaya*, *101*, 0–16.

Oktaviani, N. K. W., & Putra, M. (2021). Motivasi dan Disiplin Kerja Terhadap Kinerja Guru di Sekolah Dasar. *Jurnal Imiah Pendidikan Dan Pembelajaran*, *5*(2), 294. https://doi.org/10.23887/jipp.v5i2.35146

Palupi, T. A., & Zahroh, Z. A. (2016). Produksi Perusahaan(Studi pada Pabrik Gula Lestari , Patianrowo , Nganjuk). *Jurnal Administrasi Bisnis*, *36*(1), 80–85.

Panorama, M. (2016). *Struktur Pasar: Analisis Menggunakan Kurva*. https://www.cairn.info/revue-informations-sociales-2005-3-page-48.htm

Putri, E. A., Suwandari, A., & Ridjal, J. A. (2015). Income Analysis and Cost Efficiency of Maesan 2 Tobacco Farming in Bondowoso Regency. *Jsep*, *8*(1), 64–69.

Rini Widianti, T. A. K. (2013). *MANAJEMEN AGRIBISNIS APLIKASI PADA INDUSTRI PETERNAKAN*.

Romadhon, R., Rianingsih, L., & Anggo, A. D. (2018). Aktivitas Antibakteri dari Beberapa Tingkatan Mutu

Terasi Udang Rebon. *Jurnal Pengolahan Hasil Perikanan Indonesia*, *21*(1), 68. https://doi.org/10.17844/jphpi.v21i1.21263

Soejono, D. (2008). Pola Pengembangan Agroindustri Berbasis Perikanan Laut Di Kecamatan Puger Kabupaten Jember. *Jurnal Sosial Ekonomi Pertanian (J-SEP)*, *2*(1), 30–37. https://jurnal.unej.ac.id/index.php/JSEP/article/view/415

Tangeren1, R., & , Jullie J. Sondakh2, W. P. (2018). *Analisis Titik Impas Dan Batas Aman Sebagai Dasar Perencanaan Laba Jangka Pendek Pada Pt. Soho Industri Pharmasi Cabang Manado*. *13*(3), 373–380.

Tanjung, H. S., & Nababan, S. A. (2016). Pengaruh penggunaan metode pembelajaran bermain terhadap hasil belajar matematika siswa materi pokok pecahan di kelas III SD Negeri 200407 Hutapadang. *Jurnal Bina Gogik*, *3*(1), 35–42. https://www.ejournal.stkipbbm.ac.id/index.php/pgsd/article/view/26

Utami, amalia tri. (2019). Analisis keuntungan dan nilai tambah agroindustri pemindangan ikan di kecamatan puger kabupaten jember. *Agribest*, *1*(1), 1–10.