

Fisheries_industry_strategy_in_I ndonesia.pdf

by Firmansyah

Submission date: 15-Apr-2023 01:35PM (UTC+0700)

Submission ID: 2065133729

File name: Fisheries_industry_strategy_in_Indonesia.pdf (542.12K)

Word count: 4244

Character count: 20995

PAPER • OPEN ACCESS

Fisheries industry strategy in Indonesia

13
To cite this article: Miar *et al* 2020 *IOP Conf. Ser.: Earth Environ. Sci.* **530** 012015

6
View the [article online](#) for updates and enhancements.

You may also like

- 12
- [Resilience-based steps for adaptive co-management of Arctic small-scale fisheries](#)
Eranga K Galappaththi, Marianne Falardeau, Les N Harris et al.
- 9
- [A Simple and Fast Method for the Simultaneous Determination of Liquiritigenin and Liquiritin at DNA/Carboxyl MWCNTs Modified GCE](#)
Jincheng Chen, Bo Fu, Tailin Liu et al.
- 11
- [Collider signature of \$U_c\$ Leptoquark and constraints from \$b \rightarrow c\$ observables](#)
Aritra Biswas, Dilip Kumar Ghosh, Nivedita Ghosh et al.



 **244th Electrochemical Society Meeting**
October 8 – 12, 2023 • Gothenburg, Sweden
50 symposia in electrochemistry & solid state science
▶ Deadline Extended!
Last chance to submit!
New deadline:
April 21
submit your abstract!

Fisheries industry strategy in Indonesia

Miar¹, Firmansyah^{2*}, Shanty Oktavilia³, Dita W Puspita^{2,3}, Ryan Prayogi²

¹ Faculty of Economics and Business, Universitas Palangka Raya, Indonesia ⁶

² Department of Economics, Universitas Diponegoro, Semarang, Central Java Province, Indonesia

³ Faculty of Economics, Universitas Negeri Semarang, Semarang, Central Java Province, Indonesia

*Corresponding author: firmansyah@live.undip.ac.id

Abstract. Over the past few years, fishery growth has always exceeded economic growth in Indonesia. Based on this performance, more focused policies are needed to manage it. This study aims to develop a strategy for the fishing industry, specifically related to the center of the fisheries processing industry in Indonesia, with a descriptive secondary approach, including an analysis of the development of fisheries production base areas namely Location Quotient (LQ) and Shift Share Analysis (SSA) during 2013-2018. This study found that LQ scores were high in Maluku Province. The results indicate that related industries have a higher relative advantage than the average of all provinces, or also called basic industries. SSAs with positive scores occur in South Sulawesi Province, which shows that fisheries are a growing industry. Fisheries development strategies from this research include: (1) Improving coordination between sectors, (2) Identification and synchronization of industrial policies; (3) Developing areas that have more than one LQ as a basis for national fisheries; and (4) Selection of suitable industrial scale related to sustainable resources and regional superiority.

1. Introduction

Indonesia is an archipelago consisting of archipelagic and oceanic entities, which means that land areas are not separated by inter-island seas but are integrated as a territorial unit. Thus, land power is as important as ocean power [1]. As an archipelagic country, Indonesia has great potential in fisheries, which plays an important role in the Indonesian economy through increased community income, diverse livelihoods, animal protein supply, and foreign exchange earnings [2]. Overall, Indonesia is one of the largest fisheries producing countries that produce 6.2 percent of total aquaculture production. The performance of the fishing industry as part of the GDP sector, in the third quarter of 2018 amounting to 59,984.3 trillion Rupiahs, increased 3.71 percent from the third quarter of 2017 [3]. According to the publication of the Ministry of Maritime Affairs and Fisheries of the Republic of Indonesia [4], fisheries production in the third quarter of 2015 to 2018 continued to show positive growth. In the third quarter of 2015 (5,363,274 tons), 5.24 percent in the same period in 2016 (5,664,326 tons). In 2017 in the same period, fishery production also grew 8.51 percent (6,124,522). Then in 2018, fishery production will increase 1.93 percent with a total fishery production reaching 6,242,846 tons. The movement of the fisheries sector and Indonesia's GDP in Figure 1 shows a positive trend. The fisheries sector over the past seven years has even shown that performance has always been above national growth. Although in 2016 the fisheries sector experienced a slowdown due to weather factors, in the following year it grew. The problem of decreasing fishery production due to several factors such as: climate change,



overfishing, and fishing without regard to environmental impacts [5]. Previous studies suggest that in some areas there was excessive fishing, such as in the Java sea region and the Malacca Strait [6].

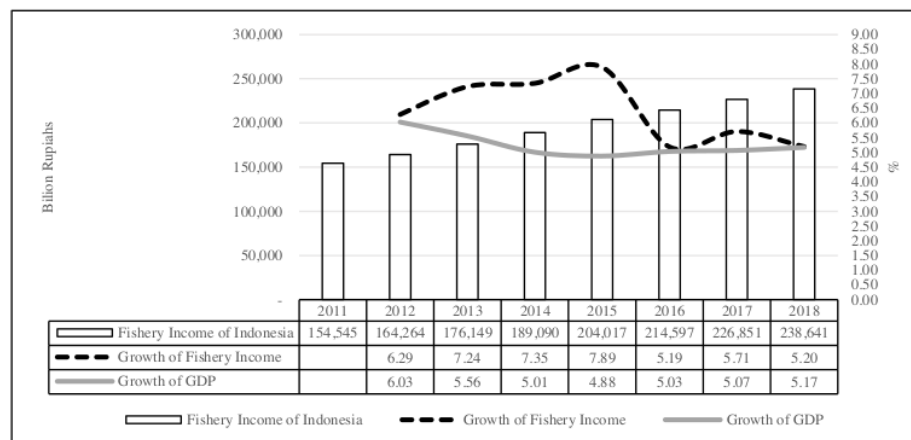


Figure 1. Fishery Income, Growth of Fishery Income and Growth of GDP Value of Indonesia (at 2010 Constant Market Prices)

Source: BPS (2019) Indonesia, Processed[7]

In general, national fisheries sector revenue [26] have fluctuated, in line with the growth performance in each province. A map of the potential performance of fisheries sector revenue in each of the 5 best provinces in Indonesia is illustrated through Table 1. The province that produces the highest fisheries sector income is East Java. Overall, the fisheries income of the 5 provinces fluctuates every year with an upward trend. The increase in production capacity represented by the average annual provincial income growth value during 2013-2018 shows that South Sulawesi has the highest rate compared to other provinces. While Riau and Lampung show the lowest income growth in the fisheries sector compared to the other 4 provinces, with annual average growth rates for 2013-2018 of 2.53 percent and 1.8 percent.

Table 1. Top Five Province with The Highest Fishery Income in Indonesia
 (at 2010 Constant Market Prices, Billion Rupiah)

No	Province	2013	2014	2015	2016	2017	2018	Average Growth (%)
1	East Java	26,904	28,753	30,394	31,932	33,471	33,176	4.32
2	South Sulawesi	14,056	16,263	18,090	19,492	21,103	22,764	10.16
3	Lampung	11,820	12,550	12,758	13,090	13,781	13,356	2.53
4	Riau	10,888	11,410	11,986	12,119	11,836	11,936	1.89
5	West Java	9,180	9,923	10,602	11,135	11,488	11,611	4.84

Source: BPS Indonesia, Processed [7]

The general phenomena shown in Table 1 are insufficient to assess the quality of performance and conditions of sector transformation. Therefore, this study will examine [19] the potential of provinces that specialize in the fisheries sector and the quality of their structural shifts. This study aims to analyze the strategy of the Indonesian fishing industry.

The results of mapping the potential and calculating the quality of the sector will produce a province that is concentrated on the development of the agricultural sector. These results can be used to recommend policies that can stimulate increased fisheries production, support improvements in the quality and added value of fishery products, and support regional economic development. Basically, the current policy not only considers economic, government and community policies but also considers a combination of economic and geographical aspects. To find out interactions in economic activities, not only affect one region but also human interactions between regions to provide commercial distribution.

2. Methodology

13 To produce a strategy for the fishing industry as an objective of this study, the initial step is to determine the potential of the fishing industry through an analysis of production growth and to see the condition of the transformation of Indonesia's fisheries structure. The calculation results will show the provinces that specialize in the fisheries sector and the performance conditions of the sector. Location Quotient and Shift-Share Analysis can be used to analyze the potential of regional economic sectors, determine the leading sectors and explain the dynamics of regional sectoral performance. The basic concept in the LQ discussion is that the regional economy differs from the national economy in several respects, partly in trade relations. For example, intermediate goods purchased from regions within the country that are part of those in the region, which are part of domestic production at the national level. Shift Share Analysis is used to determine regional development from time to time, this is useful for the renewal of the industry of each region compared to the improvement of the whole economy and the aggregate industry [8]. This tool, first introduced in 1960, can be used to explain economic change as a combination of three influential factors: national, sectoral and regional (local) [9]. This study uses fisheries sector production data for each province in Indonesia during 2013 – 2018.

Location Quotient (LQ) analysis is one of the approaches commonly used in basic economic models as a first step to understanding the production sector that drives growth [10]. LQ analysis is used to determine the leading sectors in a region by comparing the role of sectors in the region with the role of sectors in the wider region, and obtain the results of sectors that have a comparative advantage in the field being developed [11]. In other words, LQ measures the relative concentration or level of specialization of economic activity through a comparative approach. As a benchmark to calculate sector development, it can be done by comparing the results of regional economic development in the form of broader regional economic growth. In other words, LQ is used to compare the contribution of regional industries (GRDP) to the country (GDP).

$$LQ = \frac{Fp/Yp}{Fn/Yn} \quad (1)$$

Notes:

Fp = GDRP of Fishery Sector for each Province in Indonesia

Yp = Total GDRP for each Province in Indonesia

Fn = GDP of Indonesia Fishery Sector

Yn = Total GDP of Indonesia

The general criteria resulting from the estimation are: when $LQ > 1$, it is defined as base sector, which is the sector with a higher level of specialization than at the broader regional level; when $LQ < 1$, it is defined as non-base sector, which is the sector with a lower level of specialization than at the broader regional level; and when $LQ = 1$, then the level of regional specialization is the same as the broader level.

8 Shift share analysis (SSA) is used to see trends in the transformation of regional economic structures. This technique can describe the performance or productivity of regional economic work compared to the economy of a wider region. The results of the analysis reflect the comparison of the growth rates of the sectors in the region with the broader regional economic growth rates and sectors, and observe deviations from comparisons made. National economic growth (Nij), explains the reference

to economic growth that can be represented by higher regions in the administrative region (provincial or national). The explanation of the national share shows the effect of national economic growth on the regional economy. The following are some approaches for calculating Shift Share Analysis:

$$\begin{aligned} D_{ij} &= N_{ij} + M_{ij} + C_{ij} & (2) \\ N_{ij} &= Y_{ij} - r_n & (3) \\ M_{ij} &= Y_{ij}(r_{in} - r_n) & (4) \\ C_{ij} &= Y_{ij}(r_{ij} - r_{in}) & (5) \\ r_{ij} &= (Y^*_{ij} - Y_{ij}) / Y_{ij} & (6) \\ r_{ij} &= (Y^*_{ij} - Y_{ij}) / Y_{ij} & (7) \\ r_n &= (Y^*_n - Y_n) / Y_n & (8) \end{aligned}$$

Notes:

D_{ij} = Shift share analysis (changes of GDP, output and or value added)

N_{ij} = National growth effect

M_{ij} = Proportional shift

C_{ij} = Different shift

Y_{ij} = Fishery Income in GDRP for each province

Y_{in} = GDP of Indonesia Fishery Sector

Y_n = GDP Total of Indonesia, 2010 based year

Y^* = GDP analyzed year

r_{ij}, r_{in}, r_n = shown as regional and national growth

The Shift Share Analysis assumes the growth of an area can be divided into three components, as follows:

- National growth effect (N_{ij}) explains the reference economic growth, which can be represented by a higher administrative regions (national). The national growth effect shows how the effects of national economic growth on the regional economy (province). In this research, analyzing the impact of national fisheries on each province.
- Proportional shift (M_{ij}) shows the changes in the relative performance of a sector in a particular region (province) to the same sector in the national reference. Proportional shift is also known as the effect of the industrial mix. This measurement allows us to find out whether the regional economy is concentrated in industries that are growing faster than the economy that is used as a reference. The proportional shifting approach shows the dynamics of the performance of a sector in each Province against the same sector at the national level. Proportional shift is also called the effect of the industrial mix.
- Differential shift (C_{ij}) provides information in determining how far the competitiveness of the local industry to the level economy which is used as a reference. If the differential shift of an industry is positive, then the industry is relatively higher in competitiveness compared to the same industry in the reference economy. Differential shift is also called the effect of competitive advantage. If the value of the differential shift is positive, it means that the sector in the province is more competitive than the same sector at the level of the national economy.

3. Result and Discussion

LQ results reveal that there are 22 provinces with LQ greater than 1, meaning that the fisheries sector is a base sector in these provinces. A province is said to have a base sector if it produces output in the form of goods and services, both for domestic market needs and for outside the region. The industry, which is a basic sector, plays an important role as a prime mover in which any change in

increase or decrease per unit of output has a multiple effect on the regional economy both domestic and external. The direct impact is felt from the multiple effects, namely the absorption of labor due to fisheries production activities and community income due to service costs from industry. The fisheries sector that has the highest LQ is in the Maluku province. In terms of quantity, Maluku is indeed not the five largest fisheries producers, but the results of the study show that Maluku is the basis of fisheries production. The results of the study are still relevant to previous research on the fisheries sector in Maluku which is a strong base sector for the economic sector related to the development of the economic sector [12]. The second largest fishery producing region is Southeast Sulawesi. The results of the study reaffirm that Southeast Sulawesi is not only the biggest revenue producer for the fisheries sector but also as a special area for fisheries producers. Research on the leading sector also proves that this province has a base sector in the fisheries sector that produces high output and increased fishery exports [13, 14]. The LQ results also prove that Riau and Lampung are regions with a fisheries-based sector. Meanwhile, based on LQ results, East Java is the largest producer but not a province with a fisheries base sector.

Table 2. Provinces with The Highest Value of Location Quotient (LQ) Calculation in Fishery Sector

Province	2013	2014	2015	2016	2017	2018	Avrg	Province	2013	2014	2015	2016	2017	2018	Avrg
Maluku	6.32	6.16	5.73	5.56	5.46	5.40	5.77	Central Sulawesi	2.76	2.76	2.52	2.45	2.41	2.40	2.55
Southeast Sulawesi	4.44	4.65	4.18	4.42	4.45	4.44	4.43	West Papua	2.44	2.44	2.36	2.37	2.44	2.33	2.40
West Sulawesi	4.23	4.09	3.94	3.97	3.94	3.92	4.01	East Nusa Tenggara	2.11	2.11	2.05	2.06	2.05	2.19	2.09
Gorontalo	3.72	3.67	3.61	3.64	3.69	3.64	3.66	Aceh	2.09	2.00	2.03	2.01	1.96	1.97	2.01
South Sulawesi	2.99	3.15	3.18	3.18	3.19	3.22	3.15	Papua	2.24	2.21	2.11	1.98	1.98	1.88	2.07
North Kalimantan	2.68	2.79	3.00	3.02	3.05	3.15	2.95	West Nusa Tenggara	1.93	1.91	1.62	1.62	1.72	1.87	1.78
Bengkulu	3.37	3.17	2.96	2.94	2.87	2.83	3.02	Bali	1.96	1.99	1.84	1.81	1.78	1.82	1.87
North Maluku	3.51	3.28	2.94	2.92	2.81	2.78	3.04	South Kalimantan	1.51	1.46	1.42	1.43	1.46	1.51	1.47
Bangka Belitung Islands	2.90	2.87	2.77	2.75	2.53	2.62	2.74	West Sumatra	1.47	1.47	1.47	1.45	1.44	1.46	1.46
North Sulawesi	3.25	3.17	2.81	2.70	2.64	2.60	2.86	South Sumatra	1.39	1.42	1.35	1.30	1.21	1.24	1.32
Lampung	3.03	3.00	2.82	2.74	2.73	2.51	2.80	Riau	1.16	1.15	1.18	1.16	1.10	1.08	1.14

8 Based on the results of mapping regional potential through the LQ method, Shift Share Analysis is used to analyze transformation trends in the performance of provinces with the highest shift values. Table 3 shows the five provinces with the highest SSA calculation results. The SSA calculation results (Dij) from five provinces are positive, which means the sector in the province is classified as a progressive sector and its growth is faster than national fisheries. The results of the calculation of the National Share (Nij) for five Provinces are positive, that the Indonesian economy is able to contribute to the economic activities of each province. One of the general supports provided is the improvement of infrastructure facilities and the allocation of general and special funds, balance funds and subsidies. Proportional Share (Mij) has a positive value, which means the growth of the performance of the fisheries sector by five provinces grew relatively fast compared to the national economy during the 2013-2018 period. Cij (Differential Shift) calculation results from five provinces, only South Sulawesi and Southeast Sulawesi are positive, meaning that only the two provinces are able to compete in the national economy. This result is proven by previous research which states that Sulawesi is the largest marine fisheries production, thus making Sulawesi as one of the main corridors of economic activity in Indonesia [15, 16]. Sulawesi Island has the potential of the fisheries sector so it is recommended to be the focus of local government for development. Cij positive results can also mean that the fisheries sector in South and Southeast Sulawesi has a competitive advantage, which means the traded commodities are competitive commodities that have competitiveness.

Strategies for developing the fishing industry based on general policy studies include: (1) Improving coordination between sectors in order to create the final product of the fishing industry. This action was also proven by previous research which stated that the important role of human resource development in improving the skills and coordination of local government in the central government

[17]. Some factors that have not been optimal in the role of the fisheries sector, which have not been properly recorded as well as the potential and strength of the maritime economy and limited regional capacity, including the completeness of regulations in strengthening maritime management based on local potential [18]; (2) Identification and synchronization of policies that hinder the industrialization of fisheries. The study revealed that there are still many fishing communities in Indonesia that are classified as traditional fishermen, so the fishing method is still relatively simple and has a fishing boat with a small capacity so that the results obtained are not yet like the industrial scale [19]; (3) The development of the fishing industry in areas that have a high LQ to contribute to improving the regional economy as a basis for national fisheries; and (4) Selection of the right industrial scale related to the sustainable use of fisheries resources, utilities and industrial capacity, as well as regional excellence. This action is also supported by previous research, countries that emphasize the maritime sector, the sub-sector of roads, bridges and ports are the main sectors in the national economy [20]. The vital development of sea transportation in connecting connectivity between districts and cities will trigger variations in the types of community economic activities, mobility of goods flows tends to increase, the number of uses of sea transportation services continues to increase. This shows that the people's economic activities have grown along with the development of the maritime economy in the economic base of the fisheries sector. In the future, the stage towards maritime sector industrialization, the sea functions as a provider of production inputs that are transformed into manufacturing industries.

Table 3. Top Five Province with The Highest Value of Shift Share Analysis (SSA) Calculation in Fishery Sector (Billion Rupiah)

Province	SSA (Dij)	National Share (Nij)	Proportional Share (Mij)	Differential Shift (Cij)
South Sulawesi	8,708	3,909.83	1,076.75	3,721.42
East Java	6,272	7,483.64	2,060.96	-3,272.60
Southeast Sulawesi	2,819	1,715.14	472.34	631.52
West Java	2,431	2,553.52	703.23	-825.74
North Sumatra	2,331	2,367.43	651.98	-688.40

4. Conclusion

The performance of fisheries in Indonesia has enormous potential, with good competitiveness in international markets. With its growth which is above the national growth, it shows that the fisheries sector can be a determining contributor to Indonesia's GDP. This study finds that most provinces in Indonesia are fisheries producing centers and provinces that generally have good performance and are able to compete in national fisheries are South Sulawesi and Southeast Sulawesi. The development strategy in fish producing provinces in Indonesia is through coordination of all upstream and downstream sectors, as well as supporting policies and programs to develop and advance the industrialization of fishery products.

References

- [1] Rochwulaningsih Y, Sulistiyono S T, Masruroh N N and Maulany N N 2019 *Mar. Policy* **108** 103602
- [2] Tran N, Rodriguez U P, Chan C Y, Phillips M J, Mohan C V, Henriksson P J G, Koeshendrajana S, Suri S and Hall S 2017 *Mar. Policy* **79** 25–32
- [3] FAO 2018 The State of World Fisheries and Aquaculture 2018
- [4] Pregiwati L A 2018 KKP | Kementerian Kelautan dan Perikanan, Ministry of Marine Affairs and Fisheries Republic of Indonesia *Siar. Pers* 20–2

- [5] Oktavilia S, Yusfi R H, Firmansyah and Sugiyanto F X 2018 *IOP Conf. Ser. Earth Environ. Sci.* **116**
- [6] Bashir A, Ishak Z, Asngari I, Atiyatna DP and Hamidi I 2019 *Int. J. Econ. Financ. Issues* **9** 31–6
- [7] BPS 2018 *Gross Regional Domestic Product of Provinces in Indonesia by Industry* Badan Pus. Stat. 146
- [8] Morrissey K 2014 *Ocean Coast. Manag.* **91** 58–64
- [9] Goschin Z 2014 *Procedia Econ. Financ.* **15** 169–75
- [10] Hood R 1998 *Economic Analysis: A Location Quotient. Primer.* Principal Sun Region Associates
- [11] Destiningsih R, Sugiharti R R and Achsa A 2019 *Jejak* **12** 218–37
- [12] Kharisma B and Hadiyanto F 2019 *Etikonomi* **18** 29–46
- [13] Rachmawati L, Mursinto D and Istifadah N 2017 *Int. J. Humanit. Soc. Sci. Invent.* **6** 58–64
- [14] Pradana A, Pujiastuti I and Pragna Paramita P 2019 *IOP Conf. Ser. Earth Environ. Sci.* **338**
- [15] Rostin, Nusantara A W, Mas'ud A, Baheri, Yani Balaka M and Adam P 2018 *Int. J. Civ. Eng. Technol.* **9** 1430–6
- [16] Berawi M A, Miraj P and Sidqi H 2018 *IOP Conf. Ser. Earth Environ. Sci.* **109**
- [17] Muhammad MD, and Syafitri W 2017 *J. Ekon. dan Ekon. Stud. Pembang.* **9** 1–11
- [18] Nur S and Siang D 2016 *J. Agric. Resour. Econ.* **10** 1–10
- [19] Handayani T 2019 *Int. J. GEOMATE* **16** 183–90
- [20] Nurkholis, Nuryadin D, Syaifudin N, Handika R, Setyobudi RH and Udjianto DW 2016 *Aquat. Procedia* **7** 181–6

19%

SIMILARITY INDEX

14%

INTERNET SOURCES

16%

PUBLICATIONS

%

STUDENT PAPERS

PRIMARY SOURCES

- 1

Shanty Oktavilia, Firmansyah, FX. Sugiyanto, Ryan Prayogi, Hendy Aprilian Hidayat. "Non-performing loan in fishery sector, Indonesia", IOP Conference Series: Earth and Environmental Science, 2020
Publication

2%
- 2

Wilis Ari Setyati, Rini Pramesti, A.B. Susanto, A.S. Chrisna, Muhammad Zainuddin. "In vitro antibacterial study and spectral analysis of brown seaweed Sargassum crassifolium extract from Karimunjawa Islands, Jepara", IOP Conference Series: Earth and Environmental Science, 2020
Publication

2%
- 3

M Arsyad, S R Yunus, N Lanuhu, M H Jamil, Mahyuddin, N Alim. "An analysis of progressive sectors: agriculture position", IOP Conference Series: Earth and Environmental Science, 2021
Publication

2%
- 4

repository.kulib.kyoto-u.ac.jp
Internet Source

1%

5	download.atlantis-press.com Internet Source	1 %
6	lib.unnes.ac.id Internet Source	1 %
7	Made - Antara, I.G.A. Oka Suryawardhani, Ni Made Lodi Dwi Utami. "Basis Sector in the Economic Structure of Badung Regency, Bali, Indonesia", Research in Applied Economics, 2017 Publication	1 %
8	ebgc.upnjatim.ac.id Internet Source	1 %
9	O Pozdniakova, M Kazakova, A Avstrieviskikh, V Pozniakovskii. "Biologically active plant-based mixture for the prevention and complex treatment of bronchopulmonary pathology", IOP Conference Series: Earth and Environmental Science, 2019 Publication	1 %
10	Goschin, Zizi. "Regional Growth in Romania after its Accession to EU: A Shift-share Analysis Approach", Procedia Economics and Finance, 2014. Publication	1 %
11	I Alikhanov. "Impact of nuclear gluon distributions on leptoquark production by	1 %

neutrinos", Journal of Physics: Conference Series, 2021

Publication

-
- | | | |
|----|--|-----|
| 12 | Kuan Cao, Heng Zhou, Yutian Liu, Chunyi Wang. "Evaluation Method for Distribution Network Resilience Based on Typical Scenarios Under Icy Weather", Journal of Physics: Conference Series, 2023
Publication | 1 % |
|----|--|-----|
-
- | | | |
|----|--|-----|
| 13 | pertambangan.fst.uinjkt.ac.id
Internet Source | 1 % |
|----|--|-----|
-
- | | | |
|----|--|-----|
| 14 | repository.lppm.unila.ac.id
Internet Source | 1 % |
|----|--|-----|
-
- | | | |
|----|-------------------------------|-----|
| 15 | core.ac.uk
Internet Source | 1 % |
|----|-------------------------------|-----|
-
- | | | |
|----|---|------|
| 16 | Morrissey, Karyn. "A location quotient approach to producing regional production multipliers for the Irish economy : Producing regional production multipliers for Ireland", Papers of the Regional Science Association, 2014.
Publication | <1 % |
|----|---|------|
-
- | | | |
|----|------------------------------|------|
| 17 | rjoas.com
Internet Source | <1 % |
|----|------------------------------|------|
-
- | | | |
|----|---|------|
| 18 | Hardiani Hardiani, Tona Aurora Lubis. "Analysis of leading sector of Jambi City", | <1 % |
|----|---|------|

19

Izza M. Apriliani, Lantun P. Dewanti, Alexander M. A. Khan, Heti Herawati, Achmad Rizal, Nadia M. Kusnadi. "Fishing Vessel Characteristics with Multipurpose Gear to Support Fishing Operations in the Northern Sea of Java, Indonesia (Case Study in Indramayu)", Asian Journal of Fisheries and Aquatic Research, 2020

Publication

20

R S Septianingrum, B Aditya, A P Wijaya, M R Irshabdillah, N A Husna, R F Putri. "Economic inequality and its impact on human development: insight of Banten Province 2011-2015", IOP Conference Series: Earth and Environmental Science, 2020

Publication

21

www.unisza.edu.my

Internet Source

22

Anang Hari Kristanto, Jacques Slembrouck, Jojo Subagja, Simon Pouil, Otong Zenal Arifin, Vitas Atmadi Prakoso, Marc Legendre. "Survey on egg and fry production of giant gourami (): Current rearing practices and recommendations for future research ",

<1 %

<1 %

<1 %

<1 %

23

Rian Destiningsih, Rr. Retno Sugiharti,
Lorentino Togar Laut, Sudati Nur Safiah,
Andhatu Achsa. "Competitiveness
identification of fisheries export in Indonesia",
IOP Conference Series: Earth and
Environmental Science, 2020

Publication

<1 %

24

ejurnalunsam.id

Internet Source

<1 %

25

jcreview.com

Internet Source

<1 %

26

Shanty Oktavilia, Firmansyah, FX Sugiyanto, M
Aulia Rachman. "Competitiveness of
Indonesian fishery commodities", IOP
Conference Series: Earth and Environmental
Science, 2019

Publication

<1 %

Exclude quotes Off

Exclude matches Off

Exclude bibliography On