

SATISFACTION OF FISHERY ENTERPRISES WITH EXTENSION PERFORMANCE IN MAHAKAM ULU DISTRICT

Kepuasan Pelaku Usaha Perikanan Terhadap Kinerja Penyuluh Di Kabupaten Mahakam Ulu

Fitriyana^{1*}, Fredinan Yulianda², Bambang Widigdo²

¹Engineer Professional Study Program, IPB University, ²Faculty of Fisheries and Marine Sciences, Bogor Agricultural Institute

Dramaga main street, Bogor District, West Java, 16680

*Corresponding author: fitriyana@fpik.unmul.ac.id

(Received April 23th 2024; Accepted September 14th 2024)

ABSTRACT

Fisheries business actors often receive little attention from the government, especially from fisheries instructors, this often results in fundamental problems such as suboptimal capture and aquaculture production results, which can result in uncertain income. The research was carried out in Mahakam Ulu Regency in 2022 starting from August to December. The aim of the research is to determine the level of satisfaction of fisheries actors with the performance of fisheries instructors, determine the processes carried out to improve the performance of fisheries instructors, and find out the obstacles faced by instructors in carrying out extension activities. The method used was purposive sampling to determine respondents to be sampled based on certain criteria. The analysis method uses a Likert scale. The results of the study showed that the average satisfaction level of fisheries actors was 2.50, which means that fisheries actors were less satisfied with the performance of fisheries instructors. The obstacles faced by fisheries instructors were in terms of location access, instructor staff, facilities and infrastructure, government policy, participation and activeness group.

Keywords: Performance, Fisheries Extension, Fisheries Business

ABSTRAK

Pelaku usaha perikanan sering kali kurang mendapat perhatian dari pemerintah terkhususnya dari penyuluh perikanan, hal ini mengakibatkan sering terjadinya masalah-masalah mendasar seperti hasil produksi perikanan tangkap maupun budidaya yang tidak maksimal sehingga dapat mengakibatkan pendapatan yang tidak menentu. Penelitian dilaksanakan di Kabupaten Mahakam Ulu pada tahun 2022 dimulai agustus sampai dengan desember. Tujuan penelitian untuk mengetahui tingkat kepuasan pelaku perikanan terhadap kinerja penyuluh perikanan, menentukan proses yang dilakukan untuk memperbaiki kinerja penyuluh perikanan, mengetahui kendala yang dihadapi penyuluh dalam melaksanakan kegiatan penyuluhan. Metode yang digunakan dengan metode purposive sampling untuk menentukan responden yang dijadikan sampel berdasarkan kriteria tertentu. Metode analisis menggunakan skala likert. Hasil kajian diperoleh rata-rata tingkat kepuasan pelaku perikanan sebesar 2,50 yang artinya

pelaku perikanan kurang puas terhadap kinerja penyuluh perikanan, kendala yang dihadapi oleh penyuluh perikanan adalah dalam hal akses lokasi, tenaga penyuluh, sarana dan prasarana, kebijakan pemerintah, partisipasi dan keaktifan kelompok.

Kata Kunci: Kinerja, Penyuluh Perikanan, Usaha Perikanan

INTRODUCTION



Fig 1. Administrative Map of Mahakam Ulu Regency

Mahulu, short for Mahakam Ulu, is the youngest district in East Kalimantan and has five sub-districts consisting of: a. Long Link; b. Laham; c. Long Bagun; d. Long Pahangai; and e. Long Apari. Mahulu has a geographical position at 113°48'49" to 115°42'43" East Longitude and between 1°31'05" North Latitude and 0°9'33" South Latitude. The area is approximately 1,846,115.11 (one million eight hundred forty six thousand one hundred fifteen eleven) hectares (PROKOPIM MAHULU, 2022). The planning area refers to regional boundaries with border districts. has territorial boundaries:

- 1) To the north is Sarawak, East Malaysia, and Malinau Regency, North Kalimantan Province;
- 2) To the south with West Kutai Regency, East Kalimantan Province, and Murung Raya Regency and North Barito Regency in Central Kalimantan Province;
- 3) To the west is Kapuas Hulu Regency, West Kalimantan Province; And
- 4) To the east is Kutai Kartanegara, East Kalimantan Province.

If the area follows the Mahakam river, the water source flows from upstream to downstream, originating from Mahulu. With remote geographic conditions, low transportation access, and basic community service facilities that are still very minimal. Dependence of the socio-economic conditions of the community on the existence of the Mahakam river flow as water transportation infrastructure. The Mahakam River is 920 km long from the mouth of the Mahakam river to the upstream of the Mahakam river in Mahakam Ulu Regency.

Mahakam Ulu has fisheries potential in the field of capture fisheries in public waters and aquaculture, as follows in table 1 and table 2.

Table 1. Capture fisheries production data by city & district in East Kalimantan Province in 2021

No	City / Regency	Fishery Volume (Tons)	Fisheries Volume (Tons)
1	Samarinda	16.599	563.943.603
2	Balikpapan	5.013	133.796
3	Bontang	22.072	1.051.317.823
4	Paser	11.471	1.869.253
5	Kutai Barat	1.583	35.778.628
6	Kutai Kartanegara	80.925	2.579.069.306
7	Kutai Timur	6.262	178.221.086
8	Berau	23.430	552.704.664
9	Penajam Paser Utara	6.575	211.702.894
10	Mahakam Ulu	66	8.756.639
Σ	East Kalimantan Province	173.996	5.502.216.301

Source: East Kalimantan Province Maritime and Fisheries Service (2022)

Table 2. Data on aquaculture production by city & district in East Kalimantan Province in 2021

No	City / Regency	Fishery Volume (Tons)	Fisheries Volume (Tons)
1	Samarinda	737	15.926.000
2	Balikpapan	486	8.348.361
3	Bontang	4.414	17.526.323
4	Paser	14.011	382.302.612
5	Kutai Barat	2.177	68.372.858
6	Kutai Kartanegara	126.139	4.046.596.473
7	Kutai Timur	916	30.991.587
8	Berau	2.380	186.308.180
9	Penajam Paser Utara	8.976	66.938.575
10	Mahakam Ulu	3	192.695
Σ	East Kalimantan Province	160.240	4.823.503.644

Source: East Kalimantan Province Maritime and Fisheries Service (2022)

The data in table 1 shows the total capture fisheries production of 66 tonnes with a value of Rp. 8,756,639 and table 2 displays data on the total production of aquaculture, the production of which is 3 tonnes with a value of Rp. 192,695.

Data on capture and aquaculture production in Mahulu shows the lowest production value compared to other city districts in East Kalimantan. The value of fisheries production definitely has a role for the government in the fisheries sector. Law Number 06 of 2006 concerning agricultural, fisheries and forestry extension systems states that sustainable development is a necessity that must be fulfilled. To realize the implementation of counseling in the fields of agriculture, fisheries and forestry, it is required by the government (State Secretariat of the Republic of Indonesia, Bureau of Legislative Regulations in the Economic and Industrial Sector, 2006). According to Presidential Decree number 154 of 2014 concerning the institution of agricultural, fisheries and forestry extension, it is called extension, which is a learning process for the main actors and fisheries business actors.

Mahulu has fisheries instructors, the instructors carry out extension activities based on objectives that have been prepared from the results of identifying regional potential and problems faced by fisheries actors, looking at the low production data produced. This is what

encourages researchers to see that the effectiveness of the role of instructors can be seen from the performance element, so in this case the author is interested in researching the satisfaction of fisheries business actors with the performance of instructors in Mahakam Ulu Regency.

METHODS

The research location was carried out in Mahakam Ulu Regency, this research was conducted for 5 months starting from August to December 2022. This research used a qualitative descriptive research design. According to Nawawi (2019), the description method describes the current state of an object based on visible facts or as they really are. The research location was chosen purposively (Sugiyono, 2016). Purposive sampling is also called judgmental sampling, namely sampling based on the researcher's "judgment" regarding who is appropriate (meets the requirements) to be used as a sample. So in order not to be too subjective, the researcher must have certain background knowledge regarding the sample in question, in order to obtain a sample that is in accordance with the requirements or research objectives (accurate data). The research location was carried out in Mahulu.

Data analysis uses the interest analysis method and the Fisheries Satisfaction Index, using a measurement scale:

$$P = \frac{R}{b}$$

The assumption explains that respondents choose a score of 1 (not important/not good) and the largest value is a score of 5 (very important/very good), so the interval or interval between measurement scales is produced as follows:

$$P = \left(\frac{(5, 25) - (1, 23)}{5} \right) = \left(\frac{(115) - (23)}{5} \right) = 18,4 = 18$$

The calculation of the score for the level of importance and level of performance is as follows:

Table 3. Importance Score Range

No	Level of Importance	Score
1	Not important	23 – 40
2	Less Important	41 – 58
3	Quite Important	59 – 76
4	Important	77 – 94
5	Very important	95 – 115

Tabel 4. Performance Level Score Range

No	Performance/Satisfaction Level	Score
1	Not good/dissatisfied	23 – 40
2	Not good/not satisfied	41 – 58
3	Good enough/quite satisfied	59 – 76
4	Good/satisfied	77 – 94
5	Very good/very satisfied	95 – 115

Measurement of the level of importance and level of performance is carried out using a 1-5 Likert scale as in tables 3 and 4 above. To determine the average score for the level of importance and level of performance, use the following formula:

$$X = \frac{\sum Xi}{n} \qquad Y = \frac{\sum Yi}{n}$$

Information:

X = average score of performance level

Y = average score of importance level

n = number of respondents

The results of the assessment of the level of importance and level of performance will produce a calculation of the level of suitability between interest and performance. This suitability will determine the priority of increasing factors that influence the satisfaction of fisheries actors which will be calculated using a formula:

$$T_k = \frac{X_i}{Y_i} \times 100\%$$

Information:

T_k = Conformity Level

X_i = Performance Level

Y_i = Level of Importance

The satisfaction level analysis method is used to see the extent to which fisheries actors are satisfied with the performance of instructors.

RESULT

Characteristics of Mahakam Ulu

Demographically and geographically, Mahulu is a new autonomous region (DOB) with a forest area of more than 85% of the district area which was legalized in 2012 and has 5 sub-districts and 50 villages/villages with a population of 35,010 people (BPS Kaltim, 2021). The area is ±15,315 km² (Law No.2 of 2013).

The distance to access the research location to Mahakam Ulu using boat transportation takes 55 hours from the provincial capital (Samarinda) to the capital Mahakam Ulu, but the reverse journey from Mahulu to Samarinda City takes 28 hours using the same transportation, this is due to reverse flow. is in harmony with the flow of the Mahakam river from upstream to downstream so that the journey does not go against the flow of Mahakam river water as when going upstream of the Mahakam river.

Mahulu is located in the northern border region of Kalimantan which borders directly to the north with the country of East Malaysia (Sarawak). Mahulu was formed as a solution to optimize public services in order to realize community welfare as well as strengthen regional competitiveness and strengthen the integrity of the unitary state of the Republic of Indonesia (NKRI) in border areas with neighboring countries. The geographical conditions are remote, transportation access is low, and basic community service facilities are still very minimal. This district was formed as a result of the expansion of Kab. West Kutai. With regional expansion, it is hoped that it will be able to advance the border areas, especially Mahakam Ulu. Like the government program which plans to build from the outskirts so that the facilities and infrastructure can be used by the Indonesian people, especially for border communities.

The Mahakam Ulu community numbers 35,010 people, divided into five sub-districts. Data details can be seen in table 5 below:

Table 5. Mahakam Ulu Population Data by District

No	Subdistrict	Number of People (People)
1	Laham	2.749
2	Long Hubung	8.604
3	Long Bagun	14.462
4	Long Pahangai	4.978
5	Long Apari	4.217
Amount		35.010

Source: Central Statistics Agency of East Kalimantan Province, (2021)

Fishing business actors

Cultivation business actors in Mahulu have a fish rearing and hatchery business for the sangkuriang catfish (*Clarias gariepinus*) commodity which is carried out with an investment value of IDR 31,083,000, this is obtained from information on respondent data which can be seen in table 6, below:

Table 6. Investment Value of Sangkuriang catfish hatchery cultivation

No	Description	Amount	Unit price (Rp)	Total Fees (Rp)	Technical Age (Bulan)	Residual Value (Rp/%)
1	4x8 Brood Pond	2	10.000.000	20.000.000	180	2.000.000
2	1x5 Brood Pond	2	3.000.000	6.000.000	180	300.000
3	Tarpaulin Pool	4	250.000	1.000.000	12	100.000
4	Oxygen tube	1	2.150.000	2.150.000	120	215.000
5	Water pump	1	650.000	650.000	48	65.000
6	Sorting Tub	15	55.000	825.000	36	82.500
7	Bucket	6	40.000	240.000	36	24.000
8	Drain	2	25.000	50.000	36	5000
9	Paranet	24 m	7.000	168.000	24	16.800
Total				31.083.000		

Source: Processed Primary Data, (2022)

Mahulu Fisheries Potential

Fisheries resources can be an important component for the fisheries production sector with high economic value (fitriyana, 2020). Mahulu fisheries potential with fishery commodity resources, namely Haruan (*Channa striata*), Patin (*Pangasius Sp*), Tilapia (*Oreochromis niloticus*), Sangkuriang catfish (*Clarias gariepinus*), Siamese Sepat (*Trichogaster pectoralis*), Biawan (*Helostoma temminckii*), Kendia (*Barbonymus gonionotus*), Repang (*Ostheocillus repang*), Baung (*Mystus nemurus*), Ompok (*Ompok hypophthalmus*). Institutionally, fisheries businesses in Mahulu have businesses formed in joint business groups (KUB) which are built at the sub-district level in Mahakam Ulu Regency, including in table 7 below:

Table 7. Name of the Joint Business group in Mahakam Ulu

No	Name of Joint Business Group (KUB)
1	Batu Baliu 1
2	Batu Baliu 2
3	Batu Baliu 2
4	Musang Biliung

Source: Food Security and Agriculture of Mahulu Regency, (2022)

Level of importance and performance

Table 8. Level of satisfaction of fisheries actors

No	Attribute	Importance Score	Average Importance Score	Performance Score	Average Performance Score	Gap
1	Extension program	95	4.13	66	2.87	1.26
2	Counselors carry out outreach	95	4.13	85	3.70	0.43
3	Extension officers provide counseling about fisheries business development	94	4.09	56	2.43	1.65
4	The instructor teaches about group institutions	82	3.57	54	2.35	1.22
5	The instructor carries out discussion activities	89	3.87	51	2.22	1.65
6	The instructor carries out field meetings	92	4.00	47	2.04	1.96
7	Extension agents intervene in fisheries problems	96	4.17	104	4.52	-0.35
8	Extension officers carry out a learning process through pilot fisheries businesses	96	4.17	23	1.00	3.17
9	The instructor teaches about entrepreneurship	85	3.70	51	2.22	1.48
10	Counselors teach about leadership	81	3.52	55	2.39	1.13
11	Extension agents implement other extension methods	86	3.74	30	1.30	2.43
12	Extension agents facilitate information services	90	3.91	56	2.43	1.48
13	Extension agents facilitate	90	3.91	67	2.91	1.00

	consultation services					
14	Extension agents provide education and training	90	3.91	34	1.48	2.43
15	The instructor provides reading materials	81	3.52	56	2.43	1.09
16	The instructor provides loudspeakers	72	3.13	50	2.17	0.96
17	The instructor provides videos	83	3.61	54	2.35	1.26
18	Extension workers provide food and drinks	84	3.65	102	4.43	-0.78
Total		1.581	68.74	1.041	45.26	23.4
Average		87.83	3.82	57,83	2.51	1.30

The results in table 8 above show that the level of interest of fisheries business groups in Mahakam Ulu has a value of 3.82, namely the respondent's score on the important extension attributes to be implemented has an average score for the performance of fisheries instructors of 2.51.

Satisfaction Level

The results of the analysis of the level of satisfaction with the level criteria are a. 0.81-1.00 = very satisfied, b. 0.66-0.80 = satisfied, c. 0.51-0.65 = quite satisfied, d. 0.35-0.50 = less satisfied and e. 0.00-0.34 = very dissatisfied, the following satisfaction index by fisheries actors can be seen in table 9 below:

Table 9. Index of satisfaction level of fisheries actors with the performance of instructors

No	Importance Score	Average Importance Score	Number of importance weightings (%)	Satisfaction Score	Average satisfaction score	Satisfaction weighting amount
1	95	4,13	6,01	66	2,87	0,17
2	95	4,13	6,01	85	3,70	0,22
3	94	4,09	5,95	56	2,43	0,14
4	82	3,57	5,19	54	2,35	0,12
5	89	3,87	5,63	51	2,22	0,12
6	92	4,00	5,82	47	2,04	0,12
7	96	4,17	6,07	104	4,52	0,27
8	96	4,17	6,07	23	1,00	0,06
9	85	3,70	5,38	51	2,22	0,12
10	81	3,52	5,12	55	2,39	0,12
11	86	3,91	5,44	30	1,30	0,07
12	90	3,91	5,69	56	2,43	0,14
13	90	3,91	5,69	67	2,91	0,17

14	90	3,91	5,69	34	1,48	0,08
15	81	3,52	5,12	56	2,43	0,12
16	72	3,13	4,55	50	2,17	0,10
17	83	3,61	5,25	54	2,35	0,12
18	84	3,65	5,31	102	4,43	0,24
	1581	68,74	100	1041	45,26	
Amount		weighting				2,50
Index		satisfaction				50%

The level of satisfaction of fisheries actors with the performance of instructors in Mahulu is based on respondents' perceptions of 50%, which is included in the criteria of dissatisfaction, which means that fisheries instructors in Mahakam Ulu still need to improve their performance to match the expectations/needs of fisheries actors.

The level of suitability of the comparison of performance with importance in percent, namely based on the priority order of performance of fisheries instructors in Mahulu, can be implemented based on the level of suitability of the performance that has been implemented, where the attribute that has the lowest level of suitability means the instructor needs to improve his performance services, the following results of the suitability level can be seen in the table 10 below:

Table 10. The level of compatibility between the interests and performance of fisheries instructors

No	Importance Score	Performance Score	Conformity Level (%)	Priority
1	95	66	69,47	14
2	95	85	89,47	16
3	94	56	59,57	6
4	82	54	65,85	10
5	89	51	57,30	5
6	92	47	51,09	4
7	96	104	108,33	17
8	96	23	23,96	1
9	85	51	60,00	7
10	81	55	67,90	11
11	86	30	34,88	2
12	90	56	62,22	8
13	90	67	74,44	15
14	90	34	37,78	3
15	81	56	69,14	12
16	72	50	69,44	13
17	83	54	65,06	9
18	84	102	121,43	18
Total	1581			
Average	87,83			

DISCUSSION

Mahakam Ulu Regency or what is often referred to as Mahulu administratively has a population of 35,010 people spread across five sub-districts, namely Laham District, Long Hubung District, Long Bagun District, Long Pahangai District, and Long Apari District. Most

of the people in Mahulu work as fisheries business actors, namely fishermen and cultivators, one of which is as a business actor in growing and hatching sangkuriang catfish (*Clarias Gariepinus*) with an investment cost of Rp. 31,083,000, the cultivation and breeding business carried out by Mahulu residents received training in West Java, and was successfully bred and generated income from the sale of the Sangkuriang catfish commodity which was marketed in Mahulu. The level of harvest success is very dependent on seasonal and weather conditions. This is further strengthened by the research of Handoko, et al (2022) that people who earn their livelihood as fishermen rely on nature and this is the same as the opinion of fishermen who make fishing based on seasonal and weather conditions. The catch/production carried out by fishermen has 2 conditions which are due to seasonal and weather conditions.

The level of satisfaction of fisheries business actors towards fisheries instructors as seen in table 8 shows an average score of importance and performance of 3.82 and 2.51, with an average difference (Gap) of 1.30, in other words, fisheries instructors still need to carry out counseling. in accordance with the expected needs of fisheries actors. Where this is further strengthened in the research of Nurmalia, et al (2013), basically the performance or presence of instructors in fisheries business areas is able to help advance existing businesses, starting from the assistance expected by business actors and assisting in resolving problems faced in their business.

In realizing an advanced and prosperous fisheries business, instructors still experience several obstacles, such as limited access to work areas due to infrastructure conditions, instructors' staff is very limited in large locations, fisheries instructors consider government policies to be good enough, but there are several things that still need attention, including government assistance is not evenly distributed, the synergy between instructors and other agencies through communication so that it can run well, fisheries instructors consider the participation of fisheries actors in extension activities to be quite good, although there are still some who are not active due to external and internal factors including natural conditions. Safrida, et al (2015) stated that the lack of fisheries instructors can cause problems, including many areas that have not been reached and the presence of fisheries instructors is really needed as mediators, motivators and facilitators as an effort to create advanced and prosperous fisheries business actors.

CONCLUSSION

Based on the results of the satisfaction level index calculation carried out in Mahakam Ulu Regency, it was obtained that the satisfaction weighting amount was 2.50. It can be concluded that the satisfaction of business actors with the performance of extension agents is classified as less than satisfactory. In the process of improving the performance of fisheries instructors, namely prioritizing attributes that have the lowest level of suitability for performance, and the obstacles faced by fisheries instructors in carrying out extension in Mahakam Ulu Regency are location access, instructors, facilities and infrastructure, government policy and participation.

ACKNOWLEDGEMENT

The author would like to express his thanks to the East Kalimantan Province Maritime and Fisheries Service and all related parties for all the information provided to enrich the substance of this research.

REFERENCES

- Badan Pusat Statistik Provinsi Kalimantan Timur. 2021. *Provinsi Kalimantan Timur Dalam Angka 2021*. Samarinda
- Fitriyana, F. (2020, December). Komoditi Perikanan Nelayan Tangkap pada Era New Normal di Kota Bontang Provinsi Kalimantan Timur. In *Prosiding Seminar Nasional Tahun 2020*. <https://journal.polbangtanyoma.ac.id/index.php/pros2020yoma/article/view/480>
- Handoko, D. K. D., Fitriyana, F., & Susilo, H. (2022). Karakteristik Sosial Ekonomi Hubungan Patron Klien Pada Masyarakat Nelayan Purse Seine Di Kelurahan Berbas Pantai Kecamatan Bontang Selatan Kota Bontang. *Jurnal Perikanan Unram*, 12(3), 408-417. <https://www.jp perairan.unram.ac.id/index.php/JP/article/view/347>
- Humas Pemerintah Kabupaten Kutai Kartanegara, 2018. *Data Humas Pemerintah Kabupaten Kutai Kartanegara*. Tenggarong.
- Mulyadi, 2011. *Teknologi Pengolahan Ikan Gabus*. Fakultas Teknologi Pertanian Universitas Brawijaya Malang. Malang.
- Nawawi, H.H. 2019. *Metode Penelitian Bidang Sosial*. UGM Pers. Yogyakarta
- Nurmalia, N., Leilani, A., & Zaidy, A. B. (2013). Persepsi Pelaku Usaha Perikanan Terhadap Kinerja Penyuluh Perikanan. *Jurnal Penyuluhan Perikanan dan Kelautan*, 7(1), 16-25. <https://jppik.id/index.php/jppik/article/view/35>
- Prokopim Mahulu. (2022) *profil kondisi geografis Mahakam ulu 2022*. Protokol dan Komunikasi Pimpinan Mahakam ulu Indonesia.
- Safrida, S., Makmur, T., & Fachri, H. (2015). Peran penyuluh perikanan dalam pengembangan sektor perikanan di Kabupaten Aceh Utara. *Jurnal Agrisep*, 16(2), 17-27. <https://jurnal.usk.ac.id/agrisep/article/view/3042>
- Sekretariat Negara Republik Indonesia Biro Peraturan Perundang-undangan Bidang Perekonomian dan Industri. 2006. *Undang-undang Republik Indonesia Nomor 16 Tahun 2006 tentang Sistem Penyuluhan Pertanian, Perikanan dan Kehutanan*. Lembaga Negara Republik Indonesia. Jakarta.
- Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. CV. Alfabeta. Bandung.
- UU No. 2 Tahun 2013 tentang Pembentukan Kabupaten Mahakam Ulu di Provinsi Kalimantan Timur.