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ANALYSIS OF THE ROLE OF FISHERIES EXTENSION WORKERS IN IMPROVING THE KNOWLEDGE AND SKILLS OF FISH FARMERS

Analisis Peran Penyuluh Perikanan dalam Upaya Peningkatan Pengetahuan dan Keterampilan Pembudidaya Ikan

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ABSTRACT

This study aims to analyze the role of fisheries extension workers in improving the knowledge and skills of fish farmers in North Sumedang District. The research focuses on two main aspects: an analysis of the extension workers' roles and an assessment of the farmers' levels of knowledge, motivation, and skills. A case study approach with descriptive analysis was employed. Data were collected through interviews and observations using questionnaires distributed to 30 respondents who had previously participated in extension activities. The results show that fisheries extension workers carried out five key roles—motivator, facilitator, mediator, organizer, and communicator—optimally, with a cumulative score of 3,207, categorized as highly significant. On the other hand, the farmers' knowledge (78.86%) and skills (78.66%) were categorized as good, while their motivation reached the very good category (85%). These findings indicate that the role of fisheries extension workers is highly strategic in strengthening the technical capacity and work spirit of fish farmers, as well as contributing to the success of sustainable fisheries empowerment programs.

Keywords: North Sumedang District, Skills, Motivation, Fish Farmers, Knowledge, Fisheries Extension Workers

ABSTRAK

Penelitian ini bertujuan untuk menganalisis peran penyuluh perikanan dalam peningkatan pengetahuan dan keterampilan pembudidaya ikan di Kecamatan Sumedang Utara. Fokus utama penelitian mencakup dua aspek, yaitu analisis terhadap peran penyuluh serta analisis tingkat pengetahuan, motivasi, dan keterampilan pembudidaya. Pendekatan yang digunakan adalah studi kasus dengan metode analisis deskriptif. Data dikumpulkan melalui wawancara dan observasi menggunakan kuesioner yang disebarkan kepada 30 responden yang pernah mengikuti kegiatan penyuluhan. Hasil penelitian menunjukkan bahwa penyuluh perikanan menjalankan lima dimensi peran motivator, fasilitator, mediator, organisator, dan komunikator

secara optimal, dengan skor kumulatif mencapai 3.207 dan termasuk kategori sangat berperan. Di sisi lain, tingkat pengetahuan (78,86%) dan keterampilan (78,66%) pembudidaya berada dalam kategori baik, sementara motivasi mereka mencapai kategori sangat baik (85%). Temuan ini mengindikasikan bahwa peran penyuluh sangat strategis dalam memperkuat kapasitas teknis dan semangat kerja pembudidaya, serta berkontribusi terhadap keberhasilan program pemberdayaan sektor perikanan secara berkelanjutan.

Kata Kunci: Kecamatan Sumedang Utara, Keterampilan, Motivasi, Pembudidaya Ikan, Pengetahuan, Penyuluh Perikanan

INTRODUCTION

Sumedang Regency is part of the Bandung Basin national strategic area, which plays a crucial role in national development, particularly in the economic, environmental, socio-cultural, and scientific sectors. One of the leading sectors in this region is fisheries, both aquaculture and capture fisheries. Despite its significant potential, annual fish production in Sumedang only reaches around 9,800 tons, far below the consumption demand of 19,000–21,000 tons per year, resulting in a supply deficit (Sumedang Regency Fisheries and Livestock Service, 2022).

North Sumedang District is the second-largest contributor to fish production in the regency, producing 640,645 kg per year, and is also the location of a pilot fish feed production program. This program is expected to increase efficiency through the availability of affordable and easily accessible feed (Statistics, 2022).

Increasing the capacity of fish farmers depends heavily on the effectiveness of fisheries extension activities. According to Rosiah et al., 2018, mastery of knowledge, attitudes, and technical skills is key to a farmer's success, with extension workers acting as organizers, facilitators, mediators, and communicators (Ananda & Purnamasari, 2023).

However, challenges arise from the dominance of novice groups, which account for 70.09% of the 397 farmer groups in Sumedang (Distannakan, 2016). In North Sumedang District, as of January 2025, there were five groups in North Sumedang District, and only three are still active. According to Rosiah et al., (2018), the effectiveness of extension services for novice groups tends to be low. Pangaribuan (2016) revealed that the effectiveness of extension services is often hampered by administrative burdens and performance demands. Meanwhile, Maulana et al., 2019 added that economic dynamics and globalization also influence the quality of extension implementation. With only 4,489 fisheries extension workers in Indonesia (Ministry of Maritime Affairs and Fisheries, 2022), most work independently and cover more than one area.

In North Sumedang, this situation makes the role of extension workers crucial, but not all extension programs are effective. Some farmers even show resistance to extension workers, resulting in low adoption of innovations. This is in line with Safrida et al., (2015) assertion that the success of extension services is determined not only by the competence of extension workers but also by active community involvement.

Based on this background, this study aims to analyze the role of fisheries extension workers in improving the knowledge and skills of farmers in North Sumedang District.

RESEARCH METHODS

Place and Time

This research was conducted in May 2025 in 3 groups of fish farmers in North Sumedang District, Sumedang Regency.

Research methods

This research uses a case study method, according to Sugiyono (2016) the case study technique is an approach where researchers conduct in-depth exploration of programs, phenomena, processes or activities involving individuals or groups.

Data collection

The research was conducted using a purposive sampling method, selecting groups of fish farmers who had previously participated in extension activities in North Sumedang District. The research data were obtained in the form of primary and secondary data. Primary data were obtained through interviews and direct observations with 30 fish farmers in the existing fish farmer groups. This data was collected using a pre-prepared questionnaire. Secondary data were obtained from relevant agencies or institutions.

Data Analysis

This study employed descriptive analysis as the data analysis method. Descriptive analysis aims to explain the characteristics of the variables studied, specifically to provide an overview of fish farmers' perspectives on the role of fisheries extension workers in improving their knowledge and skills.

Data obtained through observation and interviews were then collected and categorized into specific patterns, and relevant data were then selected for analysis. Finally, conclusions were drawn to ensure they were understandable not only to the researcher but also to others.

This study employed a Likert scale, a type of questionnaire used to elicit respondents' attitudes through answers that each reflect the positive or negative nature of the item (Sudrajat, 2001). Scores were assigned to each indicator from 1 to 5.

1 : Strongly disagree
2 : Don't agree
3 : Hesitant
4 : Agree
5 : Strongly agree

1. Analysis of the Role of Extension Workers

To determine the interval of each category, calculations are carried out using the formula proposed by Barus Sudjana (2017):

$$\text{Length of class interval} = \frac{(R\ x\ Skti\ x\ P) - (R\ x\ Sktr\ x\ P)}{Number\ of\ categories}$$

Information:
R = Number of respondents
Skti = Highest score
Sktr = Lowest score
P = Lots of questions

Class interval calculations are used to categorize the role of fisheries extension workers (table 1) in North Sumedang District.

Table 1. Categories of Fisheries Extension Worker Roles

No	Indicator	Number of Items	Score	Criteria
1	Extension workers as motivators	5	150 - 270	Very Insignificant
			271 - 390	Doesn't Play a Role
			391 - 510	Normal
			511 - 630	Berperan
			631 - 750	Sangat Berperan
2	Extension Worker as Facilitator	5	150 - 270	Very Insignificant
			271 - 390	Doesn't Play a Role
			391 - 510	Normal
			511 - 630	Playing a role
			631 - 750	Very Important
3	Extension Worker as Mediator	5	150 - 270	Very Insignificant
			271 - 390	Doesn't Play a Role
			391 - 510	Normal
			511 - 630	Playing a role
			631 - 750	Very Important
4	Extension workers as organizers	5	150 - 270	Very Insignificant
			271 - 390	Doesn't Play a Role
			391 - 510	Normal
			511 - 630	Playing a role
			631 - 750	Very Important
5	Extension Workers as Communicators	5	150 - 270	Very Insignificant
			271 - 390	Doesn't Play a Role
			391 - 510	Normal
			511 - 630	Playing a role
			631 - 750	Very Important
	Total	25	750 – 1.350	Very Insignificant
			1.351 – 1.950	Doesn't Play a Role
			1.951 – 2.550	Normal
			2.551 - 3.150	Playing a role
			3.151 – 3.750	Very Important

2. Analysis of Knowledge, Motivation and Skill Levels of Fish Farmers

To determine the level of respondents' perceptions or knowledge and skills, whether they are classified as very low, low, medium, high, or very high, the analysis process begins by determining the highest and lowest ideal scores, then calculating the class interval length using Riduwan's (2022) formula.

Maximum Index Value = Highest Score x Number of Questions x Number of Samples
Minimum Index Value = Lowest Score x Number of Questions x Number of Samples
Interval Distance = (Maximum Value – Minimum Value): 5
Percentage Score = (Total score: Maximum value) x 100

Table 2. Level of Knowledge and Skills of Fish Farmers

No	Category	Number of Items	Score	Criteria
1	Knowledge	10	0% - 20% 21% - 40% 41% - 60% 61% - 80% 81% - 100%	Very bad Bad Enough Good Very Good
2	Motivation	10	0% - 20% 21% - 40% 41% - 60% 61% - 80% 81% - 100%	Very bad Bad Enough Good Very Good
3	Skills	10	0% - 20% 21% - 40% 41% - 60% 61% - 80% 81% - 100%	Very bad Bad Enough Good Very Good

RESULT

The Role of Extension Workers

1. Motivator

Based on the data analysis, a total score of 635 was obtained for the role of extension workers as motivators. This score was then compared with the established assessment category intervals (table).

Table 3: Class Intervals for the Role of Fisheries Extension Workers as Motivators

No	Interval	Categori	Score	Information
1	150 - 270	Very Insignificant		
2	271 - 390	Doesn't Play a Role		
3	391 – 510	Normal	635	Very Important
4	511 - 630	Playing a role		
5	631 - 750	Very Important		

Source: Primary Data processed 2025

2. Facilitator

Based on the data processing results, a score of 644 was obtained for the role of extension workers as facilitators. This score falls into the Very Influential category, corresponding to the 631–750 range.

Table 4. Class Interval of the Role of Fisheries Extension Workers as Facilitators

No	Interval	Categori	Score	Information
1	150 - 270	Very Insignificant		
2	271 - 390	Doesn't Play a Role		
3	391 – 510	Normal	644	Very Important
4	511 - 630	Playing a role		
5	631 - 750	Very Important		

Source: Primary Data processed 2025

3. Mediator

The analysis of the role of extension workers as mediators yielded a score of 673. This score was compared with the predetermined assessment categories, as shown in the following table.

Table 5: Class Intervals for the Role of Fisheries Extension Workers as Mediators

No	Interval	Categori	Score	Information
1	150 - 270	Very Insignificant		
2	271 - 390	Doesn't Play a Role		
3	391 – 510	Normal	673	Very Important
4	511 - 630	Playing a role		
5	631 - 750	Very Important		

Source: Primary Data processed 2025

4. Organizer

The data processing resulted in a total score of 597 for the role of extension workers as organizers. These scores were then categorized into predetermined intervals, as presented in the following table.

Table 6: Class Intervals for the Role of Fisheries Extension Workers as Organizers

No	Interval	Categori	Score	Information
1	150 - 270	Very Insignificant		
2	271 - 390	Doesn't Play a Role		
3	391 – 510	Normal	597	Playing a role
4	511 - 630	Playing a role		
5	631 - 750	Very Important		

Source: Primary Data processed 2025

5. Communicator

The data processing yielded a total score of 658 for the role of extension workers as communicators. These scores were then categorized into predetermined intervals, as presented in the following table.

Table 7: Class Intervals for the Role of Fisheries Extension Workers as Communicators

No	Interval	Categori	Score	Information
1	150 - 270	Very Insignificant		
2	271 - 390	Doesn't Play a Role		
3	391 – 510	Normal	658	Very Important
4	511 - 630	Playing a role		
5	631 - 750	Very Important		

Source: Primary Data processed 2025

6. Cumulative

Based on the recapitulation of scores across all role dimensions, a total score of 3,207 was obtained. This score was then analyzed using the following predetermined interval categories.

Table 8: Cumulative Fisheries Extension Worker Role Class Intervals

No	Interval	Categori	Score	Information
1	750 – 1.350	Very Insignificant		
2	1.351 – 1.950	Doesn't Play a Role		
3	1.951 – 2.550	Normal	3207	Very Important
4	2.551 - 3.150	Playing a role		
5	3.151 – 3.750	Very Important		

Source: Primary Data processed 2025

Level of Knowledge, Motivation and Skills of Fish Farmers

1. Level of Knowledge

The research results revealed that respondents' knowledge level averaged 78.86%. Based on the classification used, this score falls into the "Good" category, falling within the 61% to 80% range.

Table 9: Knowledge Level of Fish Farmers

No	Percentage	Categori	Value	Information
1	0%-20%	Very Bad		
2	21%-40%	Bad		
3	41%-60%	Fair	78,86%	Good
4	61%-80%	Good		
5	81%-100%	Very Good		

Source: Primary Data processed 2025

2. Motivation Level

Data analysis shows that respondents' motivation level averaged 85%. This figure falls into the "Very Good" category according to the assessment classification used (range 81%–100%).

Table 10. Motivation Levels of Fish Farmers

No	Percentage	Categori	Value	Information
1	0%-20%	Very Bad		
2	21%-40%	Bad		
3	41%-60%	Fair	85%	Very Good
4	61%-80%	Good		
5	81%-100%	Very Good		

Source: Primary Data processed 2025

3. Skill Level

Based on data analysis, the average skill level of respondents was recorded at 78.66%. According to the classification range, this score also falls into the "Good" category, which ranges from 61% to 80%.

Table 11: Skill Levels of Fish Farmers

No	Percentage	Categori	Value	Information
1	0%-20%	Very Bad		
2	21%-40%	Bad		
3	41%-60%	Fair	78,66%	Good
4	61%-80%	Good		
5	81%-100%	Very Good		

Source: Primary Data processed 2025

DISCUSSION

The research results show that the role of fisheries extension workers in North Sumedang District plays a significant role as motivators, facilitators, mediators, organizers, and communicators. With a cumulative score of 3,207, extension workers are deemed to have played a significant role, aligning with the local needs of the fish farming community.

As motivators, extension workers not only provide information but also encourage changes in the attitudes and work ethic of fish farmers, as emphasized by Rizqullah (2021), who emphasized that motivational roles are crucial for farmers' success in maintaining productivity. Groups like Meena Mekar also feel the importance of extension workers in maintaining business sustainability, although limited capital remains a barrier to implementing innovations. In their facilitative role, extension workers have proven effective in creating interactive learning spaces, assisting with document processing such as CBIB, CPIB, and NIB, and expanding access to information and markets. This aligns with Marbun *et al.,* (2019) opinion regarding the role of extension workers in building partnerships and accessing quality information. The role of mediator demonstrates the capacity of extension workers to connect farmers with various important stakeholders, including government agencies and cultivation experts. Nurida *et al.,* (2024) emphasized that extension workers acting as mediators can strengthen collaborative relationships, which directly impact group progress. In terms of organizers, even though extension workers are not yet in the highest category, their presence has already been instrumental in uniting farmers, organizing meetings, and developing structured work programs. This aligns with the view of Ananda and Purnamasari (2023), who stated that the role of extension workers in group dynamics is crucial for efficient activities. As communicators, extension workers are able to convey information clearly and openly, and establish effective two-way communication. This is key to building trust and strengthening social relations among farmers (Langit, 2016). A concrete example is the formation of digital communication groups that accelerate the exchange of information among group members.

Overall, these results support the findings of Rachmanzah *et al*., (2014), Fitriadi *et al.,* (2021), and Kurniasih (2023), which stated that the intensity and quality of the role of extension workers significantly determine the success of empowerment programs in the fisheries sector. The collaborative and adaptive approach employed by extension workers has become a key driver of social and economic transformation in the fish farming community in North Sumedang District.

The average score of 78.86% indicates that fish farmers in North Sumedang District have a fairly good grasp of technical knowledge. They understand important principles of aquaculture, such as water quality management, feeding, and disease control. These results support the findings of Sosiawati *et al.*, (2023), who stated that field-based training significantly improves participants' technical understanding. Furthermore, Irawan (2023) emphasized that extension workers who actively provide ongoing consultation and mentoring can accelerate the process of knowledge transfer to farmers. This high level of knowledge reflects the effectiveness of the extension approach applied, including lectures, group discussions, and hands-on practice.

An average score of 85% indicates that the farmers' motivation is at a very good level. Their enthusiasm for participating in extension training, commitment to learning, and desire to improve business conditions indicate a strong intrinsic drive. This motivation is also strengthened by external support from extension workers, farmer groups, and the economic prospects generated by aquaculture activities. Kruijssen *et al.,* (2018) explained that motivation in the fisheries sector is strongly influenced by market incentives, access to technology, and trust in extension institutions. In this region, the active involvement of extension workers has created a high level of trust and facilitated the development of farmers' enthusiasm to continuously innovate and increase their business capacity.

A skill level score of 78.66% indicates that the majority of respondents are able to implement their knowledge into practice. This technical proficiency is evident in their ability to carry out cultivation procedures independently. This finding aligns with the findings of Baticados (2024), which showed that involvement in field-based training significantly improves the practical skills of fish farmers. However, obstacles such as limited water quality measuring instruments in some groups remain a challenge that must be overcome. Respondents from the Meena Mekar Group revealed that the lack of appropriate equipment leads to doubts in technical decision-making in the field. Therefore, skills improvement must be supported by further training, the provision of infrastructure, and ongoing mentoring from extension workers to ensure the successful implementation of correct cultivation techniques.

CONCLUSION

The results of the study indicate that fisheries extension workers play a crucial role in increasing the capacity of fish farmers. This role is reflected in a cumulative score of 85.52%, which is categorized as Very Influential. Each dimension of the role as motivator, facilitator, mediator, organizer, and communicator is actively implemented and has a positive impact on farmers. The level of knowledge and skills of farmers is categorized as Good with percentages of 78.86% and 78.66%, respectively. Meanwhile, the motivation of farmers is in the Very Good category with a percentage of 85%. The results of this study generally confirm that the presence of extension workers contributes directly to increasing the knowledge, work enthusiasm, and technical skills of farmers in fish farming practices. Thus, the active role of extension workers is proven to be a key factor in the success of strengthening the capacity of farmers, while also supporting the sustainable development of the fisheries sector in the region.

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REFERENCES

Ananda, N. F., & Purnamasari, E. (2023). Peran Penyuluh Perikanan dalam Membina Kelompok Pembudidaya Ikan (Pokdakan) di Kecamatan Balikpapan Timur Kota Balikpapan. *Jurnal Pembangunan Perikanan dan Agribisnis*, *10*(1), 1-15.

Barus, M. A., Sudjana, N., & Sulasmiyati, S. (2017). Penggunaan Rasio Keuangan untuk Mengukur Kinerja Keuangan Perusahaan (Studi pada Pt. Astra Otoparts, Tbk dan Pt. Goodyer Indonesia, Tbk yang Go Public di Bursa Efek Indonesia). *(Doctoral Dissertation,* Brawijaya University).

Baticados, D. B. (2024). Impact of Community-Based Fishery Resource Management on Fishery Resource and Socio-Economic Conditions in The Philippines. *Fisheries Research*, *71*(1), 2-13.

Dinas Perikanan dan Peternakan Kabupaten Sumedang. (2022). Laporan Akhir Penyusunan Kajian Masterplan Kawasan Minapolitan Kabupaten Sumedang.

[Distannakan] Dinas Pertanian Peternakan dan Perikanan Kabupaten Sumedang. (2016). Programa Penyuluhan Perikanan. Halaman 4- 31.

Fitriadi, R, Palupi, M, & Fakhri, S. (2021). Alih Teknologi Budidaya Ikan Lele pada Lahan Gambut di Desa Seponjen, Muaro Jambi. *Jppm (Jurnal Pengabdian dan Pemberdayaan Masyarakat)*, *5(2)*, 205-210.

Irawan, N. C. (2023). Peran Penyuluh dalam Mengembangkan Korporasi Pertanian Terpadu Keluarga dan Mempromosikan Keberlanjutan Melalui Pendidikan, Pelatihan, Konsultasi, dan Bimbingan. *Agriekstensia: Jurnal Penelitian Terapan Bidang Pertanian*, *22(1)*, 14-27.

Kementerian Kelautan Dan Perikanan. (2022). Keputusan Kepala Badan Penyuluhan dan Pengembangan Sumber Daya Manusia Kelautan dan Perikanan Nomor 63 Tahun 2022 Tentang Pedoman Kerja Penyuluh Perikanan, Asisten Penyuluh Perikanan, Penyuluh Perikanan Pegawai Pemerintah dengan Perjanjian Kerja, dan Penyuluh Perikanan Bantu. Jakarta.

Kruijssen, F, Mcdougall, C. L., Van Asseldonk, I. J., & Béné, C. (2018). Gender and Aquaculture Value Chains: A Review of Key Issues and Implications for Research. *Aquaculture, 49*(3), 328–337.

Kurniasih, I. S. (2023). E-Book Dasar-Dasar Penyuluhan dan Komunikasi Pertanian.

Langit, R. A. S. (2016). Penyuluh Sebagai Komunikator Program Keluarga Berencana (Studi Kasus Karakter dan Atribusi Penyuluh Sebagai Komunikator Program Keluarga Berencana di Kabupaten Sukoharjo) (*Doctoral Dissertation*, Uns (Sebelas Maret University)).

Marbun, D. N., Satmoko, S., & Gayatri, S. (2019). Peran Penyuluh Pertanian dalam Pengembangan Kelompok Tani Tanaman Hortikultura di Kecamatan Siborongborong, Kabupaten Tapanuli Utara. *Jurnal Ekonomi Pertanian dan Agribisnis*, *3(3)*, 537-546.

Maulana, M. A., Arifuddin, M., & Indrawati, N. (2019). Hubungan Antara Efektivitas Penyuluhan dengan Produksi Padi di Kecamatan Pattallassang, Kabupaten Takalar. *Jurnal Etika Demokrasi Pendidikan Pancasila dan Kewarganegaraan*, *4*(1), 591–603.

Nurida, N., & Sitorus, R. (2024). Peran Penyuluh Pertanian dalam Pendampingan Petani Milenial. *Jurnal Penyuluhan*, *20(1)*, 84-95.

Pangaribuan, T. R. A. (2016). Mengembangkan Peran Edukasi dan Diseminasi Informasi oleh Penyuluh Perikanan Bagi Masyarakat Nelayan di Kabupaten Serdang Bedagai. *Jurnal Pikom (Penelitian Komunikasi dan Pembangunan)*, *17*(1), 61–75.

Rachmanzah, D., Widigdo, B., & Wardiatno, Y. (2014). Kajian Pelaksanaan Program Pemberdayaan Masyarakat Pesisir Berbasis Pengelolaan Berkelanjutan pada Budidaya Bandeng di Pesisir Kabupaten Karawang. *Jurnal Sosial Ekonomi Kelautan dan Perikanan*, *9(1)*, 13-27.

Riduwan, M. B. A. (2022). Skala Pengukuran Variabel-Variabel Penelitian.

Rizqullah, T. A. M., Susanti, E., & Makmur, T. (2021). Peran Penyuluh Pertanian Lapangan Terhadap Kinerja Kelompok Tani di Kecamatan Sukamakmur Kabupaten Aceh Besar. *Jurnal Ilmiah Mahasiswa Pertanian*, *6(4)*, 358-369.

Rosiah, E., Poernomo, H., & Hasan, I. S. (2018). Analisis Penyuluhan Perikanan Partisipatif dan Kompetensi Pembudidaya Ikan di Kabupaten Sumedang. *Jurnal Penyuluhan Perikanan dan Kelautan*, *12*(1), 47–63.

Safrida, S., Makmur, T., & Fachri, H. (2015). Peran Penyuluh Perikanan dalam Pengembangan Sektor Perikanan di Kabupaten Aceh Utara. *Jurnal Agrisep*, *16(2)*, 17-27.

Sosiawati, E. S. H., Alfakihuddin, M. L. B., Asni, A., & Jayaputra, T. (2023). Pelatihan Budi Daya Ikan Air Tawar pada Masyarakat Guna Mendukung Program Kampung Keren Kota Kediri. *Bubungan Tinggi: Jurnal Pengabdian Masyarakat, 5*(1), 585-595.

Sugiyono. (2016). *Metode Penelitian Kunatitatif Kualitatif dan R&D*. Alfabeta, Bandung.