Egyptian Journal of Aquatic Biology & Fisheries
Zoology Department, Faculty of Science,
Ain Shams University, Cairo, Egypt.
ISSN 1110 – 6131
Vol. 29(2): 219 – 234 (2025)
www.ejabf.journals.ekb.eg

Inland Waters Captured Fisheries in Indonesia: A Case Study of Small-Scale Fishery in Jatigede Reservoir

Izza Mahdiana Apriliani[1,2*], Lantun Paradhita Dewanti[1], Heti Herawati[3], Mochamad C. W. Arief[3], Zahidah[3] and Rachmad Cesario[4]

[1]Laboratory of Fishing Management and Technology, Department of Fisheries, Faculty of Fisheries and Marine Sciences, Universitas Padjadjaran, 45363 Sumedang, West Java, Indonesia
[2]Laboratory of Landscape Ecology, Graduate School of Regional Development and Creativity, Utsunomiya University, 321-8585 Utsunomiya, Tochigi, Japan
[3]Department of Fisheries, Faculty of Fisheries and Marine Sciences, Universitas Padjadjaran, 45363 Sumedang, West Java, Indonesia
[4]Laboratory of Water Productivity, Faculty of Agriculture, University of Lampung, 35141 Bandar Lampung, Lampung, Indonesia
[*]**Corresponding Author: izza.mahdiana@unpad.ac.id**

ARTICLE INFO

Article History:
Received: Oct. 25, 2024
Accepted: Feb. 21, 2025
Online: March 6, 2025

Keywords:
Social typology,
Fishing technique,
Fishing season,
Catch composition

ABSTRACT

Jatigede Reservoir utilization is focused as an infrastructure for capture fisheries. The relatively young age of the reservoir means that there is a lack specific information regarding the development of fishing activities in the Jatigede Reservoir. Therefore, a research to provide a specific picture of capture fisheries activities through aspects of social typology of fishermen, technical fishing operations, fishing seasons, and catch composition in the Jatigede Reservoir is needed. The research was carried out during August-December 2021 by conducting interviews and direct observations in the field. The research results showed that the majority of fishermen in the Jatigede Reservoir are full-time fishermen with gillnet fishing gear, whose ownership status is private, and are native fishermen. Other types of fishing gear used by fishermen include handlines, cast nets, lift nets and traps with fishing activities dominated in the Cimanuk River Basin. The fishing season has an effect on the smaller quantity of catch, with the composition of the catch consisting of the Nile tilapia, mozambique tilapia, freshwater lobster and paray fish. The existing potential must be maintained and monitored so that fishing activities can be carried out sustainably.

INTRODUCTION

All resources found in inland public waters are generally common pool resources and complex in terms of categories and amount of use **(Heikkila, 2004; Endah, 2017)**. One of the various forms of public land waters is a reservoir **(Deswati & Adrison, 2019)**. Reservoirs are formed as water storage containers which are then used as facilities and infrastructure to support community activities **(Randle, 2024)**. Initially, reservoirs was functioned primarily as a source of drinking water, hydroelectric power plant (PLTA),

irrigation and flood prevention. It has developed over time, starting from the use as transportation infrastructure, household needs, tourism, to using water bodies for fishing activities **(Adeniran *et al.*, 2021)**.

Utilization of reservoirs to support fisheries activities is common and has become a source of income, especially for people who live around **(Hidayat *et al.*, 2017; Apriliani *et al.*, 2018)**. Types of fisheries activities that develop in reservoir waters include aquaculture and capture fisheries **(Apriliani *et al.*, 2018; Muthmainnah *et al.*, 2022; Qiu *et al.*, 2024)**. Reservoir utilization as infrastructure for aquaculture specifically use floating net-cage technology. This technology has been widely carried out in many reservoirs such as the Koto Panjang Hydroelectric Power Plant, Saguling Reservoir, Cirata Reservoir, Djuanda Reservoir, Gajah Mungkur Reservoir, and Kedung Ombo Reservoir **(Putri *et al.*, 2019; Suryawan *et al.*, 2019)**. The number of floating net-cages in these reservoirs is increasing rapidly, and even tends to be uncontrolled until it exceeds the reservoir's carrying capacity **(Tribhuwana *et al.*, 2021)**. Ironically, this causes the degradation of the aquatic environment which causes a decrease in the quality of capture fisheries, in which there are high economic fish commodities and ends up hampering the development of capture fisheries activities in it **(Limbong *et al.*, 2023)**.

Jatigede Reservoir is focused on developing capture fisheries activities **(Hardhiawan *et al.*, 2023)**. One of the efforts made by the government to develop capture fisheries activities in the Jatigede Reservoir is through restocking 10,800,600 freshwater fish juvenile in 2016 **(Nurhayati *et al.*, 2020)**. This effort was carried out continuously by stocking 300,000 tilapia in the Jatigede Reservoir in 2017 **(Herawati *et al.*, 2020)**. It is stated in Sumedang Regency Regional Regulation (PERDA) No. 4 of 2018 concerning the Sumedang Regency Regional Spatial Plan for 2018–2038 that the development of capture fisheries facilities and infrastructure is one of the main programs being promoted as one of the government's efforts to support the development of the Jatigede Reservoir tourist area **(Hutajulu *et al.*, 2019)**. This shows the potential that is supported by ongoing efforts to develop fishing activities in the Jatigede Reservoir.

Jatigede Reservoir was constructed by the Sumedang Regency government as the government's strategy to explore the region's potential as to improve the economy and community welfare **(Shaumi *et al.*, 2022; Iskandar *et al.*, 2023)**. This goal was realized through a long process accompanied by various conflicts. The construction was carried out in 35 villages and 5 sub-districts in Sumedang Regency **(Wijayanto *et al.*, 2017)**. Land transfer for the construction was carried out for 22 years in 1982-2004 **(Nurhayati *et al.*, 2020)**. The reservoir construction process began in 2007, and culminated in intensive construction and flooding of the reservoir which was carried out in 2015 **(Wijayanto *et al.*, 2017)**. This development physically submerged 6,738 Ha of land, which resulted in the relocation of 6,642 families or approximately 19,542 people **(Wijayanto *et al.*, 2017)**. The flooding also submerged agricultural land resources as a livelihood for some people living in the area **(Balgah *et al.*, 2023)**.

Residences relocation causes people to adapt to new environments and resources **(Gao & Cheng, 2020)**. Agricultural land being replaced with waters does not automatically cause people to utilize the available resources. Community interest even tends to be minimal due to the lack of community knowledge, expertise and capital in managing water resources **(Nasution *et al.*, 2009)**. These things indicate the reasons for the sub-optimal implementation of capture fisheries activities in the Jatigede Reservoir. Optimizing capture fisheries activities needs to be carried out so that development goals as an effort to improve the economy and community welfare can be achieved.

Understanding the characteristics of resources in one environment is the first step to optimize the potential available in that environment **(Ratnadila, 2018)**. The relatively young age of the Jatigede Reservoir means there is minimal access to more specific information regarding capture fisheries activities in the Jatigede Reservoir. Therefore, the research was focused on describing the conditions of capture fisheries activities in the public waters of the Jatigede Reservoir. The information listed can be considered as a basis for making policies for the sustainability of capture fisheries activities in the Jatigede Reservoir.

MATERIALS AND METHODS

1. Description of the study sites

Research was carried out in the Jatigede Reservoir which consists of five River Basins: Cimanuk, Cialing, Chihonje, Cacaban, Cibayawak, Cimuja, and Cinambo during August–December 2021. The Jatigede Reservoir has an area of ±4,122 ha and has an average depth of 25.8m **(Warsa, 2016)**. Jatigede Reservoir has been designated as a reservoir that can be utilized by the community through capture fisheries activities based on Sumedang Regency Regional Regulation Number 4 of 2018 concerning Sumedang Regency Regional Spatial Plan for 2018-2038. Data collection on capture fisheries activities was carried out by surveying 7 trips around the Jatigede Reservoir during the research period. This trip functions in collecting data on capture fisheries activities carried out throughout the Jatigede Reservoir area (Fig. 1).

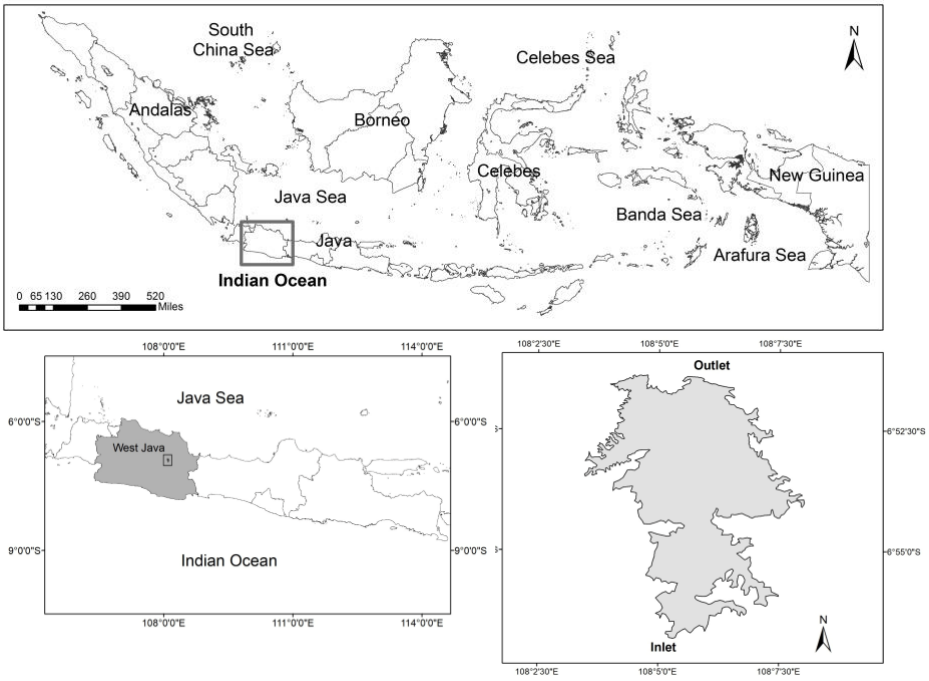

Fig. 1. Research location

2. Method

This research was conducted by using the case study method. According to **Wahyuningsih (2013)**, a case study is a research that explores a particular phenomenon (case) at a certain time and activity (program, event, process, institution or social group) and collects detailed and in-depth information using various data collection procedures over a certain period. The collected data were in the form of primary and secondary data. Primary data were obtained from observations and interviews with fishermen, while secondary data were obtained from relevant data sources in the form of journals, previous research and scientific literature. Respondents were purposively selected with the following criteria: 1. Fishermen who are carrying out fishing activities in the Jatigede Reservoir; 2. Fishermen who are using fishing gear that complies with Government Regulation (PERMEN) for Maritime Affairs and Fisheries No. 18 of 2021. The types and sources of data in this research are shown in detail in Table (1).

Table 1. Data, types of data, and data collection techniques in research

No.	Data	Description	Types of Data	Data collection technique
1.	Social typology of fishermen	Type of fishing gear Fishing gear ownership status Fisherman status Classification of fishermen	Primary	Observations and Interviews
2	Fishing operation	Construction of fishing gear Capture method Capture area	Primary	Observations and Interviews
3.	Catch	Type of catch	Primary and secondary	Observations and

No.	Data	Description	Types of Data	Data collection technique
		Size of catch	Primary	Interviews
		Catch composition	Primary	

3. Data analysis

The obtained data were then analyzed descriptively. The parameters used in the description method are the social typology of fishermen, fishing operations, and catches.

RESULTS

1. Social topology of fishermen

The social typology of fishermen in this study were grouped based on four aspects, namely fishermen status **(Monintja & Yusfiandayani, 2001)**, fishing gear ownership status **(Imron, 2003)**, fishermen classification **(Fargomeli, 2014)**, and fishing gear construction **(Permen KP No. 18 of 2021)**, as described in Table (2). Based on the obtained results, gillnet fishing gear is the most dominant type of fishing gear used by fishermen in Jatigede Reservoir. The status of fishing gear ownership shows that the majority of fishermen use their own fishing gear in fishing activities. Most of the fishermen have the status of full-time fishermen and are classified as native fishermen who live by building small-scale fishing businesses.

Table 2. Social topology of fishermen in Jatigede reservoir

Type of Fishing Gears		
Fishing gear	Amount (People)	Percentage (%)
Gillnet	55	80.8
Fishing rod	7	10.2
Traps	3	4.4
Cast net	2	2.9
Lift net	1	1.4
Ownership Status of Fishing Gear		
Ownership status	Amount (People)	Percentage (%)
Individual	66	97
Laborer	2	3
Fisherman Status		
Status	Amount (People)	Percentage (%)
Ful-time	48	70.5
Status	Amount (People)	Percentage (%)
Main-part time	8	11.7
Extra-part time	12	17.6
Fisherman Classification		
Classification	Amount (People)	Percentage (%)
Native (local)	59	86.8
Recreational	8	11.8
Subsistence	1	1.5
Total	**68**	**100**

Source: direct observation

2. Fishing operation

There are 5 types of fishing gear operating in the Jatigede Reservoir (Table 2), namely gillnet, handlines, trap, castnet and liftnet. The description of fishing operations in the Jatigede Reservoir is described through three aspects, namely fishing gear construction **(Permen KP No. 18 of 2021)**, fishing methods, and fishing areas **(Montgomerie, 2022)**. An explanation of fishing gear in the Jatigede Reservoir is provided in detail below.

The construction of gillnet fishing gear (Fig. 2) used by fishermen in Jatigede Reservoir has been modified. Gillnet used by fishermen in Jatigede Reservoir doesn't have buoy ropes, bottom ropes, weight ropes and peluntang ropes. This gear is operated by one day fishing system. The average number of trips made is 24 trips per month. Gillnet setting is carried out between 05.00-08.00 am, 12.00-02.00 pm , or 03.00-05.00 pm , while gillnet hauling is carried out between 10.00 am, 03.00 pm, or 06.00 pm. This gear is dominant in the Cimanuk River Watershed. Its use is also seen in the Cialing, Cimuja and Cacaban watersheds (Fig. 7a).

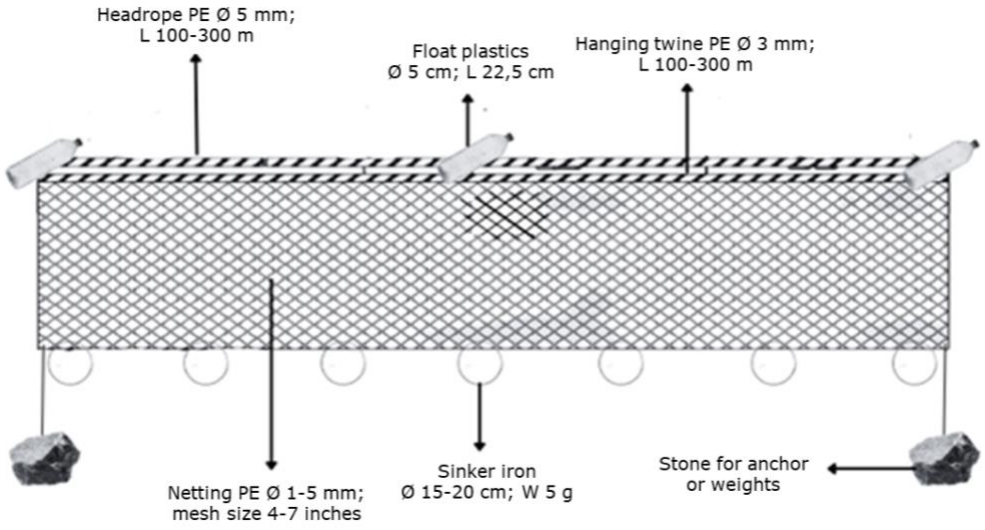

Fig. 2. Construction and specifications of gillnets operated in Jatigede Reservoir

Fishermen in Jatigede Reservoir use fishing rod as recreational fishing. The construction of the fishing rod fishing equipment used consists of a reel, rod, fishing line, hook, weight and float. The construction and specifications of the fishing rod fishing equipment are shown in Fig. (3). Fishing rod operation is usually performed by fishermen between 06.00-12.00 am, while the hauling process is carried out periodically according to the bait taken by fish. Fishing rod fishing activities come to end from 16.00 pm to sunset. The fishing points for fishing rod is shown in Fig. (7b).

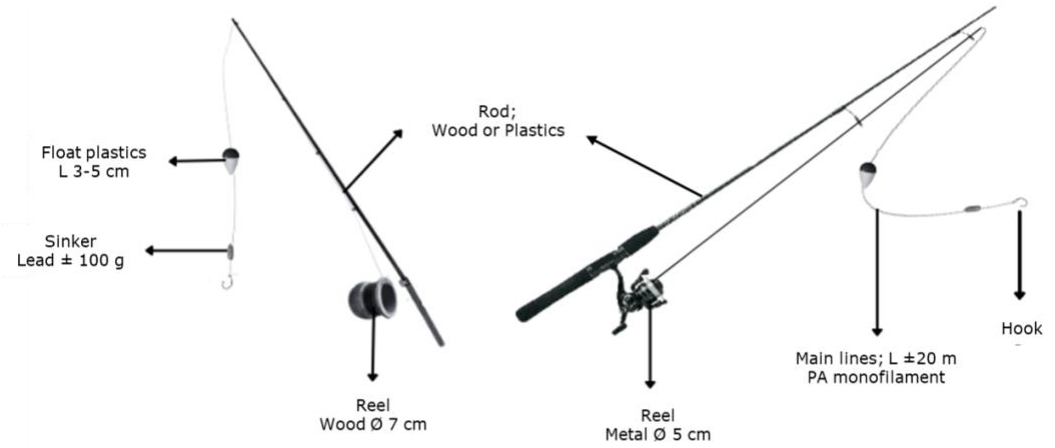

Fig. 3. Construction and specifications of fishing rod operated in Jatigede Reservoir

Trap is a passive fishing gear which is set in the waters until the catch target is trapped inside **(Jayanto *et al.*, 2018)**. The construction of traps used by fishermen in Jatigede Reservoir consists of a frame, funnel, body, weights and buoy. The construction and specifications of traps are shown in Fig. (4). Trap is operated by fishermen in one day fishing trip. The setting of trap is done between 06.00 am, 09.00 am, or 15.00 pm. Hauling is carried out between 06.00 am, 16.00 pm, or 18.00 pm. The fishing points for trap fishing gears are found in the Cacaban, Cinambo and Cibayawak River Basins (Fig. 7c).

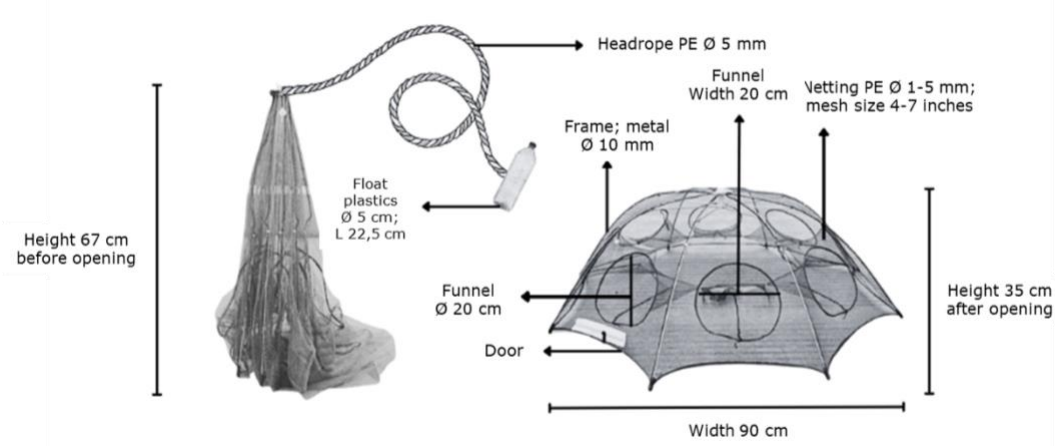

Fig. 4. Construction and specifications of traps operated in Jatigede Reservoir

Cast nets are operated by throwing the net to fall flat upon the water's surface **(Ajay & Krishnan, 2021)**. The construction of the cast nets used by fishermen in the Jatigede Reservoir consists of a main rope, body and weights. Cast net fishermen in Jatigede Reservoir usually do two fishing trips in one day. Setting is carried out between 06.30 am and 16.30 pm, while hauling the fishing gear is carried out between 12.00 am and 18.00 pm. Cast net are mainly operated in the Cimanuk River Watershed (Fig. 7d).

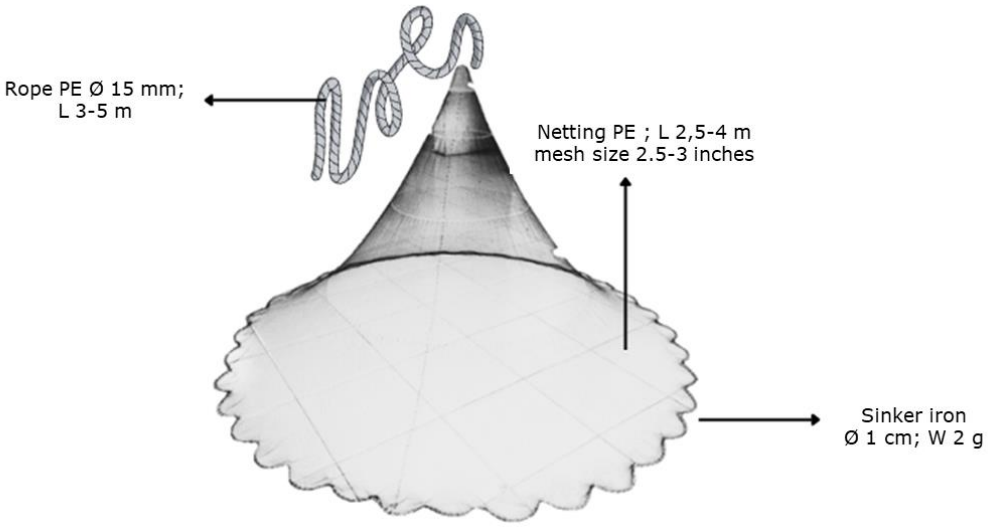

Fig. 5. Construction and specifications of cast nets operated in Jatigede Reservoir

Lift net is a cube shaped fishing gear with a net arranged at a crossroads forming a 90° angle **(Alamsah *et al.*, 2021)**. The construction of the lift net fishing gear (Fig. 6) used by fishermen in the Jatigede Reservoir consists of a bamboo frame, netting, lamps, weights, hand winch and a net towing rope. There is only one unit of lift net fishing gear in the Jatigede Reservoir area which is located in Cimanuk River Basin. Liftnet fishing points are shown in Fig. (7e).

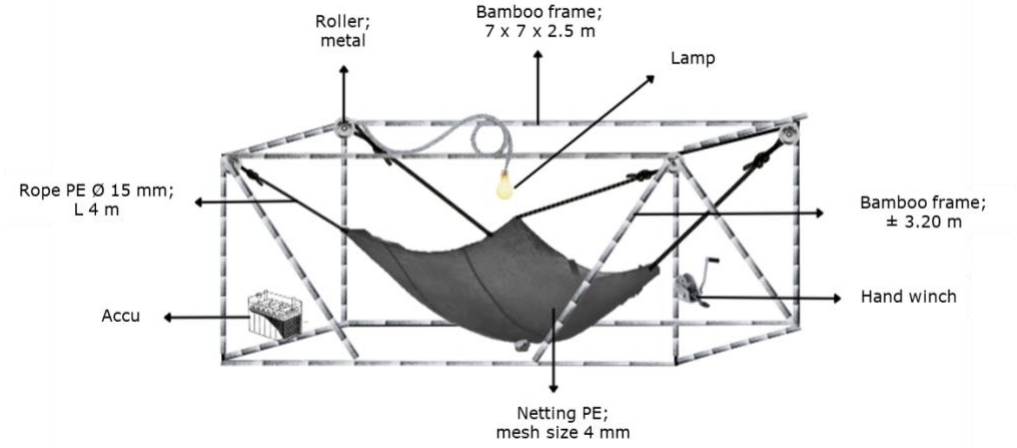

Fig. 6. Construction and specifications of lift net operated in Jatigede Reservoir

There are 5 types of fishing gear operated in the waters of Jatigede Reservoir. These fishing gears are still traditional. The distribution of fishing points in Jatigede Reservoir is shown in Fig. (7).

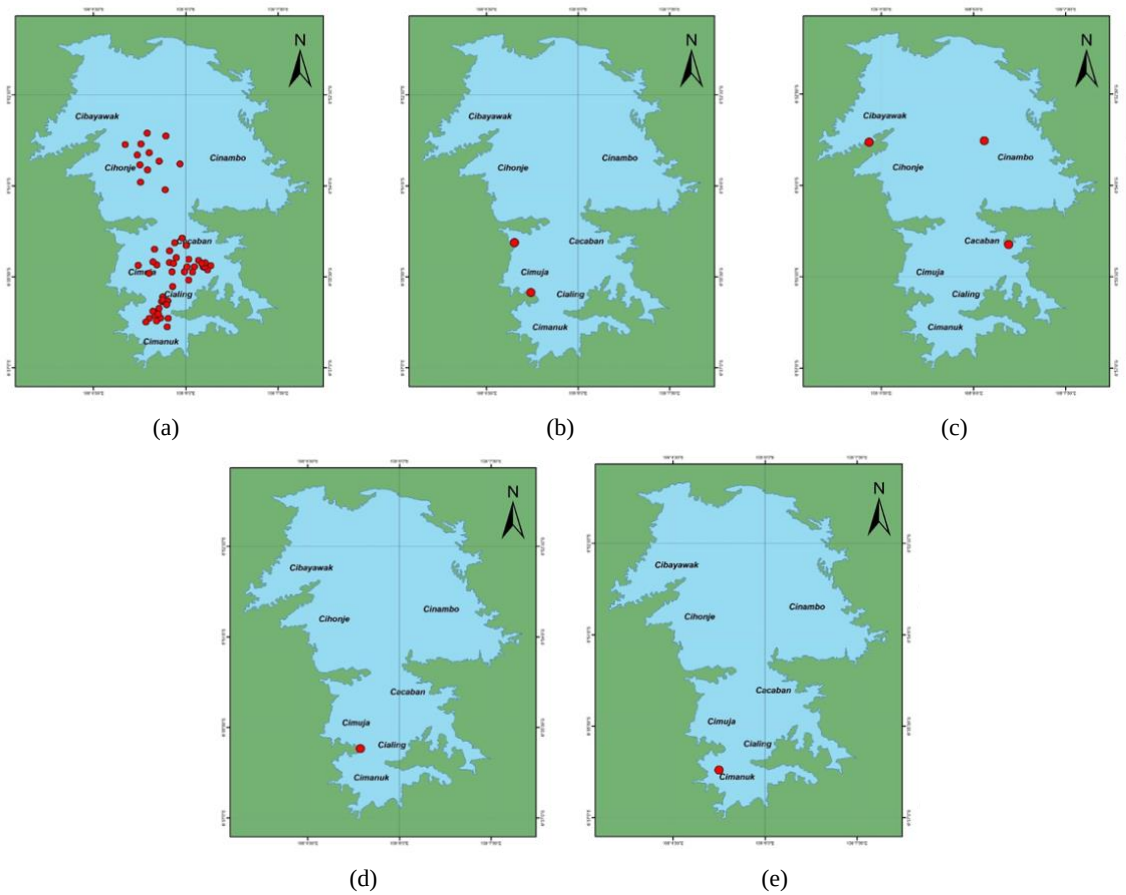

Fig. 7. Fishing area of: (a) gillnet; (b) handline; (c) trap; (d) cast net; (e) liftnet at Jatigede Reservoir

3. Catch

The number of total catch obtained by each fishing gear is shown in Table (3). It reveals the highest catch from each fishing gear as well as the average catch per trip.

Table 3. Highest and average catch per trip for each type of fishing gear

Fishing Gears	Highest Catch (kg)	Average Catch per Trip (kg)
Gillnet	100	30
Handline	8	1,5
Cast net	5	3
Lift Net	30	10
Trap	10	9

The result showed that the catch of gillnet, handline and cast net were dominated by mozambique tilapia and the Nile tilapia. The catch of lift net were dominated by the paray fish, hampal and bungo fish. Meanwhile, freswater crayfish were the main catch of trap. The types of catch acquired during the research are shown in Table (4).

Table 4. Types of catch acquired in Jatigede reservoir

Family	Common Name	Scientific Name
Cyprinidae	Beardless barb	*Mystacoleucus marginatus* (Valenciennes, 1842)
	Silver rasbora	*Rasbora aprotaenia* (Hubbs & Brittan, 1954)
	Common carp	*Cyprinus carpio* (Linnaeus, 1758)
	Hampala barb	*Hampala macrolepidota* (Kuhl & Van Hasselt, 1823)
	Lalawak barb	*Barbonymus balleroides* (Valenciennes, 1842)
	Bonylip barb	*Osteochilus vittatus* (Valenciennes, 1842)
Cichlidae	Nile tilapia	*Oreochromis niloticus* (Linnaeus, 1758)
	Mozambique tilapia	*Oreochromis mossambicus* (Peters, 1852)
	Jaguar cichlid	*Parachromis managuensis* (Gunther, 1867)
	Red devil cichlid	*Amphilophus labiatus* (Gunther, 1864)
Bagridae	Bagrus singaringan	*Mystus Singaringan* (Bleeker, 1846)
	Bagrus nemurus	*Mystus nigriceps* (Valenciennes, 1840)
	Macrones nemurus	*Hemibagrus nemurus* (Valenciennes, 1840)
Eleotridae	Marble goby	*Oxyeleotris marmorata* (Bleeker, 1852)
Gobiidae	Tank goby	*Glossogobius Giuris* (Hamilton 1822)
Leiognathidae	Ponyfishes	*Leiognathidae* (Forsskal, 1775)
Loricariidae	Amazon sailfin catfish	*Pterygoplichthys pardalis* (Castelnau, 1855)
Pangasiidae	Pangas catfish	*Pangasius* (Valenciennes, 1840)
Parastacidae	Red claw crayfish	*Cherax quadricarinatus* (Von Martens, 1868)

DISCUSSION

The whole aspects that have been explained were components related to the management of capture fisheries potential in the Jatigede Reservoir. Social typology is a term for grouping society based on the characteristics of the society within it **(Torere *et al.*, 2019)**. The grouping of characteristics, based on the four aspects, as listed in Table (2), reflects the characteristics of those involved in fishing activities in the Jatigede Reservoir. The development of each aspect needs to continue to be monitored considering that these aspects are closely related to all fishing activities carried out in the Jatigede Reservoir. Every activity carried out by fishing activities must have an impact, either good or bad, so it needs to be regularly monitored so that each impact can be overcome as early as possible as an effort to manage sustainable capture fisheries **(Akoit & Nalle, 2018; Willette *et al.*, 2023)**. In the long term, monitoring the social characteristics of fishermen should be the basis of every policy that will be implemented by the government because the management will not run optimally if it is not based on an understanding of the characteristics of targets **(Wahyono, 2016; Cohen *et al.*, 2021)**.

Aspects of fishing operations describe the technical patterns of fishing operations carried out by fishermen in the Jatigede Reservoir. The fishing gear used by fishermen influences the catch they obtain **(Rahim *et al.*, 2020; Pratiwi *et al.*, 2022)**. The differences in each specification of each fishing gear mean that its use must be adjusted to the fishermen's catch targets **(Walker *et al.*, 2005)**. Monitoring the type of fishing gear used is important as an effort to protect aquatic ecosystems **(Fadly *et al.*, 2023)**. It was

explained that the decline in reservoir function occurred in the Batutegi Reservoir, Lampung, Indonesia, in which one of the causes was the use of prohibited fishing gear in the form of electric fishing, which had an impact on all kinds of fish in the waters. This is very unfortunate considering that the Batutegi Reservoir is one of the largest reservoir in Southeast Asia, and its existence is important for the surrounding community **(Wulandari, 2021)**. As for Jatigede Reservoir, this could still be prevented considering the relatively young management of fishing activities.

Apart from the type of fishing gear, the catch is also influenced by the fishing season **(Macusi *et al.*, 2021)**. The fishing season is a challenge for fishermen's fishing activities because it is a factor that is difficult to predict. However, it has a big influence on the quantity of their catch **(Ihsan *et al.*, 2014)**. The fishing season in each fishing area may be different due to influence from various factors **(Lintang *et al.*, 2012; Sari *et al.*, 2021)**. Catches in Cirata Reservoir tend to be lower in May and increase in July. This may be influenced by higher density of rainfall in July so that the area where fish forage is wider **(Harjanti *et al.*, 2012)**. Water fluctuations play an important role in waters productivity because they influence the spawning and migration processes of fish, thus affecting the presence of fish in fishing areas **(Gownaris *et al.*, 2018)**. Knowledge of fishing season patterns is related to fishermen's efficiency in fishing **(Poizat & Baran 1997; Imron *et al.*, 2020; Sulaiman *et al.*, 2023)**. Therefore, the research related to season pattern of fishing activity in the Jatigede Reservoir should be carried out, so that fishing operation can be carried out efficiently.

Catch composition is an important aspect in the sustainability of the fishing operation. This is related to the dominance of the species and the economic value of the existing species **(Luthfiani *et al.*, 2018; Humphries *et al.*, 2019; Septian *et al.*, 2023)**. Moreover, in the management of aquaculture-based capture fisheries such as in the Jatigede Reservoir, monitoring of the composition of the catch must be carried out so that superior species which are deemed beneficial to the economic activities can be determined. Efforts such as restocking can be carried out in a targeted manner. Focusing on the management of capture fisheries activities as an effort to improve the economy and community welfare requires maximum effort to obtain optimal results from the desired goals **(Chu & Kompas, 2014; Huang & He, 2019)**. Lastly, transparency regarding information from every aspect involved is important for all stakeholders to know, so that progress can be seen from the efforts being carried out.

CONCLUSION

Based on the research that has been carried out, three conclusions can be assessed namely that fishermen in Jatigede Reservoir are dominated by full time fishermen (70.06%) with gillnet fishing gear (81%), most of them are the owners of the fishing gear (97%), and are native fishermen (86.8%). There are five types of fishing gear used by fishermen, namely gillnets, handlines, cast nets, lift nets and traps. Setting and hauling

are carried out at different times depending on the fishing gear used, and fishing areas are predominantly carried out around the Cimanuk River Basin. The main catches obtained during fishing operations in the Jatigede Reservoir consist of tilapia, tilapia fish, freshwater crayfish and paray fish.

ACKNOWLEDGMENT

The authors would like to thank the Directorate of Research, Community Service and Innovation, Universitas Padjadjaran, for providing the Academic Leadership Grant (ALG) for the implementation of this research and to all the committee members of the International Seminar of Indonesian Seas: Catalyst for Ocean Sustainability (ISCO) 2024, who have facilitated the publication process of this manuscript until it was published in the Egyptian Journal of Aquatic Biology and Fisheries.

REFERENCES

Adeniran, A.; Daniell, K.A. and Pittock, J. (2021). Water Infrastructure Development in Nigeria: Trend, Size, and Purpose. Water 13(17).2416.

Alamsah, S.; Wibowo, B.; Tambunan, K.; Krisnafi, Y.; Wibowo, Y.A.; Firdaus, A.N. and Widianto, D.I. (2021). Strength and Structure of Traditional Fisheries Lift Nets Against Flow Power in Pangandaran, West Java, Indonesia. AACL Bioflux 14(3).

Ajay, V.S. and Krishnan, A.R. (2021). Design Characteristics and Specifications of Cast Net Operated Along the Lower Stretches of Vembanad Wetlands. Fish Aquac J. S2: 001.

Akoit, M.Y. and Nalle, M.N. (2018). Pengelolaan Sumberdaya Perikanan Berkelanjutan di Kabupaten Timor Tengah Utara Berbasis Pendekatan Bioekonomi. Jurnal Agribisnis Indonesia 6(2):85-108.

Apriliani, T.; Kurniasari, N. and Yuliaty, C. (2018). Strategi Pengelolaan Perikanan di Waduk Sempor Kabupaten Kebumen Jawa Tengah. J. Sosek KP 23(2):153-166. http://dx.doi.org/10.15578/jsekp.v13i2.6660

Balgah, R.A.; Ngwa, K.A.; Buchenrieder, G.R. and Kimengsi, J.N. (2023). Impacts of Floods on Agriculture-Dependent Livelihoods in Sub-Saharan Africa: An Assessment from Multiple Geo-Ecological Zones. Land 17 :334.

Chu, L. and Kompas, T. (2014). Targets and Fisheries Management in the Asia and Pacific Region. Asia & the Pacific Policy Studies 1(3):615-622. http://dx.doi.org/10.1002/app5.56

Cohen, P.J.; Roscher, M.; Wathsala, F.A.; Freed, S.; Garces, L.; Jayakody, S.; Khan, F.; Mam, K.; Nahiduzzaman, M.; Ramirez, P.; Ullah, M.H.; van Brakel, M., Smallhorn-West, P.P. and DeYoung, C. (2021). Characteristics and

Performance of Fisheries co-Management in Asia - Synthesis of Knowledge and Case Studies: Bangladesh, Cambodia, Philippines and Sri Lanka. Bangkok. FAO.

Deswati, R.H. and Adrison, V. (2019). Eksternalitas Produksi Keramba Jaring Apung Waduk Jatiluhur. Jurnal Ilmu Ekonomi dan Pembangunan 19 (1):47-60. in Bahasa

Endah, N. (2017). Pemanfaatan Sumber Daya Danau Secara Multifungsi dan Peran Komunitas Lokal di Danau Maninjau. Jurnal Ekonomi dan Pembangunan 25(1):55-67.

Fadly; Kasnir, M. and Ihsan, A. (2023). Strategy for Countermeasures for Destructive Fishing in Makassar City Waters. Jurnal Ilmiah Ilmu Administrasi Publik: Jurnal Pemikiran dan Penelitian Administrasi Publik 13(1):319-328.

Fargomeli, F. (2014). Interaksi Kelompok Nelayan dalam Meningkatkan Taraf Hidup di Desa Tewil Kecamatan Sangaji Kabupaten Maba Halmahera Timur. Acta Diurna Komunikasi 3(3): 1-17.

Gao, S. and Cheng, Y. (2020). Older People's Perception of Changes in Their Living Environment after Relocation: A Case Study in Beijing, China. Int. J. Environ. Res. Public Healt 17.

Gownaris, N.J.; Rountos, K.J.; Kaufman, L.; Kolding, J.; Lwiza, K.M.M. and Pilitch, E.K. (2018). Water level fluctuations and the ecosystem functioning of lakes. Journal of Great Lakes Research 44:1154-1163. https://doi.org/10.1016/j.jglr.2018.08.005

Hardhiawant, M.A.S.; Apriliani, I.M.; Gumilar, I.; Dewanti, L.P. and Herawati, H. (2023). Kontruksi Alat Tangkap Gillnet di Waduk Jatigede. ALBACORE 7(3):395-404. http://dx.doi.org/10.29244/core.7.3.395-404

Harjanti, R.; Pramonowibowo and Hapsari, T. D. (2012). [Analysis of Fishing Season and Exploitation Rate of Hairtail Fish (Trichiurus sp) in waters of Palabuhanratu, Sukabumi, West Java]. Journal of Fisheries Resources Utilization Management and Technology 1(1):55-66. [in Indonesian]

Heikkila, C. (2004). Institutional Boundaries and Common-Pool Resource Management: A Comparative Analysis of Water Management Programs in California. Journal of Policy Analysis and Management 23(1):97-117.

Herawati, T.; Saputra, R.N.; Lili, W.; Suryadi, I.B.B.; Kurniawati, N.; Hedianto, D.A. and Herawati, H. (2020). The Food Habits, Niche Breadth and Niche Overlap of Fish Community in Jatigede Reservoir, West Java. Proceedings of the 5th NA International Conference on Industrial Engineering and Operations Management Detroit, Michigan, USA 10-14.

Hidayat. A.; Marits, D.M. and Gandhi, P. (2017). Institutional Analysis Of Fisheries Management In The Cirata Reservoir, West Java, Indonesia. Risalah Kebijakan Pertanian dan Lingkungan 3(2):1.

Huang, S. and He, Y. (2019). Management of China's capture fisheries: Review and prospect. Aquaculture and Fisheries 4(5):173-182. https://doi.org/10.1016/j.aaf.2019.05.004

Humphries, A.T., Gorospe, K.D.; Carvalho, P.G.; Yulianto, I.; Kartawijaya, T. and Campbell, S.J. (2019). Catch Composition and Selectivity of Fishing Gears in a Multi-Species Indonesian Coral Reef Fishery. Frontiers in Marine Science 6:378. http://dx.doi.org/10.3389/fmars.2019.00378

Hutajulu, H.; Kusumastanto, T.; Budiharsono, S. and Imran, Z. (2019). Economic policy in the development of capture fisheries in Jayapura City. IOP Conf. Series: Earth and Environmental Science 241 012027.

Imron, M. (2003). Kemiskinan dalam Masyarakat Nelayan. Jurnal Masyarakat dan Budaya 5(1): 63-82.

Imron, M.; Kusnandar; Komarudin, D. (2020). Komposisi dan Pola Musim Ikan Hasil Tangkapan di Perairan Tegal Jawa Tengah. ALBACORE 4(1):33-46.

Iskandar, A.N.K.B.P.; Zahidah and Sunardi. (2023). Species Composition and Community Structure Offreshwater Fish in a Newly Inundated Reservoir,Sumedang Regency, West Java, Indonesia. ACL Bioflux 16(3).

Jayanto, B.B.; Prihantono, K.E.; Triarso, I. and Kurohman F. (2018). Pengaruh Penambahan Funel Pada Alat Tangkap Bubu Terhadap Hasil Tangkapan Rajungan (Portugus pelagicus) di Perairan Rembang Jawa Tengah. IJFST 13(2):100-104. http://dx.doi.org/10.14710/ijfst.13.2.100-104

Limbong, M.; Simbolon, D.; Purbayanto, A.; Yusfiandayani, R. and Amri, K. (2023). Degradation of Fishing Grounds in North Waters of Banten Province, Indonesia. Depik Jurnal Ilmu-Ilmu Perairan, Pesisir dan Perikanan 12(3):373-380.

Lintang, C.J.; Labaro, I.L. and Telleng, A.T.R. (2012). Kajian Musim Penangkapan Ikan Tuna dengan Alat Tangkap Hand Line di Laut Maluku. Jurnal Ilmu dan Teknologi Perikanan Tangkap 1(1):6-9.

Luthfiani, L.; Ghofur, A. and Purwanti, F. (2018). Komposisi Jenis Ikan Hasil Tangkapan Sampingan (Bycatch) Pukat Dorong di Tambak Lorok Semarang. Journal of Maquares 7(3):288-297. http://dx.doi.org/10.14710/marj.v7i3.22553

Macusi, E.D.; Liguez, A.K.O.; Macusi, E.S. and Digal, L.N. (2021). Factors Influencing Catch and Support for the Implementation of the Closed Fishing Season in Davao Gulf, Philippines. Marine Policy 130.

Muthmainnah, D.; Rais, A.H.; Fatah, K. and Makri M. (2022). Freshwater Fish and Fishery Activities in Koto Panjang Reservoir, Riau. IOP Conf. Series: Earth and Environmental Science.

Monintja, D. and Yusfiandayani, R. (2001). Pemanfaatan Sumber Daya Pesisir dalam Bidang Perikanan Tangkap. Pusat Kajian Sumberdaya Pesisir dan Lautan IPB, Bogor.

Montgomerie, M. (2022) Basic Fishing Methods: A Comprehensive Guide to Commercial Fishing Methods. Seafish, Ediburgh.

Nasution, Z. and Sunarno, M.T.D. (2009) Tekanan Penduduk Terhadap Lingkungan dan Sumberdaya Lahan/Perairan di Wilayah Pesisir serta Alternatif Penangannya. J. Kebijak. Perikan. Ind 1(1):139-155.

Nurhayati, A.; Herawati, T.; Lili, W.; Yustiati, A. and Nurruhwati, I. (2020). Enviromental Socio-Economic Value for Capture Fisheries Resources at Jatigede Reservoir, Sumedang,West Java Province. Jurnal Penyuluhan 16(1):122-133. in Bahasa

Peraturan Menteri Kelautan dan Perikanan No. 18. (2021). Penempatan Alat Penangkapan Ikan dan Alat Bantu Penangkapan Ikan di Wilayah Pengelolaan Perikanan Negara Republik Indonesia dan Laut Lepas Serta Penataan Andon Penangkapan Ikan. Jakarta, Ministry of Marine Affairs and Fisheries.

Poizat, G. and Baran, E. (1997). Fishermen's Knowledge as Background Information in Tropical Fish Ecology: A Quantitative Comparison with Fish Sampling Results. Environmental Biology of Fishes 50:435-449. http://dx.doi.org/10.1023/A:1007317423165

Pratiwi, A.D.; Rohali, A.; Anzar, M.; Hajrah, N.W.Z.; Djamil, A.T.B.A. and Jamal, M.I. (2022). Mengulik Jenis Alat Tangkap yang Digunakan Nelayan di Kabupaten Takalar. Jurnal Mahasiswa Antropologi 1(1):36-55.

Putri, M.A.; Affandi, R.; Setyobudiandi, I. and Yulianto, G. (2019). Status Keberlanjutan Perikanan Budidaya Keramba Jaring Apung (KJA) di Waduk Jatiluhur, Kabupaten Purwakarta. a. JPSL 9(3):771-786. http://dx.doi.org/10.29244/jpsl.9.3.771-786

Qiu, L.; Qiu, Y.; Peng, L.; Shen, J.; Li, G. and Li, J. (2024). Enhancing Fishery Management in Tanghe Reservoir, China: Insights from Food Web Structure and Ecosystem Analysis. Water 16:200.

Rahim, A.; Hastuti, D.R.D. and Syam, U. (2020). Estimation Comparison of Small-Scale Fisherman Decision on Choice Fishing Gear and Outboard Engine Power. Journal of Engineering and Applied Sciences 15(2):574-580.

Randle, S. (2024). Wild Hogs in the Water: Contested Infrastructural Ecologies of Reservoir Storage in Texas. Antipode. https://doi.org/10.1111/anti.13033

Ratnadila, N.S. (2018). Scenario Planning for Underdeveloped Village Development: A Critical Study. Jurnal Penyuluhan Perikanan dan Kelautan 12(2):111-128.

Shaumi, F.I.; Rizal, A.; Bachtiar, E. and Suryana, A.A.H. (2022). Status of Capture Fisheries and Socio-Economic Analysis in Jatigede Reservoir, Sumedang Regency. Asian Journal of Fisheries and Aquatic Research 17(6):1-8.

Sari, M.; Wiyono, E.S. and Zulkarnain. (2021). Pengaruh Cuaca Terhadap Pola Musim Penangkapan Ikan Pelagis di Perairan Teluk Lampung. ALBACORE 5(3):277-289.

Septian, R.; Isnaniah. and Brown, A. (2023). Composition Analysis of Bubu Catches in the Napangga River, Tanjung Medan District, Rokan Hilir Regency. Tropical Marine Environmental Sciences 1(2):36-41.

Sulaiman, N.A.A.; Hassan, S.A.; Shaffril, H.A.M. and Hanapi, M.S. (2023). Fishermen's Knowledge of Astronomical Phenomena in Fishery Activities: A Systematic Literature Review. Pertanika J. Soc. Sci. & Hum 31(1):1-24.

Suryawan, A.; Sunardi. and Heru, B. (2019). A Review on the Floating Net Cage Waste Management for the Sustainability of Cirata Reservoir Service Life. IOP Conf. Series: Earth and Environmental Science 407 012003.

Torere, W.; Goni, S.Y.V.I. and Waani, F.J. (2019). Peran Ganda Istri Nelayan pada Masyarakat Pesisir di Desa Kima Bajo Kecamatan Wori Kabupaten Minahasa Utara. HOLISTIK: Journal of Social and Culture, 12(4):1-19. in Bahasa

Tribhuwana, A.; Muttaqin, Z. and Farhan O. (2021). Analysis of Floating Net Cages on The Carrying Capacity of The Darma Reservoir. Jurnal Teknik Sipil & Perencanaan 23(1):74-82.

Wahyono, A. (2016). Ketahanan Sosial Nelayan: Upaya Merumuskan Indikator Kerentanan (Vulnerability) Terkait dengan Bencana Perubahan Iklim. Masyarakat Indonesia 42(2):185-199.

Walker, T.I.R.J. Hudson and Gason, A.S. (2005). Catch Evaluation of Target, By-product andBy-catch Species Taken by Gillnets and Longlines in the Shark Fishery of South-eastern Australia. J. Northw. Atl. Fish. Sci 35:505-530.

Wijayanto, V.; Suwartapradja, O. and Hermawati, R. (2017). Perubahan Mata Pencaharian dan Proses Adaptasi Warga Terkena Dampak Pembangunan Waduk Jatigede. Umbara: Indonesian Journal of Antropology 2(2):66-77. in Bahasa

Willette, D.A.; Ababouch, L.; Barber, P.H.; Bunje, P.M.E.; Cauzac, J.P.; Conchon, A. and Trenkel, V.M. (2023). Emerging Monitoring Technologies to Reduce Illegal Fishing Activities at Sea and Prevent Entry of Fraudulent Fish into Markets. Front. Sustain. Food Syst 7.

Wulandari, C. (2021). Identifying Climate Change Adaptation Efforts in the Batutegi Forest Management Unit, Indonesia. Forest and Society 5(1):48-59.