



Local Wisdom and Sustainable Fisheries Management in Aceh Province Customary Law Perspective

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Abstract: Fisheries resources, especially capture fisheries, are inherently open access; however, without proper management or when exploited excessively, they risk depletion or even extinction. At the global level, fish consumption continues to rise, while production from capture fisheries has shown a steady decline. This situation can be interpreted as evidence of widespread overfishing of capture fisheries resources. If this trend persists, it will pose a serious threat to global food security, particularly within the fisheries sector. Aceh Province is a maritime region surrounded by seas and possesses significant potential for capture fisheries. Nevertheless, illegal, unreported, and unregulated (IUU) fishing presents a serious risk to the sustainability of fisheries resources in the area. At the same time, Acehese fishing communities are supported by a traditional maritime institution known as *Panglima Laot*, which, grounded in local wisdom, has played an important role in preserving the sustainability of fisheries resources up to the present. This article examines the role of local wisdom in sustainable fisheries management in Aceh Province. The study employs a normative legal research approach, with data collected by means of an analysis of legal documents. The findings indicate that Aceh Province holds the authority to implement sustainable fisheries management based on both national legislation and Aceh Qanun governing the sector. In addition, fisheries management is conducted through the customary institution of *Panglima Laot*, which has its own organizational structure and regulatory framework, particularly in overseeing fishing activities at sea. The local wisdom values embedded in this institution include justice, solidarity, and sustainability. In this regard, *Panglima Laot* has made a significant contribution to resolving conflicts within fishing communities.

Keywords: Local Wisdom, Sustainable Fisheries, Customary Law

Abstrak: Sumber daya perikanan khususnya perikanan tangkap karena bersifat open acces jika tidak dikelola dengan baik dalam pemanfaatannya atau dieksploitasi secara berlebihan bisa berdampak menyebabkan kepunahan terhadap sumber daya perikanan. Konsumsi perikanan dunia terus meningkat sedangkan produksi perikanan tangkap terus mengalami penurunan. Hal ini dapat diasumsikan sebagai gejala dari terjadinya over fishing dari sumber perikanan tangkap di seluruh dunia, jika ini terus berlangsung maka akan mengancam keamanan pangan dunia terutama dari sektor perikanan. Provinsi Aceh merupakan provinsi yang dikelilingi lautan dan banyak praktik yang memiliki potensi perikanan tangkap yang besar. illegal, unreported and regulated Fishing yang mengancam kelestarian sumber daya perikanan di wilayah tersebut. Di sisi lain masyarakat nelayan Aceh mempunyai Lembaga Adat Laot yang dikenal dengan nama Panglima Laot yang berdasarkan kearifan lokal yang mereka lakukan dapat menjaga kelestarian sumber daya perikanan sampai dengan sekarang. Artikel ini memfokuskan kajian pada peran kearifan lokal dalam pengelolaan perikanan berkelanjutan di Provinsi Aceh. Penelitian ini merupakan penelitian hukum normatif, data diperoleh melalui telaah dokumen hukum. Hasil penelitian menunjukkan bahwa Provinsi Aceh mempunyai kewenangan untuk melakukan pengelolaan perikanan berkelanjutan baik dalam undang-undang maupun Qanun Aceh yang mengatur tentang itu. Pengelolaan juga dilakukan oleh Lembaga adat panglima laot yang mempunyai stuktur sistem dan aturan tersendiri khususnya dalam melakukan penangkapan ikan di laut. Nilai kearifan lokal tersebut memiliki nilai keadilan, kebersamaan, dan keberlanjutan. Lembaga ini berperan penting dalam menyelesaikan berbagai perselisihan yang terjadi diantara para nelayan.

Kata kunci: Kearifan lokal, kelestarian sumber daya perikanan, hukum adat

Introduction

Indonesia, as an archipelagic country, has vast capture fisheries resources that are expected to become one of the main pillars of the national economy in the future. At the same time, global fish consumption continues to rise due to population growth, along with increasing global income levels and a growing awareness of healthy food choices.¹ Capture fisheries are open-access in nature and must be properly managed in their utilization so as to avoid negative impacts that might lead to the depletion or extinction of fisheries resources. Sustainable

¹Zainul Wasik, Sri Gunawan, and Tanti Handriana, "Blue Economy and the Impact of Industrialisation on Sustainable Livelihoods: A Case Study of Fisheries in the North Coastal Region of Java," *Journal of Ecohumanism* 3, no. 8 (2024); Arnoldus S. Ananta and Reniel B. Cabral, "Achieving Sustainable Fisheries and Livelihoods from Sasi Laut in a Blue Economy in Indonesia," *Marine Policy* 187 (2026); Budiman and Abdul Kadir Jaelani, "The Policy of Sustainable Waste Management Towards Sustainable Development Goals," *Journal of Human Rights, Culture and Legal System* 3, no. 1 (2023).

fisheries resource management does not prohibit fishing activities for economic or commercial purposes; rather, it requires that the level of exploitation does not exceed the carrying capacity of the aquatic environment or the regenerative capacity of fish stocks, so that future generations will continue to possess the same or even greater fishery resources than the present generation.²

The fisheries sector plays a crucial role, particularly amid declining fishery production and rising global consumption of fisheries products. The decline in production is caused by the imbalance between global production levels and demand for fish products. Food and Agriculture Organization (FAO) reported that capture fisheries production decreased from 81.5 million tons in 2011 to 79.3 million tons in 2016. Indonesia's capture fisheries production also declined in 2016 by 106,994 tons compared to 2015. On the other hand, global fish consumption increased from 130.0 million tons in 2011 to 151.2 million tons in 2016, and per capita fish consumption also rose from 18.5 kg in 2011 to 20.3 kg in 2016.³ This situation can be regarded as an indication of global overfishing of capture fisheries resources, as evidenced by declining production levels occurring alongside increasing demand for fish for consumption.

Aceh Province is located at the northernmost tip of Sumatra Island, Indonesia, and is surrounded by seas. Administratively, it consists of 23 (twenty-three) districts/cities. Of these, only 5 (five) districts/cities do not have marine areas, while 16 (sixteen) districts/cities possess coastal and marine territories, and 2 (two) districts/cities are classified as archipelagic regions.⁴ Aceh Province has considerable fisheries potential, including tuna, mackerel tuna, Spanish mackerel, anchovy, shark, skipjack tuna, trevally, snapper, grouper, pomfret, stingray, shrimp, and lobster.⁵

Fish consumption among the people of Aceh is among the highest in Indonesia. Fish is an easily accessible and affordable food source that is rich in nutrients and protein, and it has become part of Acehnese culture to prioritize fish consumption over other sources of animal protein such as beef or chicken. The capture fisheries sector also absorbs a significant amount of labor, as most communities living in coastal areas rely on fishing as their primary livelihood.

²Umi Chodriyah, Thomas Hidayat, and Karsono Wagiyo, "Some Biological Aspects Of Skipjack Tuna (*Katsuwonus Pelamis* Linnaeus, 1758) Di Perairan Toli-Toli Waters, Central Sulawesi," *Indonesian Fisheries Research Journal* 26, no. 1 (2020).

³M Nur et al., "Growth Pattern of Skipjack Tuna (*Katsuwonus Pelamis* Linnaeus, 1758) Caught with Hand Lines in Majene Waters, West Sulawesi, Indonesia," *Philippine Journal of Science* 154, no. 1 (2025); FAO, *The State of World Fisheries and Aquaculture 2018 - Meeting the Sustainable Development Goals*, FAO, 2018, 4.

⁴https://id.wikipedia.org/wiki/Daftar_kabupaten_dan_kota_di_Aceh; FAO, *The State of World Fisheries and Aquaculture 2018 - Meeting the Sustainable Development Goals*.

⁵Dinas Kelautan dan Perikanan di Provinsi Aceh [Office of Marine Affairs and Fisheries of Aceh Province], *Rencana Kerja Perubahan Tahun 2017*, Banda Aceh; 2017, 1.

Fishing communities in Aceh Province are guided by a customary institution known as *Panglima Laot*. Under Acehnese customary law, the roles and functions of *Panglima Laot* encompass various aspects, including the regulation of fishing practices, the implementation of customary maritime law, acting as a unifying body for fishing communities, and contributing to the maintenance of maritime security, among other responsibilities.

However, in other marine areas, violations of laws and regulations related to sustainable fisheries management continue to occur. The geographical conditions of Aceh Province are one of the factors contributing to the persistence of illegal, unreported, and unregulated fishing (hereinafter referred to as IUU fishing). This is evidenced by the recorded cases of illegal fishing: 7 cases prior to 2016, 4 cases in 2016, 10 cases in 2017, and 6 cases as of March 2018. In 2019, two Malaysian fishing vessels were apprehended in February,⁶ and on 15 June 2019, the Fisheries Resources Surveillance Unit at Lampulo, Banda Aceh, again detained a Malaysian-flagged fishing vessel captained by a Thai national with crew members who were citizens of Myanmar.⁷

If IUU fishing persists in the waters of Aceh, it may lead to the loss of livelihoods among fishing communities that depend on capture fisheries, as a result of fisheries resource depletion and damage to ecosystems such as coral reefs. These reefs serve as habitats, feeding grounds, and breeding areas for many marine organisms and are a crucial component of the marine ecosystem.

This study focuses on the role of local wisdom in sustainable fisheries management in Aceh Province. It employs a normative–sociological juridical legal research approach. The data were obtained from primary, secondary, and tertiary legal materials,⁸ while empirical data were collected through in-depth interviews with respondents and key informants.

Sustainable Fisheries Management under International Law

Global attention to fisheries management began to develop around 1850. Prior to that period, countries around the world most of which were monarchies generally regarded fish as an inexhaustible marine resource. Based on this concept of inexhaustibility, Hugo Grotius in 1608 introduced the principle of free access to living resources, which is closely associated with the doctrine of the freedom of the seas. On the one hand, establishing boundaries on the high seas and enforcing those boundaries was considered a

⁶<https://kumparan.com/@kumparanbisnis/tenggelamkan-2-kapal-maling-ikan-malaysia-kkp-tunggu-putusan-hakim-1549439501415268188>, retrieved on July 7, 2019.

⁷<https://news.okezone.com/read/2019/06/16/340/2067088/illegal-fishing-kapal-ikan-berbendera-malaysia-disita-di-banda-aceh>, retrieved on July 7, 2019.

⁸Soerjono Soekanto and Sri Mamudji, *Penelitian Hukum Normatif* (Jakarta: Rajawali Press, 2022); Johnny Ibrahim, *Teori Dan Metodologi Penelitian Hukum Normatif*, 3rd ed. (Malang: Bayu Media, 2007).

difficult task; on the other hand, if fish in the sea could be taken without limitation, maintaining exclusive rights over marine resources was seen as unnecessary. Consequently, at that time, fisheries management was not regarded as a major priority for coastal states compared to navigation and trade.⁹

The first parties to question the concept of the inexhaustibility of coastal fisheries were English fishermen, who complained about the declining availability of fish stocks due to the use of a new type of fishing gear known as trawling. In 1851, as dissatisfaction among English fishermen intensified because of the decreasing fish stocks, the government established a Royal Commission, a fisheries commission tasked with investigating the causes of the depletion of fish resources in British waters.¹⁰

Institutions responsible for fisheries management continued to develop in other countries. In Scotland, for example, the Fishery Board for Scotland was established in the late 1880s as part of a scientific research program. Norway also showed interest in the development of fisheries research centers in 1886, following a model similar to that adopted in the United States.¹¹ During the period between 1885 and the early 1900s, fishing activities along the North Atlantic coast underwent a revolution with the widespread use of otter trawls and steam engines. These practices led to a significant decline in fish stocks, and eventually fishermen's organizations along the coast closed several fishing grounds. At the same time, demand for fisheries products continued to rise, which further intensified overfishing and improper fishing practices (including the use of trawls). This ultimately resulted in a reduction of fish stocks in the oceans. During this period, fisheries management tended to be regulated at the national level by individual states.¹²

Sustainable fisheries management is closely related to a country's social and economic conditions, the availability of scientific data on fisheries, and the regulation of administrative mechanisms. In this context, under

⁹Emmy Latifah, "Perkembangan Pengaturan Pengelolaan Perikanan Berkelanjutan Berdasarkan Hukum Internasional," *Jurnal Bina Mulia Hukum* 1, no. 2 (2017): 127; Sri Yanti, *Kajian Strategi Pengelolaan Perikanan Berkelanjutan, Kementerian PPN/Bapenas Direktorat Kelautan Dan Perikanan*, 2014.

¹⁰Latifah, "Perkembangan Pengaturan Pengelolaan Perikanan Berkelanjutan Berdasarkan Hukum Internasional."

¹¹Tim D. Smith, *Scaling Fisheries: The Science of Measuring the Effects of Fishing, 1855-1955* (New York: Cambridge University Press, 1994), p. 68.

¹²Aryuni Yuliantiningsih et al., "From Illegal, Unreported and Unregulated Fishing to Transnational Organised Crime in Fishery from an Indonesian Perspective," in *ASEAN International Law*, 2021; Latifah, "Perkembangan Pengaturan Pengelolaan Perikanan Berkelanjutan Berdasarkan Hukum Internasional."; Omair Ameerbakhsh et al., "A Comparison of Two Methods of Using a Serious Game for Teaching Marine Ecology in a University Setting," *International Journal of Human Computer Studies* 127 (2019).

international law, fisheries-related regulations may be classified into two categories: legally binding rules, namely binding multilateral agreements, and non-binding legal rules, commonly referred to as non-legally binding or 'soft law' instruments. Both legally binding rules and soft law instruments play an important role in regulating sustainable fisheries management at the international level.

The 1982 International Law of the Sea Convention

The first international convention to specifically regulate fisheries and marine conservation was the 1958 Geneva Convention on Fishing and Conservation of the Living Resources of the High Seas. Article 1 paragraph (1) of the 1958 Geneva Convention states that: "...all States have the right for their nationals to engage in fishing on the high seas, subject (a) to their treaty obligations, (b) to the interests and rights of coastal States as provided for in this Convention, and (c) to the provisions contained in the following articles concerning conservation of the living resources of the high seas." Furthermore, Article 2 provides that: "...the expression 'conservation of the living resources of the high seas' means the aggregate of the measures rendering possible the optimum sustainable yield from those resources so as to secure a maximum supply of food and other marine products; conservation programmes should be formulated with a view to securing, in the first place, a supply of food for human consumption."

There are three fundamental issues related to the establishment of an international fisheries management system. First, the system must support the utilization of marine fisheries as a source of food for the world's population. Second, it must ensure the continued production of fisheries resources over a sufficiently long period of time. Third, the system must also support efforts to rationally allocate sustainable and continuous fisheries exploitation activities.¹³

The subsequent convention governing the international law of the sea is the 1982 United Nations Convention on the Law of the Sea (UNCLOS). This convention represents a major milestone in the history of ocean governance. It was the first effort to establish a comprehensive agreement regulating all aspects of the use of the oceans and is often referred to as the "constitution of the oceans." Its binding force is reinforced by the very broad participation of states.¹⁴

The Convention entered into force on November 16, 1994 and provides a general framework for the management of all maritime spaces and the resources

¹³Ameerbakhsh et al., "A Comparison of Two Methods of Using a Serious Game for Teaching Marine Ecology in a University Setting."

¹⁴Koesrianti, "Kedaulatan Negara Dalam Pengelolaan Sumber Daya Hayati Laut," in *Kedaulatan Negara Menurut Hukum Internasional*, ed. Dino Sunyowato (Surabaya: Airlangga University Press, 2021), p. 35.

contained therein. It also establishes fundamental principles for fisheries issues based on equity, effective utilization, and the conservation of living marine resources. These principles are applied to fisheries management in the exclusive economic zone and on the high seas. Meanwhile, fisheries within internal waters, archipelagic waters, and the territorial sea are not specifically regulated under this Convention, as these zones fall under the sovereignty of the state, which has the authority to regulate their management.¹⁵

The 1982 Convention contains a specific chapter on the Exclusive Economic Zone in Chapter V, as well as Chapter VII, Part 2, concerning the conservation and management of natural resources on the high seas, which together form the core of international fisheries management.¹⁶ These provisions regulate the authority of coastal states over their Exclusive Economic Zones. Under the Convention, a coastal state has sovereign rights,¹⁷ to explore and exploit, conserve, and manage natural resources—both living and non-living—found in the waters above the seabed, on the seabed itself, and in the subsoil. These rights also extend to the management of other activities aimed at the economic exploration and exploitation of the zone. In addition, the coastal state has jurisdiction to construct and use artificial islands, installations, and structures within the Exclusive Economic Zone, to conduct marine scientific research, and to protect and preserve the marine environment. However, in exercising these rights, coastal states are required to give due regard to the rights and obligations of other states as stipulated in the Convention.

Likewise, with regard to the management of living resources in the Exclusive Economic Zone (EEZ), the UNCLOS regulates this matter in Article 61.¹⁸ This article stipulates several obligations imposed on coastal states within their Exclusive Economic Zones, as follows: first, to determine the allowable catch of living resources found within the Exclusive Economic Zone; second, to ensure that living resources in the Exclusive Economic Zone are not threatened by overexploitation; and third, to restore populations of harvested fish species to levels capable of producing maximum sustainable yield, while taking into account

¹⁵Ellen Hey, “The Fisheries Provisions Of The Los Convention,” in *Developments in International Fisheries Law*, 2021, 20.

¹⁶Article 56 of the 1982 United Nations Convention on the Law of the Sea

¹⁷Three fundamental principles are embodied in the United Nations Convention on the Law of the Sea of 1982. First, the principle that a coastal state possesses sovereign rights over certain maritime zones adjacent to its coastline. Second, a limitation on the first principle, namely that the seabed and subsoil beyond national jurisdiction constitute the “common heritage of mankind.” Third, the principle that states have an obligation to conserve and protect the marine environment and to accommodate the interests of other states, alongside the exercise of their sovereign rights over the sea. Koesrianti, “Kedaulatan Negara Dalam Pengelolaan Sumber Daya Hayati Laut.”

¹⁸Article 61 of the 1982 United Nations Convention on the Law of the Sea

fishing patterns, the degree of dependence on fish stocks, and established international minimum standards.

Article 61 of the Convention provides that, in restoring fish stocks, coastal states must take into account the possible impacts that such recovery measures may cause. It also requires coastal states to exchange scientific information, statistical data related to catches and fishing efforts, as well as other relevant data concerning the conservation of fish stocks, through competent international organizations. Article 62 of the Convention regulates the utilization of living resources in the Exclusive Economic Zone. Coastal states are obliged to utilize the living resources within their Exclusive Economic Zones and to promote the optimal use of marine living resources. Coastal states are required to determine their capacity to harvest the allowable catch. If the allowable catch exceeds a coastal state's harvesting capacity, the state is obliged to grant other states access to the surplus through agreements, in accordance with the provisions of the Convention.¹⁹

However, in granting access to other states within its Exclusive Economic Zone, a coastal state must take into account all relevant factors. These include the importance of living resources to the coastal state concerned and its other national interests, the needs of developing states in the relevant sub-region or region to utilize part of the surplus, and the need to minimize economic dislocation in states whose nationals have traditionally fished in the zone or have carried out substantial research and identification of fish stocks.²⁰

Regulations of the coastal state relating to conservation must also specify the species of fish that may be caught and determine catch quotas. These may include quotas related to particular fish stocks or groups of stocks for a certain period, or the total allowable catch for nationals of a state during a specified time. Such regulations may also cover the regulation of fishing seasons and areas, the types, size, and number of fishing vessels permitted, the minimum size and type of fish and other species that may be taken, and the detailed information required from fishing vessels, including catch statistics, fishing effort data, and vessel position reports. In addition, regulations may require that part of the catch be landed in the ports of the coastal state, or establish terms and conditions relating to joint ventures or other cooperative arrangements, requirements for the training of personnel and the transfer of fisheries technology, e.g., enhancing the capacity of the coastal state to conduct fisheries research, and enforcement procedures.

¹⁹ Article 62, paragraphs (1), (2), and (3) of the 1982 United Convention on the Law of the Sea

²⁰ Article 62, paragraph (4) of the 1982 United Convention on the Law of the Sea

Coastal states are required to give due notice of conservation and management regulations.²¹

The 1982 Convention also regulates fish stocks that are shared or belong to the same species and occur within the Exclusive Economic Zones of two or more coastal states. In such cases, these states are required to seek, either directly or through the relevant sub-regional or regional organizations, agreement on the measures necessary to coordinate and ensure the conservation and development of such fish stocks.²² This obligation also applies to fishing activities conducted in areas adjacent to and beyond the Exclusive Economic Zones.

Article 64 of the Convention further regulates highly migratory species. Under this provision, coastal states and other states whose nationals fish for highly migratory species, as listed in Annex I, are required to cooperate directly or through appropriate international organizations. The purpose of such cooperation is to ensure the conservation of these species and to promote their optimum utilization throughout the region, both within and beyond the Exclusive Economic Zones. In regions where no relevant international organization exists, coastal states and other states whose nationals exploit such species in the area are required to cooperate in establishing such an organization and to participate in its activities.

The 1982 UNCLOS also regulates fisheries management on the high seas. These provisions are contained in Chapter VII, Part 2. Article 116 states that all states have the right for their nationals to engage in fishing on the high seas. This right is subject to the obligations arising from international agreements and to the interests of coastal states. The obligation of states to take measures concerning their nationals for the conservation of living resources on the high seas is set out in Article 117, which requires all states to take such measures, or to cooperate with other states in taking measures, as may be necessary for the conservation of living resources of the high seas.

Furthermore, Article 118 of the Convention regulates cooperation among states in the conservation and management of living resources on the high seas. It imposes an obligation on all states to cooperate in the conservation and management of these resources. States whose nationals exploit the same living resources, or different living resources in the same area, are required to enter into negotiations with a view to taking the measures necessary for the conservation of the living resources concerned. Where appropriate, they shall cooperate to establish sub-regional or regional fisheries organizations for this purpose.

Article 119 of the UNCLOS regulates the conservation of living resources on the high seas. In determining the allowable catch and establishing other measures related to the conservation of living resources on the high seas, states

²¹ Article 62, paragraph (4) of the 1982 United Nations Convention on the Law of the Sea

²² Article 63 of the 1982 United Nations Convention on the Law of the Sea

are required to adopt measures designed on the basis of the best scientific evidence available to them. These measures aim to maintain or restore populations of harvested species at levels capable of producing the maximum sustainable yield. In addition, conservation measures taken by states with respect to living resources on the high seas must take into account the effects on species associated with or dependent upon the harvested species, with the objective of maintaining or restoring populations of such associated or dependent species above levels at which their reproduction may become seriously threatened.

The above discussion illustrates that the 1982 UNCLOS regulates the authority of coastal states over fisheries resources located both within the Exclusive Economic Zone and on the high seas. However, these rights are accompanied by obligations as stipulated in the Convention, including the obligation to conserve living resources, to utilize them optimally, to determine the capacity of coastal states to exploit living resources, and to grant other states access to the sustainable surplus of allowable catch that cannot be fully harvested by the coastal state.

Coastal states that exploit the same fish stocks occurring within the Exclusive Economic Zones of two or more states are required to seek, through direct negotiations, agreement on the measures necessary to coordinate and ensure conservation. With respect to highly migratory fish species, coastal states and other states must cooperate directly or through relevant international organizations in order to ensure conservation and to promote the objective of optimal utilization of the same species throughout the entire region.

Likewise, landlocked states have the right to participate, on an equitable basis, in the exploitation of an appropriate part of the surplus of living resources in the Exclusive Economic Zones of coastal states within the same sub-region or region. Similar rights are also granted to geographically disadvantaged states. In addition to the Exclusive Economic Zone, the 1982 UNCLOS also governs fisheries on the high seas, where freedom of fishing is granted to all states. At the same time, the Convention imposes obligations on all states to cooperate with one another, including cooperation among states exploiting living resources in the same area, and to implement conservation measures for living resources on the high seas.

FAO Compliance Agreement

The Food and Agriculture Organization (FAO) initiated the establishment of the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas on November 24, 1993, more commonly known as the 1993 FAO Compliance Agreement. This agreement aims to lay the foundation for fishing practices on the high seas and to implement conservation measures for marine living resources by

strengthening the role of multilateral fisheries organizations.²³ The Agreement entered into force on April 24, 2003.²⁴

This Agreement is a continuation of the provisions of the UNCLOS, which stipulates that all states are obliged to take measures, or to cooperate with other states in taking measures, with respect to their nationals as may be necessary for the conservation of living resources on the high seas.²⁵ The Agreement also recognizes the rights and interests of all states to develop their fisheries sectors in accordance with their national policies, as well as the need to promote cooperation with developing countries in order to enhance their capacity to fulfill their obligations under the Agreement.²⁶

The 1993 FAO Compliance Agreement obliges States Parties to maintain records of fishing vessels operating on the high seas and to provide the FAO with information on the activities of registered vessels.²⁷ The Agreement also requires states to cooperate in the exchange of information, as regulated under Article V concerning international cooperation. The FAO Compliance Agreement was designed to strengthen the provisions of the 1982 UNCLOS relating to high seas fishing, particularly with regard to the effective control of fishing vessels operating on the high seas. Under this framework, flag states must ensure that all fishing vessels flying their flag comply with conservation and management measures for high seas fisheries. Conservation measures under the Agreement extend beyond fisheries management alone and include the maintenance of records of fishing vessels operating on the high seas, reporting such information to FAO, and fostering cooperation among states in information exchange. All of these elements are essential in combating IUU fishing practices. The FAO Compliance Agreement introduces a new concept in which fishing on the high seas is no longer regarded as an “unqualified right,” as the emphasis is placed on state duties rather than solely on the “freedom of fishing.”²⁸

UN Fish Stock Agreement

The United Nations Fish Stocks Agreement constitutes an implementation of certain provisions of the 1982 UNCLOS relating to the long-term conservation

²³Melda Kamil Adriadno, “Praktik Pembenderaan Kembali (*Reflagging*) Pada Kapal Penangkap Ikan”, *Jurnal Hukum Internasional*, Volume 1 Nomor 3 April (2004), p. 486

²⁴Mary Ann Palma, Martin Tsamenyi and William Ederson, *Promoting Sustainable Fisheries, The International Legal and Policy Framework to Combat Illegal, Unreported and Unregulated Fishing*, Leiden-Bosto; Martinus Nijhoff, 2010, p. 60.

²⁵The second preambular paragraph of the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, 1993 (FAO).

²⁶Alenia ketiga, *ibid*.

²⁷Melda Kamil Adriadno, *Op.cit.*, p. 486.

²⁸Lawrence Juda “*International Law and Ocean Use Management*” in HD Smith (Ed) *Ocean Management and Policies Series*, London; Loutledge, 1996, p. 276.

and sustainable use of straddling fish stocks and highly migratory fish stocks, in order to ensure that those provisions are effectively applied. This is stated in Article 2, which provides that “the objective of this Agreement is to ensure the long-term conservation and sustainable use of straddling fish stocks and highly migratory fish stocks through effective implementation of the relevant provisions of the Convention.”

The UN Fish Stocks Agreement entered into force on 11 December 2001, following its ratification by 30 states. By mid-October 2005, the Agreement had been ratified by 56 states, including the European Community. This Agreement places strong emphasis on the obligation to cooperate in the conservation of living marine resources by granting greater authority to regional fisheries management organizations. The Fish Stocks Agreement also provides for non-flag state enforcement and incorporates the dispute settlement procedures of the Law of the Sea Convention (LOSC) into the framework of regional fisheries management organizations.²⁹

The main elements of the Fish Stocks Agreement are as follows:³⁰

1. The agreement requires coastal states and states and distant water fishing states (DWFS) to ensure that the conservation and management measures, which are created within the EEZ and on the high seas, are compatible.
2. The agreement sets out general principles for the conservation and management of straddling fish stock and highly migratory fish stocks, including the precautionary approach, which parties to agreement are to apply on the high seas as well as within their EEZ.
3. The agreement specifies the duties of the flag states with respect to their vessel fishing on the high seas for straddling fish stocks and highly migratory fish stocks.
4. The agreement contains detailed rules on the establishment and operation of subregional or regional fisheries management organizations or arrangements (RFOs), which are to establish conservation and management measures on the high seas. Parties to the agreement are obliged to join RFOs or agree to comply with the measures they create. Otherwise, they will not be allowed to fish in the areas where these management and conservation measures apply.

²⁹ Tore Henriksen, Geir Honneland and Are Sydnes, *Law and Politics in Ocean Governance, The Un Fish Stock Agreement and Regional Fisheries Management Regimes*, Leiden, Netherlands; Martinus Nijhoff Publishers, 2006, p. 11-12.

³⁰ William Edeson, David Freestone, and Gudmundsdottir, *Legeslating for Sustainable Fisheries, A Guide to Implementing the 1993 FAO Compliance Agreement and 1995 UN Fish Stock Agreement*, Washington DC; The International Bank for Reconstruction and Development/ The World Bank, 2001, p. 22.

5. The agreement introduces innovative provisions on enforcement for non-flag states, and a new concept of port-state jurisdiction in respect of fishing vessels
6. The agreement contains detailed provisions on peaceful dispute settlement.

Conservation and management of straddling fish stocks and highly migratory fish stocks require coastal states and flag states conducting fishing activities on the high seas to fulfill their obligation to cooperate in accordance with the provisions of the Convention.³¹ This cooperation includes adopting measures to ensure the long-term sustainability of straddling and highly migratory fish stocks while prioritizing their optimal utilization. Such measures must be based on the best scientific evidence available and designed to maintain or restore fish stocks at levels capable of producing the maximum sustainable yield, as determined by relevant economic and environmental factors. These measures should also take into account the special requirements of developing states, fishing patterns, stock interdependence, and generally accepted minimum international and regional standards.

In addition, states are required to apply the precautionary principle in the conservation, management, and exploitation of straddling and highly migratory fish stocks. This includes assessing the impacts of fishing activities, other human activities, and environmental factors on stock levels, as well as on species that are part of the same ecosystem or are associated with or dependent upon existing fish stocks.

Coastal states and flag states are required to collect and share complete and accurate data on fishing activities, including vessel positions and catch composition, as well as to promote and conduct scientific research, develop appropriate technologies to support conservation, and implement and enforce conservation and management measures through effective monitoring, control, surveillance, and enforcement.

In accordance with Article 6, states are required to apply the precautionary principle broadly in the conservation, management, and exploitation of straddling and highly migratory fish stocks in order to protect marine resources and preserve the marine environment. Furthermore, states are required to exercise greater caution when information is uncertain, unreliable, or insufficient. The absence of adequate scientific information may not be used as a reason to postpone or undermine conservation and management measures.³²

³¹Pasal 5 *UN Agreement for The Implementation of The Provisions of The United Nations Convention on The Law of The Sea of 10 December 1982 Relating to The Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks* 1995.

³²William Edeson, David Freestone, and Gudmundsdottir, p. 30.

Article 6 paragraph (3) sets out the following measures that must be implemented in applying the precautionary approach:

- a) Improving decision-making for the conservation and management of fishery resources by obtaining and sharing the best scientific information available and by applying advanced techniques to address the risks arising from uncertainty;
- b) Establishing implementation guidelines and, on the basis of the best scientific information available, determining specific stock reference points and the actions to be taken when those reference points are exceeded;
- c) Taking into account, *inter alia*, uncertainties related to stock size and productivity, reference points, stock conditions in relation to those reference points, levels and distribution of fishing mortality, and the impacts of fishing activities on non-target species and associated or dependent species, as well as current and projected oceanic, environmental, and socio-economic conditions; and
- d) Developing data collection and research programs to assess the impacts of fishing on non-target species, associated or dependent species, and their environments, and adopting the necessary planning to ensure the conservation of such species and the protection of habitats of special concern.

Further, Article 6 paragraph (5) requires enhanced monitoring in order to detect changes in the status of both target and non-target stocks and to improve the effectiveness of conservation and management measures. States are also required to regularly review and refine these measures on the basis of new information. For new or exploratory fisheries, states must adopt conservation and management measures with particular caution, including, *inter alia*, catch limits and effort limits. Such measures shall remain in place until sufficient data are available to allow an assessment of the impacts of fishing on the long-term sustainability of the stocks concerned. Where possible, these measures should allow for the gradual development of fisheries.³³

If a natural phenomenon has a significant adverse impact on the status of straddling fish stocks or highly migratory fish stocks, states are required to adopt emergency conservation and management measures to ensure that fishing activities do not further aggravate such adverse impacts. States must also take emergency measures when fishing activities pose a serious threat to the

³³Articles 5 and 6(6) of the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (United Nations Fish Stocks Agreement).

sustainability of these stocks. Measures adopted on an emergency basis shall be temporary in nature and must be based on the best scientific evidence available.³⁴

Conservation and management measures for both straddling fish stocks and highly migratory fish stocks must also be applied in the high seas areas adjacent to waters under the jurisdiction of coastal states' Exclusive Economic Zones. In this context, coastal states and states fishing on the high seas have a duty to cooperate in order to achieve compatible measures relating to the relevant stocks.

In determining the compatibility of conservation and management measures, states shall: a) ensure that conservation and management measures adopted by coastal states within areas under their national jurisdiction are formulated with due regard to the related fish stocks occurring on the high seas; b) take into account measures previously agreed upon and applied for the high seas in accordance with the Convention by the relevant coastal states and states fishing on the high seas for the same stocks; c) take into account measures previously agreed upon and applied in accordance with the Convention by sub-regional or regional fisheries management organizations or arrangements for the same stocks; d) consider the biological unity and other biological characteristics of the stocks, as well as the relationships among stock distribution, fisheries, and the geographical particularities of the region concerned, including the extent to which the stocks occur and are fished within areas under national jurisdiction; e) take into account the dependence of the respective coastal states and states fishing on the high seas on the stocks concerned; and f) ensure that such measures do not result in harmful impacts on marine living resources as a whole.³⁵

In fulfilling their obligation to cooperate, states must make every effort to agree on compatible conservation and management measures within a reasonable period of time. If no agreement is reached within that period, the parties may resort to dispute settlement procedures. Pending agreement on the compatibility of conservation and management measures, states, in a spirit of understanding and cooperation, must make every effort to establish provisional and practical arrangements. Such provisional arrangements shall take into account the rights and obligations of all states concerned, shall not jeopardize or hinder the achievement of the final objectives, and shall not prejudice the outcome of any dispute settlement procedures.³⁶

Coastal states are also required to regularly inform states that conduct fishing activities on the high seas within the same sub-regional or regional area—either directly or through appropriate fisheries management organizations or arrangements of the conservation and management measures they have adopted

³⁴Article 6, paragraph (7)

³⁵Article 7, paragraphs (1) and (2)

³⁶Article 7, paragraphs (3)–(6)

for straddling fish stocks and highly migratory fish stocks within areas under their national jurisdiction. Similarly, states fishing on the high seas must regularly inform other interested states either directly or through relevant international organizations or sub-regional or regional fisheries management arrangements, or through other appropriate means of the measures they have adopted to regulate the activities of vessels flying their flag that engage in fishing for such stocks on the high seas.³⁷

Part Three of this Agreement concerns the regulation of mechanisms for international cooperation regarding the measures that must be taken by regional fisheries organizations at the international level for the conservation and management of straddling fish stocks and highly migratory fish stocks. This part also regulates the functions of sub-regional and regional fisheries management organizations, such as agreeing upon and complying with conservation and management measures to ensure the long-term sustainability of straddling and highly migratory fish stocks; agreeing on allowable catch allocations or levels of fishing effort; producing and evaluating scientific advice; assessing changes in the status of such stocks; and assessing the impacts of fishing on non-target, associated, or dependent species.

Regional and sub-regional fisheries organizations also function to agree on standards for the collection, reporting, verification, and exchange of fisheries data for those stocks; to promote and carry out scientific assessments of fish stocks and relevant research; and to disseminate the results of such assessments and research. In addition, international, regional, and sub-regional organizations are required to formulate adequate cooperation mechanisms for effective monitoring, control, surveillance, observation, and enforcement, as well as to ensure full cooperation from relevant national authorities and industries in implementing the recommendations and decisions of such organizations or arrangements and in carrying out the conservation and management measures adopted by international organizations.

This Agreement also regulates matters concerning new membership or participation, as well as the transparency of the activities of sub-regional and regional fisheries management organizations. Part IV of the Agreement addresses non-member states and states that are not participants in international fisheries organizations and are not parties to this Agreement. Such states are not exempt from the obligation to cooperate in the conservation and management of straddling fish stocks and highly migratory fish stocks.³⁸

Those states must not authorize vessels flying their flag to conduct fishing operations targeting straddling or highly migratory fish stocks that are subject to conservation and management measures adopted by such organizations or

³⁷Article 7, paragraphs (7)–(8)

³⁸Article 17

arrangements. Non-participating states are also required to exchange information relating to the activities of their fishing vessels engaged in fishing operations for those stocks. They must take measures that are consistent with this Agreement and with international law.

The Fish Stocks Agreement constitutes a basic framework for the conservation and management of straddling fish stocks and highly migratory fish stocks. The Agreement sets out guidelines for the establishment of regional fisheries organizations and defines the legal authority of such organizations. Regional fisheries organizations play a crucial role in the implementation of the provisions of the Fish Stocks Agreement, and the effective implementation of this Agreement at the regional level can be achieved when each state ensures that straddling and highly migratory fish stocks within the exclusive economic zone of coastal States are properly conserved and managed.

The Agreement also requires cooperation among all states in the regulation of straddling and highly migratory fisheries through participation in regional fisheries organizations. In addition, it regulates the form and functions of regional fisheries organizations in the future. Regional fisheries organizations are expected to serve as forums for states to formulate and comply with rules and procedures concerning the collection of scientific data, monitoring, control, surveillance, and enforcement of such regulations.

The accuracy of scientific data is a fundamental requirement for effective fisheries management. With regard to the collection and exchange of scientific data related to straddling and highly migratory fish stocks, Article 14 of the UN Fish Stocks Agreement provides that states shall collect and exchange scientific, technical, and statistical data relating to fisheries for such stocks, ensure that the data collected in sufficient detail to allow for effective stock assessment, and provide the data in an appropriate manner to meet the requirements established by regional and sub-regional fisheries organizations, as well as take appropriate measures to verify the accuracy of such data.

States are also required to cooperate, either directly or through international organizations, to agree on data specifications and formats established or developed by international organizations, and to develop and exchange analytical techniques and stock-assessment methodologies in order to strengthen measures for the conservation and management of straddling fish stocks and highly migratory fish stocks.³⁹

Article 18 of the Fish Stocks Agreement concerns the obligations of flag states that are parties to the Agreement. This provision relates to the concept of flag State responsibility for fishing vessels operating on the high seas and sets out specific obligations that must be adopted and implemented by flag states before

³⁹Article 14

their nationals are authorized to engage in fishing activities on the high seas and in areas managed by fisheries organizations.

The above provisions appear to be intended not only for fishing vessels targeting straddling fish stocks and highly migratory fish stocks, but for all fishing vessels operating on the high seas. This can be seen from the wording of the provision stating that “a State whose vessels fish on the high seas shall take such measures...”⁴⁰ This formulation indicates that the obligation applies to all fishing vessels, and is not expressly limited to vessels fishing for straddling or highly migratory fish stocks.

Article 18 paragraph (1) provides that a state has responsibility for all fishing vessels flying its flag in accordance with the rules set out in the Fish Stocks Agreement. The flag state shall ensure that all vessels flying its flag and operating on the high seas comply with conservation and management measures adopted by subregional and regional fisheries organizations, and that such vessels do not engage in activities that undermine the effectiveness of those measures.

Article 18 paragraph (2) of the Fish Stocks Agreement also stipulates that a flag state shall not authorize its vessels to fish on the high seas unless it is satisfied that it is able to exercise effectively its responsibilities in accordance with the 1982 UNCLOS and the Fish Stocks Agreement. Further measures that must be taken by states with regard to vessels flying their flag and fishing activities on the high seas are as follows:

1. States shall maintain records of fishing vessels authorized to fish on the high seas and shall provide access to information contained in such records upon request by directly interested states, subject to the provisions of the flag state’s national legislation concerning the disclosure of information.⁴¹
2. States shall require fishing vessels and their gear to be marked in accordance with uniform and internationally recognized vessel and gear marking systems, such as the FAO Standard Specifications for the Marking and Identification of Fishing Vessels.⁴²
3. States shall require timely recording and reporting of vessel positions, target and non-target species caught, fishing effort, and other relevant fisheries data, in accordance with the standards of subregional, regional, and global organizations for the collection of such data from fishing vessels.⁴³
4. States shall verify catches of both target and non-target species through means such as observer programs, inspection schemes, landing reports,

⁴⁰Article 18, paragraph (1) of the UN Fish Stocks Agreement

⁴¹ Article 18, paragraph (3)(c)

⁴² Article 18, paragraph (3)(d)

⁴³ Article 18, paragraph (3)(e)

transshipment monitoring, and the monitoring of landings and market statistics.⁴⁴

5. States shall carry out monitoring, control, and surveillance of fishing vessels flying their flag, their fishing operations on the high seas, and related activities.⁴⁵
6. States shall regulate transshipment on the high seas in order to ensure that the effectiveness of conservation and management measures is not undermined.⁴⁶
7. States shall regulate fishing activities to ensure compliance with conservation and management measures adopted by subregional, regional, or global organizations, including measures aimed at minimizing catches of non-target species.⁴⁷
8. States shall ensure that national monitoring, control, and surveillance systems applied to vessels flying their flag are consistent with those adopted by subregional, regional, or globally agreed systems.⁴⁸

FAO Port State Measures Agreement

Based on the provisions of international law, a state has full sovereignty over its ports, with limited exceptions such as the obligation not to discriminate in the treatment of vessels of different nationalities and the right to take necessary measures to prevent any violations of the conditions prescribed for the entry of such vessels. This is as regulated under Article 25 of the 1982 UNCLOS.⁴⁹

The coastal state also has rights over foreign vessels present in its ports, as stipulated in Article 218 of the 1982 UNCLOS.⁵⁰ This article grants the coastal state the authority to conduct inspections and initiate legal proceedings against a vessel where there is sufficient evidence that the vessel has committed discharges in violation of applicable international rules and standards, whether such violations occurred in internal waters, the territorial sea, or the exclusive economic zone of the port State.

The FAO has approved the development of a legally binding agreement in the field of law concerning port state measures to reduce IUU fishing. Considering the substance of the FAO Model on Port State Measures to prevent, deter and eliminate IUU fishing, the agreement encompasses the integration of ports with other relevant measures to address IUU fishing, cooperation and information exchange among national authorities and states, requirements prior to port entry, port use, port inspection procedures, the role of flag states, provisions for

⁴⁴ Article 18, paragraph (3)(f)

⁴⁵ Article 18, paragraph (3)(g)

⁴⁶ Article 18, paragraph (3)(h)

⁴⁷ Article 18, paragraph (3)(i)

⁴⁸ Article 18, paragraph (4)

⁴⁹ Article 25, paragraph (2) of the 1982 UNCLOS

⁵⁰ Article 218 of the 1982 UNCLOS

developing states, dispute settlement, arrangements with non-participating states, as well as monitoring and review of the implementation of the agreement.

The FAO Port State Measures Agreement shall enter into force thirty days after the date of adoption or the deposit with the depositary of the twenty-fifth instrument of ratification, acceptance, approval, or accession.⁵¹ Through this agreement, states establish coordination procedures, facilitate cross-sectoral cooperation, data collection, reporting and information systems in accordance with RFMO standards, licensing and fish permits, the promotion of regional and national fisheries in line with RFMO standards, as well as international standards on labor, vessel safety, and pollution prevention.⁵² If this agreement is widely ratified by port states worldwide, it will undoubtedly strengthen the actions of states and the international community at the global level to address, reduce, or, where possible, eliminate IUU fishing, thereby enabling fisheries conservation and management measures to be implemented to their fullest extent.

The provisions contained in international law have been ratified by Indonesia. This may be interpreted to mean that these rules are applicable within the management of fisheries in Indonesia. Aceh Province is one of the provinces within the Unitary State of the Republic of Indonesia that is granted special autonomy. The granting of broad autonomy to regional governments is expected to enhance competitiveness while upholding the principles of democracy, equity, justice, special status, and regional particularities, as well as regional potential and diversity within the framework of the Unitary State of the Republic of Indonesia.⁵³

Miriam Budiardjo describes that the essential nature of a unitary state lies in the fact that its sovereignty is indivisible and unlimited, as guaranteed by the constitution. Although regions are granted authority to regulate and manage their own territories, this does not mean that regional governments are sovereign, since supervision and supreme authority remain in the hands of the central government.⁵⁴ Part of the central government's authority is delegated to regional governments, giving rise to autonomous rights. The relationship of authority between the central government, as the party granting authority, and autonomous regions, as the recipients of authority, is structured based on the principles of

⁵¹Article 29 of the Agreement on Port State Measures: *"This Agreement shall enter into force thirty days after the date of deposit with the Depositary of the twenty-fifth instrument of ratification, acceptance, approval or accession ..."*

⁵²Dina Sunyowati, Port State Measures dalam Upaya Pencegahan terhadap IUU Fishing di Indonesia, in Idris, et al. (Eds.), *Peran Hukum Dalam Pembangunan di Indonesia Kenyataan, Harapan dan Tantangan*, Bandung; Remaja Rosda Karya, 2013, p. 444.

⁵³ Reynold Simandjuntak, "Sistem Desentralisasi Dalam Negara Kesatuan Republik Indonesia Perspektif Yuridis Konstitusional," *De Jure, Jurnal Syariah dan Hukum*, Vol. 7 No. 1, June (2015), p. 58.

⁵⁴ *Ibid.*

decentralization,⁵⁵ deconcentration,⁵⁶ and the principle of *medebewind* (co-administration or assistance tasks).⁵⁷

The division of authority between the central and regional governments is explicitly regulated in Article 18 paragraph (2) of the 1945 Constitution of the Republic of Indonesia, which states: “Provincial, district, and municipal governments shall regulate and administer their own governmental affairs in accordance with the principles of autonomy and assistance tasks.” This provision affirms regional governments as autonomous governmental units within the Unitary State of the Republic of Indonesia. Autonomy inherently requires independence or discretion. It is therefore reasonable to say that the essence of autonomy is independence, although it does not constitute freedom in the sense of a fully independent entity (*zelfstandigheid* rather than *onafhankelijkheid*).⁵⁸

In light of the foregoing, it may be concluded that Aceh Province, as part of the Republic of Indonesia and as a recipient of special autonomy, may exercise fisheries management authority within the scope conferred upon it. This is reflected in the provisions of Law Number 44 of 1999 concerning the Implementation of the Special Status of the Special Region of Aceh. The third section of this chapter regulates the administration of customary life, stating that “the region may establish various policies aimed at empowering, preserving, and developing customary practices within its territory that are inspired by and in accordance with Islamic law. The region may also establish existing customary institutions in accordance with their respective positions at the provincial, district/municipal, subdistrict, settlement, and village or *gampong* levels.”⁵⁹

The Aceh Government Law: Regulation of Fisheries Management in Aceh

Fisheries management in Aceh Province, in addition to being regulated by various laws and regulations as mentioned above, is also governed by Law Number 11 of 2006 concerning the Government of Aceh (hereinafter referred to as the UUPA). Article 156 stipulates that “the Government of Aceh and the district/municipal governments manage natural resources in Aceh, both on land and in the marine areas of Aceh, in accordance with their respective authorities.” The management referred to includes planning, implementation, utilization, and supervision of business activities, which may take the form of exploration,

⁵⁵Reynold Simanjuntak, p. 60.

⁵⁶Reynold Simanjuntak, p. 60.

⁵⁷Eko Noer Kristiyanto, “Pemilihan Gubernur Tak Langsung Sebagai Penegakan Eksistensi Gubernur Sebagai Wakil Pemerintah Pusat di Daerah”, *Jurnal Rechts Vinding*, Vol. 1 No. 3, (2012), 398; Andi Pitono, “Asas Dekonsentrasi dan Asas Tugas Pembantuan dalam Penyelenggaraan Pemerintahan”, *Jurnal Kebijakan Publik*, Vol. 3, No. 1 March (2012), p. 14.

⁵⁸Bagir Manan, *Menyongsong Fajar Otonomi Daerah*, Yogyakarta: Pusat Studi Hukum Universitas Islam Indonesia, 2nd Ed., September 2002. p. 26.

⁵⁹Articles 6 and 7 of Law No. 44 of 1999

exploitation, and cultivation. The natural resources concerned include the sectors of mining, forestry, fisheries, and marine affairs, which are to be carried out by applying the principles of transparency and sustainable development. Likewise, Article 162 specifically regulates fisheries and marine affairs under Part Five of Chapter XXII on the Economy.

Articles 156 and 162 demonstrate that the Government of Aceh and the district/municipal governments within Aceh Province, in accordance with their respective authorities, are entitled to manage living natural resources in the marine areas of Aceh, including fisheries management. Such management includes conservation, administrative regulation and licensing of fishing and/or aquaculture activities, spatial planning of marine areas, coastal zones, and small islands, law enforcement with respect to regulations issued for marine areas under their authority, and participation in safeguarding the sovereignty of the Unitary State of the Republic of Indonesia. The management of natural resources in these marine areas shall be conducted with due regard to the principles of sustainable development and the preservation of the marine environment.

Article 165 paragraph (3) stipulates that “the Government of Aceh and the district/municipal governments, in accordance with their respective authorities and based on nationally applicable norms, standards, and procedures, are entitled to grant:

- a. licenses for the exploration and exploitation of general mining;
- b. licenses for the conversion of forest areas;
- c. fishing licenses up to a maximum distance of 12 nautical miles measured from the coastline seaward and/or toward archipelagic waters for the province, and up to one-third of the provincial jurisdictional area for district/municipal governments;
- d. licenses for the operational use of fishing vessels of all types and sizes;
- e. licenses for the use of surface water and seawater;
- f. licenses related to forest management and utilization; and
- g. licenses for local operators in the field of telecommunications.”

These provisions indicate that, under the UUPA, the Government of Aceh (at the provincial level) has the authority to issue fishing licenses up to a distance of 12 nautical miles from the coastline, while district/municipal governments are authorized only up to one-third of the provincial distance, or in other words, up to 4 nautical miles. Other licenses that may be issued in accordance with the respective authorities include licenses for the operational use of fishing vessels of all types and sizes, as well as licenses for the use of surface water and seawater within the specified distances.

Another regulation is Aceh Qanun (regional bylaws) Number 7 of 2010 concerning Fisheries, which governs the role of the *Lembaga Adat Laut* (Sea Customary Institution) and *Hukum Adat Laot* (Customary Sea Law). Article 76 paragraph (1) states that “the sea customary institution has the authority and

responsibility for the implementation of maritime customs and customary sea law.” Paragraph (2) provides that “customary sea law concerning the management and utilization of fishery resources remains applicable insofar as it does not conflict with statutory laws and regulations.” Furthermore, Article 7 paragraph (1) stipulates that the sea customary institution has the right to manage the *lhok* ((fishing territories or bays) in accordance with customary sea law, and paragraph (2) states that “the management boundary as referred to in paragraph (1) extends up to one *leuen pukat* (approximately 200 meters), measured at the highest tide.”

The authority regulated under the UUPA to manage fishery resources within the maritime territory of Aceh Province is quite extensive. This is inseparable from the fact that most of its territory borders the sea, coastal areas, and small islands, which constitute sources of livelihood for the community. Their utilization must therefore be pursued for the prosperity of the people of Aceh, with priority given to those whose livelihoods are highly dependent on fishery resources.

The existing body of laws and regulations governing fisheries management in Aceh Province is sufficiently comprehensive to provide direction for the sustainable management of fisheries. Regulations at the national level have also aligned with international legal frameworks, both in the form of hard law and soft law instruments. Under *hukum adat laot* (customary sea law), an act is considered a violation of customary law if it disturbs the balance of the physical world and the spiritual world, or if it disrupts the material well-being of an individual or a group as a unified community. When such a disturbance occurs, it gives rise to a response in the form of a customary sanction. The nature and extent of this response are determined according to customary law, as the purpose of the reaction is to restore or repair the disturbed balance.⁶⁰

Panglima Laot: Local Wisdom in Aceh’s Fisheries Management

Within Aceh’s customary sea law, there is a written agreement issued by the *Panglima Laot*, dated June 6–7, 2000, in Banda Aceh, concerning customary sea (*adat laot*) regulations. Unlike Western legal systems, which consider an act unlawful only when it violates a statutory provision and impose punishment as a form of state retribution against the offender, customary law operates differently. Western law also distinguishes between criminal and civil law. In customary law, however, an act is deemed a violation when it disturbs public peace and social order. In such cases, customary leaders may take measures to restore the situation to its original state, and at that moment, new customary norms may emerge.

⁶⁰Syamsuddin Daud, *Adat Meulaot (Adat Menangkap Ikan Di Laut)* (Banda Aceh: Majelis Adat Aceh, 2014), p. 33–34; Laylay Alfaytouri Baddah et al., “Bringing Fishermen Together Through the Customary Maritim Law of the Sea in the South West Aceh Region: Al-Shulh’s Perspective,” *Legitimasi: Jurnal Hukum Pidana Dan Politik Hukum* 13, no. 2 (2024).

Violations of *hukum adat laot* include all acts contrary to previously established customary sea regulations, such as: a prohibition on going to sea for three days after the *kenduri laot* (sea thanksgiving ceremony), calculated from sunrise on the day of the ceremony until sunset on the third day; a prohibition on fishing on Fridays, for one day, calculated from sunset on Thursday until sunset on Friday; a prohibition on fishing during Eid al-Fitr for three days, calculated from sunset on the eve of Eid (*meugang*) until sunset on the third day of the holiday; a prohibition on fishing during Eid al-Adha for three days, calculated from sunset on the day of *meugang* until sunset on the third day of the holiday (adjusted to the pilgrimage activities of Hajj); a prohibition on fishing on Indonesia's Independence Day, August 17, for one day, calculated from sunset on August 16 until sunset on August 17; and a prohibition on fishing on December 24, for one day, to commemorate the earthquake and tsunami disaster that struck Aceh in 2004. December 24 is observed as a day of mourning to honor the souls of the tsunami victims, many of whom were from fishermen's families, in remembrance of the tragedy of the 2004 Indian Ocean earthquake and tsunami.

These prohibited fishing days constitute obligations that must be observed by all fishermen in Aceh. Beyond being mandatory, these no-fishing days also provide space and time for fish to reproduce. If fish are harvested continuously without intervals, fish stocks may decline or even become depleted, as they would have no opportunity to spawn. Such a situation would threaten future human life, particularly in terms of protein supply from fisheries, since fish are a primary food source for coastal communities.

The enforcement of the Friday fishing prohibition carries not only spiritual significance allowing fishermen to perform Friday prayers—but also practical and social benefits. The day provides time to repair damaged fishing gear, spend time with family, and engage in social activities within the *gampong* (village). It has become a tradition in Aceh, especially in coastal areas, that Friday mornings are devoted to community service activities such as *gotong royong* (mutual cooperation) to clean the environment, the *meunasah* (village prayer hall), mosques, roads, and sometimes to attend meetings among fishermen.⁶¹

Adat laot was originally an unwritten set of rules, similar to customary practices known as *reusam*, and applied within specific *lhok*. Differences may exist between one *lhok* and another. However, since the 1970s, based on agreements reached through deliberations among the *Panglima Laot* throughout Aceh, *adat laot* has been standardized and declared applicable across the entire Aceh region.

⁶¹Sanusi M Syarif, *Leuen Pukat Dan Panglima Laot Dalam Kehidupan Nelayan Di Aceh* (Banda Aceh: Yayasan Rumpun Bambu, 2003), 26; Wahyuddin et al., "The Role Of Government In Illegal Fishing Prevention To Increase Fishermen's Economic Welfare In Aceh Province," *Jurnal Ilmiah Peuradeun* 7, no. 2 (2019).

The regulation of fishing procedures at sea is known as *meupanyang*. It governs matters concerning the competition for fish by and among boats, the installation of *tuas* (anchoring structure), *rumpon* (fish aggregating device/FADs), and *bubu* (fish traps), issues relating to the placement of *tuas/unjam* (anchored fish-attracting structures), the taking of fish from another boat's *tuasan*, the capture of *benur/nener* (lobster larvae/juvenile fish), as well as trial procedures and legal sanctions.

Fishing procedures are regulated through the determination of restricted fishing zones for certain categories of fishing fleets. In addition, they are based on customary rules regarding who is granted the first opportunity to catch fish. Restricted fishing zones apply in certain waters, particularly coastal waters where fishermen still use beach seines (*pukat darat*). In these areas, from the zero point up to 300 meters seaward constitutes the operational zone for beach seine fishing. Beyond this zone and extending to the open sea, the rule of priority applies: whichever boat first gives a signal indicating that it has sighted a school of fish has the right to conduct the initial catch.

As a signaling symbol at the beginning of fishing, fishermen often notify other boats by raising a *tudung* (a wide head covering, also known as *krah*) as a sign that they have spotted a school of fish and intend to fish in that area. With regard to signaling fish to be caught, several conditions determine which boat holds the right to capture the fish in question.

If a school of fish is signaled with a *krah* by one Acehnese seine boat (*pukat Aceh*), while another seine boat is already present in the area, and yet another boat is positioned beside the school of fish, the boat closest to the fish is not automatically entitled to catch them. If the nets have been cast in sequence—first, second, and third and it is the third net that successfully encircles and catches the fish (*meulabuh*), then the catch must be divided equally between the first and the third boats.

The right to claim a school of fish is marked by a signal known as *krah*, declared by the *pawang pukat* (net leader) to the crew by calling out “*krah hai rakan*” (“*krah, friends!*”) or by raising or waving a *tudung* (a wide head covering) so that it can be seen by other boats in the vicinity. Another signal is striking the water with a pole at the end of the net while herding the school of fish that has been located an action referred to as *mate*.

These provisions demonstrate that the party entitled to the school of fish is the one who first declares *krah*, not necessarily the one physically closest to the fish. Even if, while being pursued and encircled by the net, the fish move near another boat, that boat is prohibited from casting its net if another boat has already lowered its net first.

If a motorboat encounters a school of fish and immediately circles it, but the school then disappears from sight (dives), while an Acehnese seine boat (*pukat Aceh*) is nearby, the applicable rule is as follows: if the school of fish reappears

beside the motorboat, the fish remain the property of that boat. However, if the school reappears behind the *pukat Aceh* boat while the original motorboat is pursuing it in a different direction, and the school is approximately one *leun pukat* (about 200 meters) from the *pukat Aceh* boat, then the school becomes the right of the *pukat Aceh* boat. In such a case, priority belongs to whichever *pukat* boat first declares *krah* over the fish.

These provisions clearly indicate that when a school of fish appears near a boat, that boat has the right to catch it. However, if the school subsequently disappears and reappears behind a *pukat Aceh* boat while the original boat is chasing in the opposite direction, the right to the fish shifts to the *pukat Aceh* boat. This demonstrates that rights over a school of fish may transfer rapidly depending on the circumstances.

If a motorboat is in the process of *laboh* (casting and encircling the fish with its net), and the *pukat Aceh* boat is unable to press in or otherwise secure rights to the catch, the customary agreement under *hukum adat laot* provides the following rule: if the fish are encircled solely by the motorboat, a *pukat Aceh* boat may obtain a share of the catch by being the first to approach the *umbai* (end section of the net). In such a case, the catch is divided equally between them. If the fish are brought ashore solely by the motorboat, any boat that remains at sea is still considered a partner (*kongsi*). This reflects the principle that all parties may receive a share of the fish being caught, provided that their actions comply with the prevailing customary rules.

If a school of fish has been declared *krah* by a *pukat Aceh* boat and is being pursued by other *pukat* boats intending to *laboh* (cast their nets around) the school, but weather or natural conditions make it impossible for the pursuing *pukat Aceh* boat to successfully encircle the fish, another motorboat may assist in casting the net—provided it has obtained permission from the *pawang pukat* (net leader) of the pursuing boat. If the school of fish is successfully encircled, the catch is divided into three shares: one share for the boat that first declared *krah*, one share for the boat that pursued the fish, and one share for the assisting motorboat that helped in the *meulaboh* (net casting), on the condition that it is able to reach the *umbai* (end section of the net).⁶²

These provisions demonstrate the presence of values such as justice, cooperation, and mutual assistance (*gotong royong*) in the customary procedures of fishing at sea. The party that first sights and declares its intention to catch a school of fish is granted the initial opportunity to do so. However, if weather or natural conditions prevent that party from succeeding, another boat may carry out

⁶²Syarif.; Badruzzaman Ismail, *Principles of Customary Law* (Banda Aceh: Aceh Traditional Council, 2009); Rusjdi Ali Muhammad and Dedy Sumardi, *Kearifan Tradisional Lokal: Penyerapan Syariat Islam Dalam Hukum Adat Aceh* (Banda Aceh: Dinas Syariat Islam Aceh, 2011).

the catch, and the resulting proceeds are shared among the boat that first sighted the fish, the boat that caught them, and the boat that assisted in the operation.

If a motorboat tows a *pukat Aceh* boat and encounters a school of fish, the towed *pukat* boat may not declare *krah* over the fish it has sighted until it detaches itself from the towing motorboat. If a motorboat using a *pukat Aceh* net is in the process of *laboh* and is assisted by a *kulek* (small traditional wooden boat), the fish caught are brought ashore by the *kulek*. However, if the fish are transported ashore solely by the motorboat, the compensation for the assistance provided by the *kulek* is 10 percent of the total catch. A *kulek* boat is a kind of “sea rickshaw” used to transport fish catches from the sea to the shore. In addition to the term *kulek* boat, there is also the term “*meu tek*” (literally meaning “to nurse”), which refers to a practice in which a small boat, from the time of departure, remains directly attached to a larger boat. During the *laboh* process, this small boat assists in guarding the net to prevent it from becoming entangled in the motorboat’s propeller; if entanglement occurs, its crew will dive into the water to free the net. This assisting boat is entitled to receive 10 percent of the fish it helps transport ashore, along with an additional portion of fish to take home for household consumption.⁶³

If a *pukat Aceh* boat is in the process of *laboh*, and then a motorboat and another *pukat Aceh* boat arrive at the location and jointly assist the boat that is already *laboh*, the compensation for the assistance provided by the motorboat and the assisting *pukat Aceh* is that the total catch is divided into two equal parts. Of this division, one half goes to the original boat conducting the *laboh*, while the other half—allocated to the assisting parties—is further divided equally between the motorboat and the assisting *pukat Aceh*. In this way, all parties receive a share of the catch.

If a school of fish is sighted by several boats and they all pursue it, and upon reaching the location one of the boats is in the most suitable position to *laboh* the fish, then the boat that successfully casts its net receives one-half of the total catch. The remaining half is divided among the other boats that were able to maintain their position during the pursuit. For any boat whether using a *pukat Aceh* or a *pukat langgar* if its *umbai* has already been cast but no fish are caught, its right to the fish being encircled is considered lost or void.⁶⁴

⁶³Meta Suriyani Zaki Ulya, “Re-Strukturisasi Kelembagaan Panglima Laot Sebagai Hakim Adat Laot Di Aceh,” *Jurnal RechtsVinding* 12, no. 3 (2023); Muhammad Insan Tarigan and Heru Saputra Lumban Gaol, “Panglima Laot and the Fourth Precept of Pancasila: Traditional Ocean Governance in Aceh,” *Lex Portus* 11, no. 1 (2025).

⁶⁴Heru Susetyo et al., “Panglima Laot and Contributions in Upholding Customary Law in Aceh’s Maritime Regions,” *Indonesian Journal of Socio-Legal Studies* 3, no. 1 (2023); Riadhush Sholihin et al., “Resolving Illegal Fishing in Rumpon Unjam: The Strategic Role of Panglima Laot in Aceh’s Customary Law,” *Legitimasi: Jurnal Hukum Pidana Dan Politik Hukum* 13, no. 2 (2024).

For any nets that converge closely (*mesak-sak*), the right to *laboh* belongs to the boat whose net first “falls in luck” (*jatuh untung*). A boat that casts its net later must hold back its net and may only receive a share of any surplus obtained from the partnership catch of the boat that successfully performs the *laboh*. It is strictly prohibited to cast a net within another boat’s fishing area (*halaman pukat*) without first giving a signal to the boat whose *umbai* was deployed earlier. To avoid resentment between motorboats and *pukat Aceh* boats, the practice known as *ikan nyirat* has been abolished. In joint fishing operations (*kongsi*), a boat that assists in the *laboh* is entitled to 5 percent of the total catch as its share.⁶⁵

If a motorboat is in the process of *laboh* and requires assistance because the fish cannot be secured without help from another boat, it may only request assistance from the boat that first arrives and passes the *umbai* or bow of the boat in need of help. The catch is then divided equally between them after deducting the 5 percent *hak laboh* (right to cast the net). A motorboat that needs assistance must seek help from the nearest *pukat* motorboat; it is not permitted to request assistance from small boats whose function is solely as transport vessels (sea rickshaws or fishing boats), unless there is no *pukat* motorboat in its vicinity. It is strictly prohibited to push in or forcibly encroach (*peupok*) during fishing operations. If a motorboat has already performed *laboh* (i.e. its *umbai* has fallen), any subsequent boat is forbidden from casting its net inside or outside the area of that net for the same school of fish this situation is referred to as *mesak-sak pukat*. Any violation of this rule will result in sanctions: the entire catch will be confiscated, the 5 percent *hak laboh* will be returned, and the violating party is obliged to repair all damage to the first boat. The confiscated catch is handed over to the first boat.⁶⁶

The rules governing the process of fishing at sea described above reflect the values upheld within Aceh’s fishing communities. The substantive content of these rules embodies the principle of justice: when a school of fish is found at sea and other boats are present nearby, the catch is shared among the boats involved in the fishing effort, in accordance with the prevailing circumstances.

Another value reflected in these rules is solidarity. When a school of fish is sighted, the boat that first declares *krah* or signals its intention to cast the net is granted the right to make the initial catch. However, this right does not disregard other nearby seine boats. As long as the established principles of *hukum adat laot* are followed, those other boats may still receive a share of the catch. The values of togetherness and mutual cooperation (*gotong royong*) are also evident in

⁶⁵Michael Boyland, Agus Nugroho, and Frank Thomalla, “The Role of the Panglima Laot Customary Institution in the 2004 Indian Ocean Tsunami Recovery in Aceh,” 2017.

⁶⁶Mahendra Pudji Utama et al., “Transformation of Panglima Laot in Aceh: From Punggawa to Customary Institution,” in *E3S Web of Conferences*, vol. 202, 2020; Mujiburrahman et al., “Panglima Laot: Maritime Cultural Heritage and Sustainability of the Coastal Environment in Aceh,” in *E3S Web of Conferences*, vol. 317, 2021.

provisions stating that if a net is being cast (*meulaboh*) and another boat arrives to assist, the resulting catch will still be shared with the assisting boat.

The norms practiced by fishermen under *hukum adat laot* constitute a way of life that has been embraced and transmitted from one generation to the next. Over time, these good living practices have been formalized into rules and norms that are disseminated, recognized, understood, and taught within Aceh's fishing communities.

In practice, these customary provisions are implemented by the fishing community at sea. Nevertheless, the general fisheries laws applicable throughout Indonesia also remain binding upon fishermen in Aceh Province. Thus, Acehese fishermen engaged in marine fishing are subject to and must respect two legal frameworks: customary law (*hukum adat laot*) and national fisheries law.

Conclusion

Sustainable fisheries management is an issue that has been recognized internationally as a mandatory obligation and, at the national level, is governed by various laws and regulations. Aceh Province, as part of the State of Indonesia, has the authority to implement sustainable fisheries management, both under national legislation and under Aceh Qanun that specifically regulate this matter. In addition to government-led management, fisheries management in Aceh is also guided by the customary institution known as *Panglima Laot*, which has its own institutional structure and regulatory system, particularly in governing fishing activities at sea. The local wisdom embodied in this institution reflects the values of justice, solidarity, and sustainability. This institution serves an essential role in addressing disputes within fishing communities. These customary rules can complement existing national and international legal frameworks governing fishing activities. If effectively implemented, the rules can enhance assurances of sustainability and help ensure that fisheries resources remain preserved and sustainable over the long term.

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