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Behind The Veil of Blue Ecolabelling: Dismantling the Juxtaposition of International Regulations on Sustainable Oceans

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Abstract
Ecolabelling was introduced as an alternative consumer-facing mechanism in the market to combat certain threats against the environment and to promote sustainable usage of its components. More importantly in the case of Indonesia as a maritime country, fishery ecolabels can be used to build sustainability to its marine environment which can be vital for its economy in the future. To this end, this article constructs an exposition of ecolabels from a legal perspective in the international and local contexts that is still absent in Indonesia's legal research. This study employs normative legal research methodology in its data collecting and analysis. The article in its analysis will argue that while the international standards provided for blue ecolabels are robust, its genuine implementation can only be realized in the domestic scene, where local aspects can be considered. This research in the end finds that an ecolabelling of fisheries in Indonesia is urgently needed, concludes that ecolabelling in fisheries can help the state in realizing its international commitments, and recommends its urgent creation in the national scene.

Keywords: blue ecolabels; sustainable development; marine conservation; grass-root regulations; people-centered economy; domestic implementation of ecolabels.

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A. INTRODUCTION

The United Nations (UN) defined the Blue Economy (BE) as an economic system based on sustainable marine practices that fundamentally aims to accomplish human well-being as well as social justice while considerably lowering environmental threats and the scarcity of ecological resources in the oceans[3]. According to the World Wildlife Fund (WWF), sustainable BE practices can improve food security, employment, and equity for current and future generations.[4] BE was recently translated into Indonesia as the Global Maritime Fulcrum (GMF) concept, which was concerned with the growth of the entire maritime system.[5] Led by the National Development Planning Agency, it focuses on how to realize Indonesia's vast marine potential, which is in desperate need of infrastructure development and economic integration[6].

Indonesia, after China, is currently the world's second-biggest supplier of capture fisheries, with a production of 7,99 million tons per 2022.[7] Thus, it is obvious that the seafood industry is a most important and vital sector of Indonesia's BE[8]. However, despite Indonesia's increasing seafood industry, its application remains difficult, with overcapacity, harmful fishing, and illicit fishing being major issues[9]. Furthermore, the global increase in seafood consumption was already threatening fish populations. According to the World Bank and the Food and Agriculture Organization (FAO), 75% of global fishery resources are constantly threatened with depletion due to unsustainable and environmentally destructive fishing practices[10] . The 1992 Earth Summit[11] introduced ecolabels, a certification system initiated by governmental or non-governmental entities aimed at providing consumers with information regarding the environmental consequences associated with a particular product[12], as a vehicle of sustainable development to help address such issues. Through its variation of the fishery-centered “blue ecolabels,” ecolabels can support marine conservation, and minimize detrimental fishery practices[13]. Ecolabels have also been acknowledged as a significant policy instrument in the pursuit of many Sustainable Development Goals (SDGs), more specifically SDG 14.4 which pertains to the pressing concerns of overfishing, the eradication of illegal, unreported, and unregulated (IUU) fishing, and environmentally harmful fishing practices [14].

However, there are currently very few fisheries-specific ecolabel products available. For instance, just 15% of the yearly worldwide

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3 Ki H. Lee, Junsung Noh, and Jong S. Khim, “The Blue Economy and the United Nations’ Sustainable Development Goals: Challenges and Opportunities,” Environment International Vol. 137, 2020, pp. 1, https://doi.org/10.1016/j.envint.2020.105528.

4 Michelle Voyer et al., “Shades of Blue: What Do Competing Interpretations of the Blue Economy Mean for Oceans Governance?,” Journal of Environmental Policy and Planning Vol. 20, no. 5, 2018, pp. 595–616, https://doi.org/10.1080/1523908X.2018.1473153.

5 Dewi Santoso and Fadhillah Nafisah, “Indonesia’s Global Maritime Axis Doctrine: Security Concerns and Recommendations,” Jurnal Hubungan Internasional Vol. 10, no. 2, 2017, pp. 87.

6 Premesha Saha, “Indonesia’s Potential as a Maritime Power,” Maritime Affairs Vol. 12, no. 2, 2016, pp. 28–41, https://doi.org/10.1080/09733159.2016.1232951.

7 Administrator, "Pengusahaan Sektor Perikanan Hanya Di Wilayah Terukur," *Indonesia.Go.Id Portal Informasi Indonesia* 2022, https://indonesia.go.id/kategori/editorial/6950/pengusahaan-sektor-perikanan-hanya-di-wilayah-terukur?lang=1.

8 Sylvie N. Tranter et al., “The Inclusion of Fisheries and Tourism in Marine Protected Areas to Support Conservation in Indonesia,” Marine Policy Vol. 146, 2022, pp. 2, https://doi.org/10.1016/j.marpol.2022.105301.

9 Kusdiantoro et al., “Perikanan Tangkap di Indonesia: Potret dan Tantangan Keberlanjutannya,” Jurnal Sosial Ekonomi Kelautan Dan Perikanan Vol. 14, no. 2, 2019, pp. 145-146, https://doi.org/10.15578/jsekp.v14i2.8056.

10 Indra Jaya et al., “‘Are the Working Principles of Fisheries Management at Work in Indonesia?,’” Marine Policy Vol. 140, 2022, pp.1-17, https://doi.org/10.1016/j.marpol.2022.105047.

11 Nienke v.d. Burgt, *The Contribution of International Fisheries Law to Human Development*, Martinus Nijhoff Publishers, 2013, at 29-32.

12 Jie Jin and Qiuhong Zhao, “Eco-Labelled Product Consumption Analysis and Incentive-Penalty Mechanism Design by Using a System Dynamics Approach,” Computers and Industrial Engineering Vol. 153, 2021, pp. 1, https://doi.org/10.1016/j.cie.2020.107055.

13 Andre Notohamijoyo et al., “Membangun Skema Ekolabel Perikanan Nasional Sebagai Wujud Perlindungan Terhadap Hak Nelayan Dan Sumber Daya Perikanan,” Jurnal Ekonomi & Kebijakan Publik Vol. 11, no. 1, 2020, pp. 27–38.

14 Bianca Haas et al., “Big Fishing: The Role of the Large-Scale Commercial Fishing Industry in Achieving Sustainable Development Goal 14,” Reviews in Fish Biology and Fisheries Vol. 29, no. 1, 2019, pp. 161–75, https://doi.org/10.1007/s11160-018-09546-8.

fish harvest is certified by the Marine Stewardship Council's ecolabel in 2019[15]. Regionally, ASEAN's ATEL ecolabelling plan for tuna fishery has made little progress towards an active implementation since its scheme was agreed upon in 2018[16]. Moreover, a national standard in blue ecolabelling has yet to be established, with a national ecolabel for tuna, skipjack tuna, and *tongkol*, as proposed in Decision of the Minister of Marine Affairs and Fisheries Number 107/KEPMEN-KP/2015, being unrealized to the present day. In addition, blue ecolabelling in Indonesia continues to rely on foreign international organizations such as the Aquaculture Stewardship Council (ASC) and the Marine Stewardship Council (MSC), which is not appropriate for the current capacity of its small artisanal fishermen, especially considering its high certification costs.

Thus, this article's primary purpose is to address two crucial concerns regarding blue ecolabelling: What role do blue ecolabels truly play in the international legal structure of sustainable marine economy and how to abstract it correctly to help with its implementation? What kind of urgency necessitates the creation of a Local Blue Ecolabelling in Indonesia and how can it be realized in the national legal structure? Previous research[17][18] has been conducted to generally determine the need for and the position of ecolabelling, and specifically blue ecolabelling, within the relevant international and national frameworks as well as the urgency to construct one in the national scene. However, results of previous research must be further developed and substantiated to aid local regulators in such an endeavor.

For example, one previous research related to this study was written by Febrian Isharyadi, et al., entitled "Analysis of eco-label certification implementation on eco-friendly products in Indonesia." In this research, ecolabeling was already seen as a good quality mechanism in ensuring environmental sustainability and ecosystem resilience. This study found that there were already several types of local ecolabel schemes that have emerged, which provide certification for paper, textile, glass, and other industrial materials. This research also found that the application of local ecolabelling is still limited and emphasized the need for a sufficient local ecolabel for other industries such as the fisheries sector that have a high demand from consumers to obtain ecolabels. However, this research only remarked on the lack of its local implementation while the author's present research provides a more comprehensive legal analysis on the subject and constructs, as well as recommends for adoption, a general framework for its application in the national scene.

Another related previous research was written by Andre Notohamijoyo, Martani Huseini, Raldi H. Koestoer, and Syafril Fau entitled, "*Membangun Skema Ekolabel Perikanan Nasional Sebagai Wujud Perlindungan Terhadap Hak Nelayan Dan Sumber Daya Perikanan*."[19] This study concluded that although international ecolabel schemes for fisheries can support sustainable development in the international scene, their application is not friendly for fisheries in developing countries such as Indonesia. The research found that many stakeholders agree and encourage the creation of local fisheries ecolabels due to the high trust that stakeholders have in government regulators. However, despite the previous research providing the general public with a basic framework for fisheries ecolabel, it did so without thoroughly consulting certain international and national legal frameworks

[15] Frédéric Le Manach et al., "Small Is Beautiful, but Large Is Certified: A Comparison between Fisheries the Marine Stewardship Council (MSC) Features in Its Promotional Materials and MSC-Certified Fisheries," PLoS ONE Vol. 15, no. 5, 2020, pp.3, https://doi.org/10.1371/journal.pone.0231073.

[16] Andre Notohamijoyo et al., "Leadership as the Main Driving Factor of Regional Sustainable Development Cooperation: A Case Study of ASEAN Tuna Ecolabelling (ATEL)," in IOP Conference Series: Earth and Environmental Science, vol. 1111 ,2022, pp.1-7, https://doi.org/10.1088/1755-1315/1111/1/012079.

[17] Markos Karavias, "Interactions between International Law and Private Fisheries Certification," Transnational Environmental Law Vol. 7, no. 1, 2018, pp. 165–84, https://doi.org/10.1017/S2047102517000139.

[18] F. Isharyadi et al., "Analysis of Eco-Label Certification Implementation on Eco-Friendly Products in Indonesia," IOP Conference Series: Earth and Environmental Science Vol. 1108, no. 1, 2022, pp.1-6, https://doi.org/10.1088/1755-1315/1108/1/012002.

[19] Notohamijoyo et al., *supra note 18* at 27–38.

that can provide a more exact recommendation for a sound local fisheries ecolabel mechanism. The author's current research expands on this basic framework by constructing a more comprehensive scheme through an analysis of relevant international and national legal instruments as well as other economic-social dimensions such as logistics and human resources quality.

Thus, this research aims to provide a more complete explanation on the place of blue ecolabels within international and national law systems, how its true effective implementation can be made at the local level through consideration of many practical dimensions, and what general legal scheme can be developed to realize it in Indonesia.

To answer the article's research questions, the article comprises two overarching consecutive narratives. Firstly, the article presents a historical-legal background to fishery conservation and the BE in the multilateral scene, the connection between ecolabels and the SDGs and its related legal, and a robust and accessible structuring of its prevailing international standards and their application. The second part elaborates on the need for the creation of a local blue ecolabelling, in this case in Indonesia, the current absence of local blue ecolabels and a general legal structure as consideration to realize it in the future.

This article uses a qualitative methodology with the data being collected in the researcher's setting[20]. More specifically used is the normative legal research method which utilized written materials such as legislations, agreements, and doctrines along with other established sources such as articles and books to analyze legal issues[21]. Through its methodology and analysis, this research seeks to consider the applicability of international blue eco-labelling regulations and concludes whether they are accessible and beneficial for all fisheries, especially small-scale ones from developing countries.

B. A GENERAL ANALYSIS OF REGIMES FOR FISHERIES AND BLUE ECOLABELS

1. A Rapid Overview of Governance on Fisheries in International Law

As general prerequisites for environmental labeling, the international community has mandated the application of the General Agreement on Tariffs and Trade (GATT) and the Technical Barriers to Trade (TBT) Agreement in order to prevent the imposition of trade obstructions that are deemed superfluous. The principle of non-discrimination is a key component of the World Trade Organization (WTO)'s framework in this regard, which is governed by GATT's articles I, III, and XI.[22] More specifically the provisions of the TBT Agreement provided further requirements for the application of environmental labeling. Abstracting from its provisions, environmental labeling must be:

1. Transparent: ecolabels must be completely transparent to both domestic and international producers. Thus, WTO members, for example, are obliged to establish inquiry points to provide information and respond to inquiries regarding enacted technical regulations and the like (article 10.1 and 10.3).
2. Non-discriminatory: the agreement sanctions WTO member states to adhere to the principles of most-favored-nation (MFN) treatment and national treatment when dealing with imported goods. The principles mentioned are delineated in articles 2–4 of the agreement.
3. Harmonized: to avoid different labeling standards from one place to another that can generate confusion, articles 2.4, 2.5 and 2.6 as well as point F of Annex III of the TBT Agreement mandated the application of international standards in the creation of environmental labels.

Beyond trade-related measures that exist within the WTO system, other treaties

[20] John W. Creswell and J. D. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, SAGE Publications,Inc, Fifth Edition, 2018, at 257.

[21] Muhaimin, *Metode Penelitian Hukum*, Mataram University Press, First Edition, 2020, at 45-57.

[22] Jasper Stein, "The Legal Status of Eco-Labels and Product and Process Methods in the World Trade Organization," American Journal of Economics and Business Administration Vol. 1, no. 4, 2009, pp. 287-288.

have provided many important provisions on conservation of fishery resources which are, in many ways, considered in the assessments that grant ecolabels. For instance, article 1(2) of the 1958 High Seas Convention instituted to all states the duty to conserve the living resources of the high seas through measures enacted for each of their own nationals. The same article also called for the cooperation of states in the adoption of measures aimed at achieving that same duty[23]. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) 1975 ensures that commerce in particular fauna, such as cetaceans and sturgeons in the case of maritime animals, is sustainable and does not endanger their survival. Specifically, Articles III, IV, and V of CITES stipulate that trading of these animals take place only for scientific objectives, within established quotas, and with the required export permissions[24].

However, among the aforementioned international agreements, the 1982 UNCLOS is the most fundamental regulation in marine conservation. The treaty establishes a firm framework on the utilization and conservation of the world's seas, their biological and mineral resources, and the management of fish stocks in a sustainable manner. For instance, its provisions on the EEZ (articles 61(1) and (2), 62(1) and 64), it required states to regulate the preservation of its living resources, its allowable rate of catch, its optimal utilization, and the establishment of regional governance mechanisms as media for collaboration on sustainability issues[25].

Marine conservation measures were increasingly viewed favorably Post-UNCLOS with a greater focus on sustainability. Reinforcing the 1987 Brundtland Report[26] which revitalized a fleshed-out concept of sustainable development of oceans,[27] the 1995 UN Stocks Agreement contained within it, further provisions protecting the sustainability of high seas' straddling and highly migratory fish stocks. Its article 5(h) commended states to take efforts to avoid or eradicate over-fishing and assure that fishing effort levels are sufficient to support the sustainable and continual use of fishery resources. The Convention on Biological Diversity (CBD) 1992 required states to incorporate the preservation and sustainable use of biological diversity to the maximum extent feasible and suitable. Its article 10 encourages states to take measures through policy implementation to minimize or reduce harmful effects on biodiversity when utilizing biological resources.

Further international sustainable marine policies were soon quick to be developed dynamically through the usage of international fora, such as the formulation of the FAO Code of Conduct for Responsible Fisheries and other instruments within the forum of the Food and Agriculture Organization, which will be further expounded below.

2. The Importance of Blue Ecolabelling: Contributions and Potential in the Framework of Sustainable Development Goals

Ecolabelling was introduced in the 1992 Earth Summit and was promoted as a possibly effective market tool for sustainable development. Ecolabels are designable to interrelate environmental issues with production and manufacture, manipulating customers' consumption preferences to achieve sustainable development of the

[23] Chuanliang Wang, Qian Zhao, and Yen C. Chang, "On the Legal Status of Marine Fishery Resources: From the Perspectives of International Fishery Law," Heliyon Vol. 9, no. 4, 2023, pp.4, https://doi.org/10.1016/j.heliyon.2023.e15354.

[24] Tanya Wyatt, "Canada and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES): Lessons Learned on Implementation and Compliance," Liverpool Law Review Vol. 42, no. 2, 2021, pp.145, https://doi.org/10.1007/s10991-020-09267-8.

[25] Nathan J. Bennett et al., "Towards a Sustainable and Equitable Blue Economy," Nature Sustainability Vol.2, no. 11, 2019, pp.992, https://doi.org/10.1038/s41893-019-0404-1.

[26] Livinius I Nwokike, "The Aftermath of Brundtland Commission's Report: Bedrock to International Environmental Law Consciousness and Sustainable Development," Awka Journal of Public and Private Law Vol 12, 2022, pp.17, http://www.geci.org.ng.

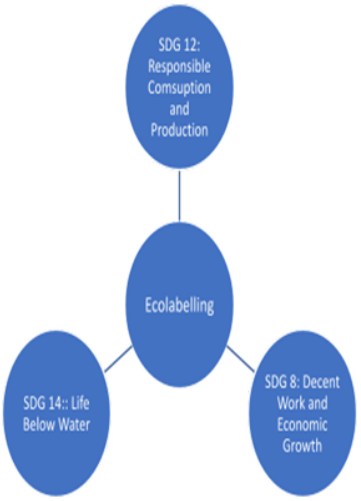
[27] Holly J. Niner et al., "Issues of Context, Capacity and Scale: Essential Conditions and Missing Links for a Sustainable Blue Economy," Environmental Science and Policy Vol. 130, 2022, pp.25–26, https://doi.org/10.1016/j.envsci.2022.01.001.

widest scale[28]. Interlinkage between ecolabels and international commitments was maturely synthesized in the 2015 Sustainable Development Goals. Ecolabelling is particularly linked to three SDGs: 12, 14, and 8.

Ecolabels are primarily related to SDG 12 - Sustainable Consumption and Production (SCP)[29], as its certification involves catchers, sellers, and processors in the entire life cycle of a product[30] and thus, contributes to the 'sustainable management and efficient use of natural resources' (SDG 12.2). It also contributed to the reduction of food waste (SDG 12.3) as it prevents bycatch in fishery production[31]. The Aichi Biodiversity Targets and the Kunming Montreal Global Biodiversity Framework of the 1993 CBD also have recognized blue ecolabels as an official indicator in implementing sustainable consumption and production (Aichi Target 4/Kunming-Montreal Target 5)[32].

Blue Ecolabels are well-related to SDG 14. The International Science Council considers blue ecolabelling as an enabling factor in the realization of 'sustainable fisheries, the restoration of fish stocks, and the erasure of IUU fisheries' (SDG 14.4). UNCTAD noted that blue ecolabels present an ecosystem-sensitive approach towards fisheries which is supported by international markets and are focused at

Image 1. Interlinkage Between Ecolabelling and SDGs



protecting, restoring and enhancing habitats and ecosystems with direct or indirect impacts on fisheries[33]. The International Institute for Sustainable Development regarded seafood standards as a potential tool to realize SDG 14 as it allows fish farms to assess, disclose, and commercialize sustainable production practices[34]. Ecolabels can achieve other specific targets within SDG 14 such as target 14.2 on 'sustainable management and protection of marine ecosystems' as ecolabelling assessments also target fisheries management.

Ecolabelling is also connected with SDG 8. Ecolabels can bring expansion to fishery-related jobs as market patterns have become consumer-oriented, and customers' demands on eco-friendly products are being brought to the forefront of international trade [35]. Customers become increasingly aware of their buying behavior, the demand for eco-friendly products are increasing[36] and global acceptance for eco-friendly production

[28] United Nations, "United Nations Conference on Environment & Development Agenda 21," (1992) http://www.un.org/esa/sustdev/agenda21.htm.

[29] Simone Wurster, Luana Ladu, and Dhandy Arisaktiwardhana, "Bio-Based Products Suggestions for Ecolabel Criteria and Standards in Line with Sustainable Development Goals," International Journal of Standardization Research Vol. 17, no. 1, 2019, pp.23, https://doi.org/10.4018/IJSR.2019010102.

[30] Dipen Paul et al., "A Study on Effectiveness of Ecolabels in the Fast-Moving Consumer Goods Sector," IOP Conference Series: Earth and Environmental Science Vol. 1161, no. 1, 2023, pp. 1-13, https://doi.org/10.1088/1755-1315/1161/1/012004.

[31] Rebecca Lent and Dale Squires, "Reducing Marine Mammal Bycatch in Global Fisheries: An Economics Approach," Deep-Sea Research Part II: Topical Studies in Oceanography Vol. 140, 2017, pp.268–77, https://doi.org/10.1016/j.dsr2.2017.03.005.

[32] Lewis Akenji and Magnus Bengtsson, "Making Sustainable Consumption and Production the Core of Sustainable Development Goals," Sustainability (Switzerland) Vo. 6, no. 2, 2014, pp.513–29, https://doi.org/10.3390/su6020513.

[33] Lahsen Ababouch, "Advancing Sustainable Development Goal 14: Sustainable Fish and Seafood Value Chains, Trade and Climate Background Note," 2019, at 30.

[34] Jason Potts et al., "State of Sustainability Initiatives Review : Standards and the Blue Economy," 2016, at 2.

[35] Kuo C. Chung, "Green Marketing Orientation: Achieving Sustainable Development in Green Hotel Management," Journal of Hospitality Marketing and Management Vol. 29, no. 6, 2020, pp.726-728, https://doi.org/10.1080/19368623.2020.1693471.

[36] Tina Shahsavar, Vladimír Kubeš, and Dušan Baran, "Willingness to Pay for Eco-Friendly Furniture Based on Demographic Factors," Journal of Cleaner Production Vol. 250, 2020, pp. 2, https://doi.org/10.1016/j.jclepro.2019.119466.

methods continue to grow[37]. As it is, eco-friendly businesses will proliferate and the widening market access for sustainable products bring more possibility for new jobs[38]. Thus, active implementation of ecolabels for the blue economy can truly provide growth in job creation and a sustainable economic integration of marine-related jobs.[39]

C. SPECIFIC PREVAILING REGULATORY FRAMEWORKS FOR BLUE ECOLABELLING

International regulatory frameworks for ecolabels are divided into two interconnected groups: normative and procedural. Normative regulations address substantive principles and standards that serve as the foundation for ecolabel assessments. Procedural regulations, on the other hand, govern how assessments can be conducted.

Table 1. Examples of Prevalent Frameworks in Blue Ecolabels

Frameworks	
Normative	**Procedural**
FAO Code of Conduct for Responsible Fisheries (FAO Code of Conduct)	*International Organization for Standardization (ISO) 14000 Environmental Management Standards*
	International Social & Environmental Accreditation & Labeling (ISEAL) Alliance Codes of Good Practise
FAO Guidelines for the Ecolabelling of Fish and Fishery Products (FAO Guidelines)	*MSC Fisheries Standard*
	MSC Chain of Custody Standard

Table 2. Example of Requirements in the Normative Regulations of FAO

FAO Code of Conduct	**FAO Guidelines**
Exemplary substantive requirements (art. 6 and art.7) 1. Effective conservation and management of resources; 2. Maintenance of the quality, diversity and availability of fishery resources. 3. Prevention of overfishing and excess fishing capacity. 4. Conservation and management should be based on the best scientific evidence; 5. Conservation, management, and exploitation should be precautionary; 6. Application of environmentally safe fishing gear and practices; 7. Maintenance of product quality and nutrition during the production chain; 8. Rehabilitation of critical fishery habitats. 9. Promotion of optimal utilization; 10. Addressing adverse impacts of fisheries on the ecosystem.	Elaborating upon the FAO Conduct. For example, the fulfillment of the prevention of overfishing and optimal utilization must satisfy: 1. Assessment if overfishing does occur if it is above the reference limit. 2. Fishing mortality should be minimized to below the reference limit; and 3. Accounting for the resilience of the fish stock's composition. Besides being normative, the Guidelines further provide procedures of standard-setting, accreditation, and certification for ecolabelling. For example, standard-setting bodies should: 1. Use normative standards following international and instruments such as UNCLOS and the FAO Code; 2. Follow procedural basis relied on standards such as the ISO/EIC Code of Good Practice and

[37] Gincy Marina Mathew et al., "Sustainable and Eco-Friendly Strategies for Shrimp Shell Valorization," *Environmental Pollution* Vol 267, 2020, pp.3, https://doi.org/10.1016/j.envpol.2020.115656.

[38] OECD, "Employment Implications of Green Growth: Linking Jobs, Growth, and Green Policies," 2017, www.oecd.org/greengrowth.

[39] Nataliya Yarkina and Nataliya Logunova, "The Concept 'Blue Growth' as a Way for Sustainable Development of the Fisheries," E3S Web of Conferences 244, 2021, at 3-5, https://doi.org/10.1051/e3sconf/202124403021.

	the ISEAL Codes of Good Practice; 3. Be transparent in the drafting and finalizing its standard; 4. Ensure the balanced participation of independent experts and interested parties; 5. Allow for the submission of comments for its draft; and 6. Review the standard regularly. Moreover, the Guidelines generally develops two ecolabelling certifications: 1. Ecolabelling for fishery products; and 2. Ecolabelling for chain of custody which allows for safety movement of eco labeled products throughout the production and distribution.
The FAO Guidelines underline definitive principles that shall be applied to all ecolabelling in capture fisheries. All blue ecolabels should be:	
1. Consistent with the 1982 UNCLOS, the 1995 UN Fish Stocks Agreement, and WTO Rules; 2. In compliance with all relevant rules and legislation; 3. Voluntary and market-drive; 4. Transparent; 5. Non-discriminatory and allows fair trade and competition; 6. Provided with the opportunity to enter international markets;	1. Incorporate reliable, independent auditing and verification procedures; 2. Considered equivalent if consistent with the guidelines; 3. Based on the best scientific evidence available; 4. Practical, viable, and verifiable; 5. Truthful; 6. Clear; and 7. Based on certain minimum substantive requirements.

Two definitive procedural regulations in Blue Eco Labels that are sampled for the purpose of this article are the ones developed by ISO and ISEAL Alliance. ISO has contributed in defining the current classification of international eco-labeling programs. ISO ecolabelling classifications provide a uniform framework in which an organized labeling system can be devised and implemented within a particular industry sector, rather than providing specific performance standards. However, blue ecolabelling schemes are established based on performance standards, wherein products are classified according to their adherence to such performance-related requirements. Additionally, the classification of products is determined not only by their compliance with the established performance standard but also by the methodologies employed to establish such standards and evaluate product conformity. This categorization outlines the three primary classifications of seafood ecolabelling schemes that are often employed[40]:

(a) First-party labeling: usually made by producers or sellers according to their product criteria, which may encompass considerations related to the environment, food quality, and health. Self-declaration ecolabelling refers to the ISO Type II environmental labeling.

(b) Second-party labeling: commonly developed by industry associations or governments, with the organization specifying the standards for its members' products. Compliance is commonly assessed through internal

[40] Carolyn Deere-Birkbeck, Eco-Labelling and Sustainable Fisheries, IUCN--The World Conservation Union, 1999.

industry or association certification mechanisms or by engaging external certifying bodies. These certifications fall under ISO Type I or Type III classifications.

(c) Third-party labeling: commonly established by organizations that operate independently from the related industry sector, hence possessing a certain level of impartiality and independence. Typically, the labeling system's owner is responsible for defining the criteria and conferring labels upon products that have, through an independent assessment procedure, demonstrated their compliance with these criteria. Typically, an ISO Type I ecolabel[41].

Table 3. Ecolabelling Classification System

Classification	Standard and Assessment Procedure
Type I	1. Assessment by a third-party independent certification body. 2. Based on ISO 14024:2018 Standard
Type II	1. Internal compliance assessment. 2. Based on ISO 14021:1999 Standard
Type III	1. Assessment by a third-party industry-related organization; 2. Based on ISO 14026:2006 Standard

While the ISO Standards detail how certification is to be done according to its general framework, more detailed technical requirements on the assessment quality that certification bodies can adopt were developed by several relevant international organizations such as the ISEAL Alliance and the Global Ecolabelling Network (GEN). The ISEAL Alliance provides three codes of good practice in this regard.

[41] Trevor J. Ward and Bruce F. Phillips, *Seafood Ecolabelling : Principles and Practice*, Wiley-Blackwell, 2008, at 10-17.

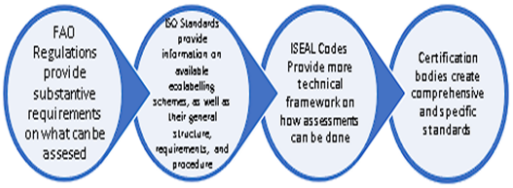
Table 4. Scope of the ISEAL Codes

Types of Code	Primary Aims	Exemplary Requirements
Standard-Setting Code	1. Describes how a standard should be constructed, and improved over time. 2. Guarantees that the standard contains particular criteria that can be tested and assessed.	1. Conduct a regular review of standard-setting procedures; 2. Develops Terms of Reference detailing the proposed scope of a new standard, its justification, and achievable outcomes.
Assurance Code	1. Provides a framework for assessing standards compliance so stakeholders can trust assessment results. 2. Promotes rigorous, accessible, accurate, and transparent assurance.	1. Maintain a risk management plan that includes a list of the most significant risks; 2. define and document system impartiality and conflict of interest risks.
Impacts Code	1. Supports rigorous monitoring and evaluation to assess how well systems meet their goals. 2. Helps standards track progress toward sustainability goals and improve	1. Create, document, and put in place a monitoring and evaluation system. 2. shall have a data management system for performan

	practices over time.	ce monitoring data storage, organization, and analysis.

Abstracting from the analysis above, a sufficient scheme can be constructed on the variables needed for the creation of an eco labelling scheme constructible by certification bodies.

Image 2. General Scheme of Blue Ecolabelling Standard-Setting Process



An application overview of blue ecolabelling can be seen in the example of the MSC (an ISO Type I Ecolabelling organization). The MSC's newest standard is based on the FAO Guidelines with its development, review and practice following the ISEAL Standard Setting Code of Good Practice.

Table 5. An Example of Application of International Rules in the MSC's Standard Using an Exemplary Variable

International Standard	Variable: Transparency
FAO Guidelines for the Ecolabelling of Fish and Fishery Products	Art. 2.4: Be transparent, including balanced and fair participation by all interested parties. Art. 47: Standard-setting organizations or arrangements should carry out their activities in a transparent fashion and follow written rules of procedure.
ISEAL Alliance Standard-Setting Code of Good Practice	Clause 4.1. The standard-setting organization follows transparent procedures that are improved over time. Requirement (4.1.1b): Shall be made available to stakeholders, at a minimum through the organization's website.
MSC Fisheries Standard	Implementation: The General Certification Process and the Default Assessment Tree Section GSA of the Standard: Objective: Improve the common understanding of stakeholders of how fisheries will be assessed by use of a simple, transparent assessment structure. Output: 1. Publication of the general assessment process; and 2. The publication of the specific default assessment tree in the MSC's Fisheries Standard.

Following the FAO Guidelines, the two standards that the MSC applies are:

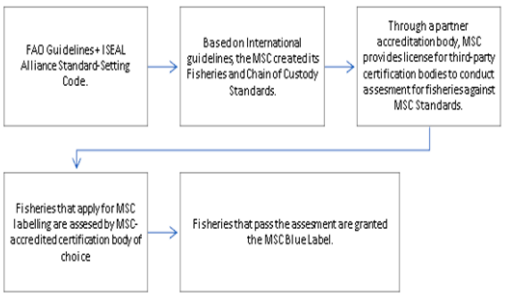
1. **The Fisheries Standard**: certifies fisheries products according to MSC requirements. An independent certifier uses the standard to ascertain how qualified the applicant fishery is according to the MSC standard. If a fishery meets the requirements, a five-year certification is

granted which is subject to yearly monitoring audits.

2. **The Chain of Custody Standard**: the standard makes certain that MSC-certified fish products originate from a verified and audited supply chain and fishery. This ensures that fish sellers, processors, and shippers distinguish MSC-certified fish from non-certified ones and that they apply the MSC ecolabel correctly.

Accreditation Services International (ASI) is selected by the MSC to accredit applicants to guarantee that independent certifiers are qualified to conduct MSC-compliant evaluations. The MSC evaluates fisheries based on three criteria. The first criterion is stock sustainability, which necessitates that fisheries be managed to permit indefinite fishing without overfishing. The second criterion is ecosystem impacts, which require fishing operations to safeguard the framework, productivity, functioning, and biodiversity of the ecosystem which also includes other species and habitats, upon which the fishery depends. The third requires that fisheries must comply with local, national, and international regulations and have an efficient management system.

Image 3. General Scheme of Fisheries Ecolabelling by the Marine Stewardship Council



D. ECOLABELLING IN INDONESIA: TOWARDS A NATIONAL BLUE ECOLABEL

1. Constraints to Current International Ecolabelling and Needs for a National Ecolabel

Despite the potential that ecolabels have and the benefits they can offer, there have been several critics of its direct implementation of international legal instruments and standards as done by international ecolabelling institutions that warrant a tighter implementation in the local-national scene. MSC Certifications have experienced several fundamental problems, especially for small and medium-sized fisheries.

Below are issues in selected cases in international blue ecolabelling for small fisheries:

Spiny Lobster Fishery (Baja, California. 2004)[42]

1. Small volume of catches resulted in inadequate production to cover costs;
2. Price was too high for new markets;
3. Insufficient support in distribution logistics; and
4. The assessment process only involved top officials.

Kyoto Danish Seine Offshore Fishery (Kyoto, Japan. 2008)[43]

1. High costs for MSC assessment and annual surveillance;
2. necessitates substantial acquisition and upkeep investments before price premiums' benefit becomes evident;
3. difficulty in fitting the Japanese fisheries governance framework into MSC's own;
4. The labeled product did not attract a price premium; and
5. No possibility for sufficient export as the fishery is not large enough.

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42 Ward and Phillips.

43 Mihoko Wakamatsu and Hiroki Wakamatsu, "The Certification of Small-Scale Fisheries," Marine Policy Vol. 77, 2017, pp.97–103, https://doi.org/10.1016/j.marpol.2016.12.016.

Prawn Fisheries in South Borneo and Surveys of Fisheries in Indonesia (Indonesia. 2018-2019)[444546]

1. High costs for MSC assessment;
2. Unfavorable towards small scale fisheries;
3. Lack of data for fishery stocks;
4. Non-performance in surveillance for sustainable practises
5. Little understanding of sustainable fishery and ecolabelling schemes and their benefits.

Other mentioned issues:

1. Preference towards internationally-oriented large-scale fisheries;
2. Limited technical and financial capacities of fisheries to satisfy MSC requirements[47]; and
3. Inadequate fishing practices control and monitoring mechanisms and incompatibility between local and national/federal regulations[48].

Evidence from previous research indicated that inadequacies in certification exist both from the perspective of the MSC and the fisheries being assessed. Local artisanal fisheries often do not have enough awareness of sustainable fishery practices. Irresponsible fishing was documented[49], management knowledge was minimal and fishers did not follow state-mandated sustainable fishery regulations[50]. The MSC also contributed to this complexity by inadvertently requires high amount of money for fisheries to be assessed that small fisheries cannot afford to expend on[51].

While the Baja California lobster case above provided the possibility for the certification of small fisheries through the medium of cooperatives, it can arguably be treated as an exception rather than the norm. Indeed, large-scale fisheries have received far more MSC certification than small-scale fisheries[52]. Furthermore, all three cases were, respectively, troubled with inadequacy at the part of fishermen, either because of insufficient support for logistics of distribution channels, being not sufficiently large enough to support export of eco labeled products, or having not enough fishery-related data to continue with the certification. The Kyoto Danish case further mentioned a difficulty to fit the Japanese fisheries governance framework into MSC's own as changes within the local structure cannot be assessed if they are not aligned with the national one. The PT. Sekar Laut Tbk case elaborated that MSC standards were indicatively inappropriate with Indonesian fisheries mainly because high costs of certification may create a distorted picture of small-scale fishing and that variations in the cultural and institutional systems resulted in a difficulty for a western model of ecolabelling implementation[53].

Such problems cannot be resolved only by the related fisheries. Instead, this research proposes a more local-based state

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44 Umi Karomah Yaumidin and Oman Zuas, "Eco-Labeling And International Trade Agreements: The Case Of Marine Stewardship Council Certification For Indonesia's Shrimp Potential Market," Buletin Ilmiah Litbang Perdagangan Vol. 15, no. 2, 2021, pp.209–234, https://doi.org/10.30908/bilp.v15i2.539.

45 Radityo Pramoda et al., "ECOLABELLING PERIKANAN: SERTIFIKASI MARINE STEWARDSHIP COUNCIL (MSC) UNTUK PRODUK TUNA (Studi Kasus: Bali) Fisheries Ecolabelling: Marine Stewardship Council (MSC) Certification for Tuna Product (Case Study: Bali)," Jurnal Kebijakan Sosek KP Vol. 7, no. 2, 2017, pp. 159–177.

46 Andre Notohamijoyo et al., "The Long Way of Ecolabel Scheme Acceptance in Indonesia: Case Study in Tuna Fisheries," in Proceedings of the 1st International Conference on Environmental Science and Sustainable Development, 2020, at 1–11, https://doi.org/10.4108/eai.22-10-2019.2291487.

47 Lynda M Bellchambers, Bruce F Phillips, and Mónica Pérez-Ramírez, "From Certification to Recertification the Benefits and Challenges of the Marine Stewardship Council (MSC): A Case Study Using Lobsters," Fisheries Research Vol. 182, 2016, pp.88–97, https://doi.org/10.1016/j.fishres.2015.08.029.

48 Víctor Manuel Velázquez Durán and Rocío Rosales Ortega, "The Challenges of Legitimacy for Southern Environmental Certifications in Small-Scale Fisheries: Evidence from the Chakay Collective Brand in Quintana Roo, Mexico," Maritime Studies Vol. 21, no. 1, 2022, pp.77–97, https://doi.org/10.1007/s40152-021-00244-z.

49 Umi Karomah Yaumidin and Oman Zuas, *supra note* 44 at 213.

50 Notohamijoyo et al., *supra note* 46 at 6.

51 Bellchambers, Phillips, and Pérez-Ramírez, "From Certification to Recertification the Benefits and Challenges of the Marine Stewardship Council (MSC): A Case Study Using Lobsters," at 8.

52 Richard Achankeng Nyiawung and Victoria Ndinelago Erasmus, "Ocean and Marine Stewardship in Africa: The Marine Stewardship Council Certification in Namibia and The Gambia," Frontiers in Marine Science Vol.9, 2022, pp. 2, https://doi.org/10.3389/fmars.2022.873397.

53 Umi Karomah Yaumidin and Oman Zuas, *supra note* 44 at 217.

intervention with an aim being the proliferation of local blue ecolabels in Indonesia. Determinants considered in justifying this include:

1. Education for sustainable fishery management and ecolabels' importance can only be sufficiently conducted by local stakeholders through capacity building; and
2. National eco labeling can be more sensitive to the fisheries being addressed. It can introduce lower costs, adjusts assessment practices to consider traditional fishing practises, adapts easily in case national regulations are amended, and can cooperate more fluidly in the certification processes of local fisheries;

Preferably, government-supported nation-wide eco labeling programs are to be constructed as government supervision can further enhance local ecolabels' quality, provide easier access of government funds and incentives for fisheries certification processes, and prevent careless proliferation of ecolabels. Moreover, state-led sustainable fishery governance is also supported by certain international regulations.

For example, articles 5()b, 10(b), 10(c), and 10(e) of the 1993 CBD, which Indonesia ratified with Law Number 5 of 1994, mandated states to integrate sustainable use of biological resources into plans, programs and policies, adopt measures relating to its utilization, promote traditional practises that are compatible with its conservation, and encourage collaborations in its sustainable use between the government and the commercial sector.

Furthermore, article 71.7 of the FAO Code of Good Conduct urges the state, for example, to create effective procedures for fisheries supervision, surveillance, control, and enforcement in order to ensure their compliance with existing conservation and management policies. The implementation of a government-led or local sustainable fishery practice and management system, such as ecolabelling, can ensure that such legal commitments are met. Moreover, international certification mechanisms still heavily depend on local government management systems to properly evaluate environmental impacts and achieve particular standards[54]. Thus, it is a much more viable solution for local fisheries to depend on local ecolabels.

Another reason for the development of a local ecolabel is related to the state of Indonesia's seafood supply chain. Indonesia is one of the biggest producers of capture fisheries in the world[55] with the main commodities of production being tunas, skipjack tunas and eastern little tunas. The Central Bureau of Statistics (BPS) further noted that Indonesia's fishery export recently amounted to 1.2 million tons.

Table 7. Indonesia's Total Production of Capture Fisheries in 2020 and 2021

Species	Volume (Ton)	
	2020	2021
Tunas	300,803	359,132
Skipjack Tunas	468,269	432,845
Eastern Little Tunas	581,023	593,906
Shrimps	207,114	247,502
Other fishes besides Tunas, Skipjack Tunas, Eastern Little Tunas, Eastern Little Tunas, and Shrimps	4,936,931	5.134.180
Non-fish commodities (seaweed, pearls, and others)		
Total	**6,494,140**	**6,767,565**

Furthermore, Indonesia remains as a major producer of highly-traded reef fish such as the grouper with a yearly yield of 119,000

[54] Abigayil Blandon and Hiroe Ishihara, "Seafood Certification Schemes in Japan: Examples of Challenges and Opportunities from Three Marine Stewardship Council (MSC) Applicants," Marine Policy Vol. 123, 2021, pp.1-11, https://doi.org/10.1016/j.marpol.2020.104279.

[55] Abdul Bashir et al., "International Journal of Economics and Financial Issues The Performance and Strategy of Indonesia's Fisheries: A Descriptive Review," International Journal of Economics and Financial Issues Vol. 9, no. 1, 2019, pp. 32, https://doi.org/10.32479/ijefi.7188.

metric tonnes[56]. While Indonesia's global fish trade has increased dramatically for the past two decades, contributing to the market supply for goods such as shrimps, fish filets and frozen fish with a total yearly value of US$ 111.83 billion. Blue Eco Labels can be used to attract more sales of goods and technological investment, promote significant productivity and local economic performance and increase Indonesia's shares in the international seafood market[57]. More conclusively, a survey previously conducted[58] found that there is a high level of trust among many respondents in the Indonesian MMAF and that many hope for a local alternative to the existing fishery eco labeling schemes that can be applied nationwide.

However, certain barriers to blue ecolabelling exist in the local seafood supply chain. Prevalent problems in the supply chain [596061] are:

1. **Quality issues**: numerous marine products captured by fishermen were denied on their intended market due to quality and sanitary concerns.
2. **Disparity of costs**: the lack of supporting port infrastructure in fish production centers has made the fishery industry extremely expensive.
3. **Weak cold chain system**: the cold chain system ensures long-term food safety and security. But, as cold storage facilities are not readily available in local production centers, the quality of products is easily compromised.
4. **Customers' needs and awareness**: The fish market is yet to have a system that can communicate the needs and preferability of customers on a regular basis to the sellers or fishermen. For instance, local fishery businesses that attempt to enter the export market may not understand its customers' preference for ecolabels and fail to apply it for their products. Domestic consumers' awareness of ecolabelling, which may be low due to insufficient information, also impedes producers' desire to undergo ecolabelling certification.

Many actions needed to erase these problems will require significant government and local assistance such as the construction of more reliable fishery infrastructure, coordination with many stakeholders in quality surveillance of fishery products, and public socialization to raise fisheries' and customers' awareness of ecolabelling.

2. Indonesia's Current Ecolabelling Regime and the Absence of Blue Ecolabels

The most basic regulation providing national ecolabel schemes is the Regulation of the Minister of the Environment Number 2 of 2014 which oversees the implementation of the Type I (ISO 14204) and Type II (ISO 12401) Ecolabels. The implementation is as follows[62]:

1. **Type I Ecolabel** (article 4): The label is given through a certification conducted by a third party. Certification assessment is made based on the product-related eco-label criteria in the Indonesian National Standard (SNI). *Komite Accreditasi Nasional* (KAN) accredits the body that performs the assessments, while the eco-label given is registered in

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[56] Miftakhul Khasanah et al., "Management of the Grouper Export Trade in Indonesia," Reviews in Fisheries Science and Aquaculture," Reviews in Fisheries Science & Aquaculture Vol. 28, no.1, 2020, pp.1-15, https://doi.org/10.1080/23308249.2018.1542420.

[57] Myoungjin Oh et al., "Does Eco-Innovation Drive Sales and Technology Investment? Focusing on Eco-Label in Korea," Business Strategy and the Environment Vol. 29, no. 8, 2020, pp. 3174–3186, https://doi.org/10.1002/bse.2565.

[58] Notohamijoyo et al., "Membangun Skema Ekolabel Perikanan Nasional Sebagai Wujud Perlindungan Terhadap Hak Nelayan Dan Sumber Daya Perikanan," at 33.

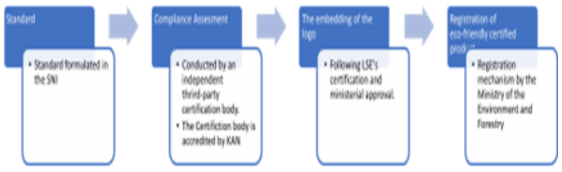
[59] Niniet Indah Arvitrida, Dian Rahmawati, and Dwi Lastomo, "Fishery Supply Chains in Indonesia: Improvement Opportunities on The Downstream Side," *International Conference on Industrial Enterprise and System Engineering*, edited by Luciana Andrawina et al., Atlantis Press, 2018, at 253–257, https://doi.org/https://doi.org/10.2991/icoiese-18.2019.45 .

[60] Eiichi Kusano and Suadi, "Indonesian Seafood Supply," Food Value Chain in ASEAN: Case Studies Focusing on Local Producers, ERIA, 2019, http://sidatik.kkp.go.id/publikasi/index/12.

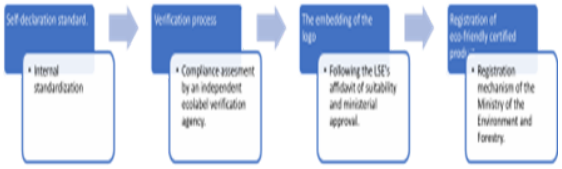
[61] Katherine Tsantiris, Lingfeng Zheng, and Victoria Chomo, "FAO Fisheries and Aquaculture Circular FIAM/C1157 (En) Seafood Certification and Developing Countries: Focus On Asia," 2018.

[62] F. Isharyadi et al., "Analysis of Eco-Label Certification Implementation on Eco-Friendly Products in Indonesia," IOP Conference Series: Earth and Environmental Science 1108, no. 1, 2022, at 1-6 https://doi.org/10.1088/1755-1315/1108/1/012002.

the Ministry of Environment and Forestry (MEF).



2. **Type II Ecolabel** (article 5): A Self-declaration of a product's eco-friendliness made by a producer through a submission of a claim assessed against one or more environmentally friendly criteria. The claim will be verified by an ecolabel verification agency (LVE) through an evaluation process which is conducted by assessing its adherence to environment management regulations, its implementation of systems of environment management, its utilization of product standards, and its usage of ecologically sustainable packaging.



Another law in this area is the Regulation of the Ministry of Environment and Forestry Number P.5/Menlhk/Setjen/Kum.1/2/2019. This legislation provides more substantive general ruling on the eco-friendly labeling criteria needed to be fulfilled and allows everyone who traded goods and services within Indonesia's territory to apply for ecolabel certification. Those who fulfilled the criteria and passed the certification can apply for the usage of ecolabels to the related ministry that oversaw their activities. Subsequently, they can apply such labels for their products. However, the regulations mentioned above only outlined the parameters of what criteria that shall be fulfilled in the certification scheme and ecolabel application but not on the specific qualifications needed for the assessment of industry-specified products. This responsibility falls on other governmental institutions or independent bodies.

For example, is the ecolabelling standards for air conditioning devices which is regulated by both the Decision of the Minister of Energy and Mineral Resources Number 57 of 2017 and BSN's SNI 04 6958:2003 and which is applied by government-appointed certification bodies such as LSPro Qualis Indonesia. Decision of the Head of the BSN Number 3 of 2023, provide further substantive guidelines for the assessments of ecolabel-related SNI-standardized goods and services by third-party certification agencies.

Unfortunately, there are no definitive local guidelines or standards on the ecolabelling of capture fisheries. The only relevant legal product was the Decision of the MMAF Number 107/KEPMEN-KP/2015. It mandated the creation of an eco labeling scheme for Tuna, Skipjack Tuna, and Tongkol. However, until now there is no definitive actions on behalf of the MMAF to concretely realize such plans. Moreover, there are no independent fisheries certification bodies that are in operation today. Independent certification bodies such as the Indonesian Ecolabel Agency (LEI) limited their scope only to forestry, industry, and building materials-related products.

It is possible that despite the basic voluntary nature of international instruments on ecolabelling, stakeholders are only comfortable acting on them once they are well-translated into national regulations and standards to give further confidence for local stakeholders to act. Thus, it is imperative for the government to help establish ecolabelling guidelines to encourage the proliferation of local ecolabels.

3. A General Suggestive Overview of a Possible Blue EcoLabelling Scheme in Indonesia

The construction of a blue ecolabelling that this research offers a general framework that the government may deliberate on in the creation of a national blue ecolabelling. However, a most practicable scheme can be

further elaborated on future research. The following scheme offered in this article generally follows relevant international guidelines, and, appropriately, Law Number 20 of 2014 on Standardization and Conformity Assessment.

Generally, blue ecolabelling's construction in Indonesia requires a substantial involvement from the government, particularly the MMAF and the BSN. One of the basic undertakings that the MMAF must do is to widely disseminate the importance of blue ecolabelling to important stakeholders in Indonesia. Socialization for citizens should focus on introducing how blue ecolabelling can contribute to a healthier marine environment. Socialization for fishermen should be focused on how fishery practices, while respecting traditional approaches pursuant to article 10 (c) of the CBD, can be made sustainable according to internationally-agreed standards.

The MMAF should champion the construction of more approvable fishery infrastructure to assist fisheries, develop a surveillance mechanism to periodically assess how fisheries fare in adjusting to the sophistications needed for any eco labeling schemes, and begin prioritizing and promoting fisheries that can be successful participants of the upcoming eco labeling scheme. To provide ease for the MMAF to complete all these steps, it should champion the creation of fisheries cooperatives so as to help certificating bodies to assess participant fisheries in a most feasible way and to make it easier for the government to provide incentives for the ecolabelling of artisanal fisheries.

Generally, the MMAF and the BSN should champion the development of ISO Type I Ecolabel, incorporating the provisions of the TBT Agreement as appropriate, following FAO Guidelines' recommendations, and support a more voluntary model of ecolabels as good market mechanisms. To encourage conformity with the rest of international community, the BSN, coordinating with the MMAF, should create guidelines, with an output being Ecolabel-related SNIs, which substance is based on relevant international instruments such as the FAO Code of Conduct and the FAO Guidelines as well as enacted national regulations such as the Regulation of the MMAF Number 19 of 2022 which regulates the sustainable fish resources utilization level of Indonesia's fisheries management areas. Moreover, the BSN, coordinating with the MMAF, should further create species-specified (e.g. tuna, tongkol, and salmon) substantive ecolabelling guidelines according to their local characteristics so that assessment can be carefully done.

The MMAF should support the establishment of an independent third-party certification body specialized in fisheries. After it create its standards and is certified by KAN, the certification body can start assessing candidate fisheries with suggested procedural stages as follow:

1. Candidate notifies the MMAF that it plans to register for assessment by the certificating body.
2. Deliberating based on pre-assessment data the MMAF may have already developed, it can notify the certificating body to proceed with the assessment or that the certificating body can pre-assess the candidate again to check its readiness to continue with the assessment process.
3. The certificating body then assess the candidate thoroughly before submitting its assessment report, containing the information of whether the candidate is fit for certification or not, to the MMAF for archiving and further deliberation.
4. If the candidate is found fit, the MMAF will notify the certificating body to produce a certificate for the candidate. Through the certificating body, the MMAF will provide an approval letter so that the blue ecolabel can be given to the approved fishery to apply to its products. Thereafter, the fishery's eco labeled products are registered in the MMAF.
5. The certificating body, coordinating with the MMAF and the BSN, should further conduct yearly surveillance assessments and cyclical recertifications to assess the fishery's robustness which will be submitted as reports to the MMAF.

The BSN, coordinating with the MMAF, following the FAO Guidelines and MSC's example, should further create chain-of-custody standard guidelines which allow the certification of processors and distributors so that ecolabelled products can be safely transported to customers' hands. In assisting artisanal fisheries in covering costs that they cannot themselves cover in the certification process, the MMAF should provide vital incentives so that fisheries can truly be eco labeled.

Moreover, to avoid the need for recertification abroad, the MMAF, through the central government, should disseminate the entire eco labeling scheme that it already constructed to all its main trading partners through channels such as Mutual Recognition Agreements (MRAs). To help realize this particular objective, and in order to fulfill further requirements contained in the TBT Agreement, the government should also set up inquiry points so that it can answer all reasonable enquiries from other WTO members and interested parties in other WTO members on matters regarding the implemented eco labeling scheme.

Conclusively, this research is of the view that the complete success of a long-lasting blue eco labeling scheme in Indonesia can only be achieved once comprehensive steps such as those considered in this solution are implemented thoroughly.

E. CONCLUSION

Blue Ecolabelling is found to be a positive alternative mechanism for the creation of a sustainable marine environment. Though research conclude that blue ecolabels are sound and highly-viable for adoption within the complex framework of international regulations on sustainable fisheries, its implementation should not only stop at the international scene but permeate to the local one as the research finds that practise of international certifiers is not sufficiently accommodative for artisanal fisheries.

It finds that the current practise of international blue ecolabelling does not provide enough access towards small fisheries considering that there is a reality of high costs, the rigidity of standards that can ignore local dynamics, and more favorable conditions for larger certification candidates. In this regard local implementation is vital. Localized blue ecolabelling in Indonesia will be capable of erasing current problems in ecolabelling, potentially further Indonesia's market reach as the changing market becomes more and more environmentally-aware, helps accomplish its international commitments, and last but not least, provides advancement to its artisanal fisheries.

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