

An overview

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This brief builds on a longer report on government support for marine fisheries in Indonesia, which is available <u>here</u>.

An archipelagic country with more than 17,000 islands, Indonesia is the second largest marine fish producer in the world after China. Its fishing sector is essential for ensuring food security, supporting employment, and generating income, making it a key sustainable development priority for the country's authorities. Many of the fish stocks in Indonesia's waters, however, are either already suffering from overfishing or are considered to be fully exploited (Ministry of Marine Affairs and Fisheries, 2017). Carefully designed policies are thus needed to ensure that marine fisheries can continue to provide these many benefits to the Indonesian population.

Government support to the sector can play an important role in the pursuit of sustainable fisheries, but some measures can also incentivize excessive levels of fishing. Designing and implementing the right public support policies is crucial. To contribute to an informed and evidence-based national discussion on the topic in Indonesia, the International Institute for Sustainable Development, WWF Indonesia, and Marine Change recently published an inventory of the support measures provided to marine fisheries by governments at the central level and in three provinces: Aceh, Maluku, and North Sulawesi (Suharsono et al., 2021). This report and its accompanying database show that fuel subsidies are the largest regular type of support provided to the sector by the Indonesian government. A core recommendation from this work is that the potential socio-economic and environmental risks of these subsidies warrant a careful evaluation of their impact.

This brief draws from that report to present key information and figures about fuel subsidies to marine fisheries in Indonesia. It then explains why a detailed assessment of their impacts is needed, emphasizing the need to better understand how they affect fishing communities and

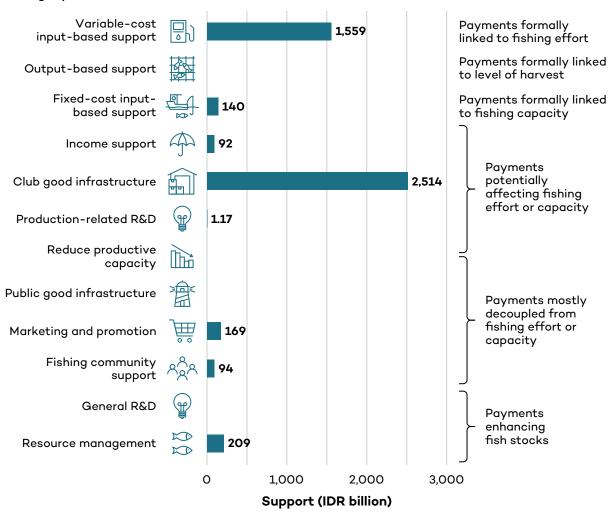


the marine resources they rely on for their livelihoods, as well as whether any possible reform could better serve the desired policy objectives. The brief concludes by offering key lessons from Indonesia's past experience in reforming fossil fuel subsidies more broadly.

Fuel Subsidies to Marine Fisheries in Indonesia

Indonesia provides significant public support to its fisheries sector, with support from the central government amounting to an average of IDR billion 4,585 (USD 328 million) between 2017 and 2020. While this amount may appear to be relatively small if one considers that the fisheries sector is worth around IDR 179 trillion (USD 12.5 billion), it is sizable in absolute terms and does not include government support provided at the provincial level. Provincial governments also tend to give significant support to fishers, mostly through measures to help them cover the fixed costs associated with fishing activities, such as the acquisition of vessels, engines, and equipment, as well as the provision of fisheries-related infrastructure.

Figure 1. Central government support to marine fisheries support, annual average by category (in IDR Billion, 2017–2020)



¹ The data and information presented in this section and the next have been extracted from Suharsono et al. (2021). Please refer to the original study, and the accompanying <u>dataset</u>, for more information and details on the methodology.



The support provided by the central government to marine fisheries is largely focused on the provision of fuel below the market price (which represents the overwhelming majority of variable-cost input-based support on Figure 1) and, like support at the provincial level, on spending for the construction and management of infrastructure facilities for the fisheries sector (Figure 1). These two categories alone accounted for around 90% of all support between 2017 and 2020. Fuel subsidies are the second largest category of support, but also the most consistent, with very significant amounts every year. Overall, these subsidies accounted for roughly 35% of all central-level expenditures over the 2017–2020 period. Payments varied from IDR 877 billion (USD 64.73 million) in 2017 to IDR 2,257 billion (USD 166.59 million) in 2019.

Fuel subsidies are given in the form of fuel (diesel and kerosene) being sold to fishermen at a discounted price at dedicated fuel stations—Solar Packed Fisherman Dealers and Fishers' Fuel Filling Stations. Subsidized fuel was initially provided to vessels of all sizes, but after the release of Presidential Decree No. 15 of 2012, only fishing vessels under 30 Gross Tonnage are qualified to receive such support at the maximum quota of 25 tonnes per month for each vessel. The provision and distribution of the fuel are carried out by business entities (AKR and Pertamina) according to the assigned volume regulated by BPH Migas, the Indonesian downstream oil and gas regulatory body.

3.0 2,500 2.257 2.58 Subsidy amount (IDR billion) 2.5 2,000 Volume (million KL) 1,891 1.93 1.92 2.0 1,500 1.271 1.5 1,000 1.0 878 500 0.5 0 0 0 2017 2018 2019 2020 2017 2018 2019 2020

Figure 2. Fuel subsidies to the fisheries sector (kilolitres and IDR billion, 2017–2020)²

While the amount of fuel provided at a discounted price to fishers tends to be relatively stable, with only a slight increase between 2017 and 2020, the value of the support has risen significantly over the same period due to changes in the price of crude oil and the rupiah exchange rate (See Figure 2). Current global events that resulted in soaring fuel prices, coupled with Indonesia's heavy dependence on fossil fuels, are expected to translate into a significant increase in energy subsidies. The Ministry of Energy and Mineral Resources

² The slight decrease in 2020 for both the volume and the amount of fuel subsidies is due to the fact that the data that was obtained as part of the original study only covered the period until October 2020.



predicted that the Government of Indonesia will spend IDR 320 trillion (USD 21.8 billion) on fuel and liquefied petroleum gas (LPG) subsidies by the end of 2022, corresponding to IDR 190 trillion (USD 12.9 billion) more than budgeted, should the international oil price remain at its current level (Masitoh, 2022). This increase is also likely to translate into higher fuel subsidies for the fisheries sector.

Are Fuel Subsidies Aligned With Sustainable Development Objectives?

Fuel subsidies are considered to be risky from a sustainability perspective. Without strictly enforced and sustainable limits imposed on catch or fishing effort, cheaper fuel can incentivize excessive fishing pressure (Martini & Innes, 2018), with negative consequences for the sustainability of marine resources and the livelihoods of the populations who depend on them for nutrition, employment, and income. This risk is particularly high in a country like Indonesia, where the fisheries management regime is not strictly limiting fishing levels (CEA Consulting, 2018), and a large majority of fish stocks already appear to be fully exploited or overexploited (Ministry of Marine Affairs and Fisheries, 2017). The fact that fuel subsidies are provided irrespective of the species targeted by beneficiaries means that the current system of distribution may encourage excessive fishing for resources that are already fished beyond sustainable levels or approaching that point.

Even from a short-term socio-economic perspective, the extent to which fuel subsidies effectively support fishers' livelihoods is uncertain. Over the 2017–2020 period, the level of realization for this type of support was low: the volume of subsidized fuel allocated by authorities was significantly and consistently higher than the volume that ultimately was purchased by fishers. This may indicate that not all the intended beneficiaries were able to access such support, in particular in the most remote communities where fishers need to travel long distances to either obtain a permit for subsidized fuel or to get fuel from the dedicated fuel stations. Such a disadvantage in accessing fuel subsidies can cause further socio-economic hardship to vulnerable, small-scale fishers, as subsidies can distort the price of fish and negatively affect their competitiveness. Fuel subsidies also—almost by definition—benefit boat owners or operators, who bear the costs of fuel, with no evidence that these benefits then translate into higher wages for vessel crews. A recent study also showed that the income received by fishing vessel crew was still below regency minimum wages in 9 provinces out of 10, despite fuel subsidies (Suharsono et al., 2021).

A detailed assessment of the impacts of fuel subsidies would thus allow a better understanding of whether these measures meet their desired policy objectives effectively and efficiently. Such an evaluation should look both at the short-term socio-economic impacts of fuel subsidies and their longer-term impacts on the sustainability of marine resources. It would allow us to determine whether the current provision of subsidized fuel effectively supports fishers' livelihoods while preserving fisheries' ability to sustainably deliver essential socio-economic benefits. An in-depth assessment of these measures would also be greatly facilitated by more transparent official data.



What Can Be Learned From a Broader Discussion on Fossil Fuel Subsidies in Indonesia?

At the end of December 2014, Indonesia introduced major reforms to its fossil fuel subsidies: a removal of subsidies to gasoline, except for distribution costs outside of the central islands of Java, Bali, and Madura and the introduction of a "fixed" subsidy of IDR 1,000 per litre for diesel. At the same time, world oil prices plummeted. Together, these changes led to massive fiscal savings, equal to IDR 211 trillion (USD 15.6 billion): over 10% of state expenditure (Pradiptyo et al., 2016). Since Indonesia does not have a mechanism to precisely track how the subsidies were reallocated, we can only compare budgets before and after the reform. Such a comparison reveals that there were marked increases in expenditure in three main areas: an IDR 148 trillion (USD 10.1 billion) increase in ministries' budgets, much of this supporting "special programs" on human and economic development; an IDR 61 trillion (USD 4.5 billion) "capital injection" to state-owned enterprises with a focus on infrastructure; and an IDR 34 trillion (USD 2.5 billion) increase in transfer funds to regions and villages (Pradiptyo et al., 2016).

In 2021, the House of Representatives approved a scheme to reform the distribution system of subsidized 3-kg LPG cylinders. The current subsidy scheme, which relies on the provision of 3-kg LPG cylinders at a subsidized price, will be changed into a system of direct cash transfers to individuals. This is done to better target the subsidy and to ensure that it is being received by the poorest 40% of the population. At the moment, the government is still perfecting the Social Welfare Integrated Database (Data Terpadu Kesejahteraan Sosial/DTKS) by conducting regular verification and validation as the basis of the implementation of the planned reform (Mediatama, 2021). For 2022, the government budgeted IDR 134 trillion (USD 9.3 billion) for energy-related subsidies, which includes support related to retail fuel, 3-kg LPG cylinders, and electricity.

Previous experience in reforming fossil fuel subsidies for other sectors in Indonesia suggests that improving targeting and distribution methods can improve the efficiency of the support measure. This lesson is particularly relevant when reforming fuel subsidies in the fisheries sector, as the most remote fishers and fishing communities are having difficulties accessing the subsidized fuel. As a result, it is likely that the subsidies disproportionately benefit larger-scale, more commercial, fishing operations, which are not intended to be the primary beneficiaries of the program. Possible reform of this fuel subsidy scheme would also lead to savings, creating an opportunity to redirect the money raised to other support measures that are less risky from a sustainability perspective and may better serve the socio-economic needs of the often vulnerable fishing communities that depend on healthy marine resources for their livelihoods.



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