

## **China's Financing and Subsidization of Capture Fisheries at Home and Abroad**

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## Table of Contents

### *Research Summary by Oceana*

1.	Introduction	5
1.1	Methodology and Sources	6
2.	China's Role in the Provision of Fisheries Subsidies	7
2.1	China's Fisheries and Aquaculture Production	7
2.2	Financing Policies, Structure and Budget Sources	7
	DIRECT SUBSIDIES	10
3.	Central Government Subsidies	10
3.1	Fuel Subsidies	10
3.1.1	Evolution of China's Fuel Subsidies Program	10
3.1.2	2015 Announcement of Fuel Subsidy Program Adjustments	12
3.1.3	General Transfer Payments 中央下放到省级的一般性转移支付资金	13
a.	Domestic Fisheries Fuel Subsidies 渔民的生产成本补贴	15
b.	Fishing Ports and Navigation Beacon Subsidies 渔港航标建设	17
c.	Fisheries and Administrative Informatization Construction 渔业渔政信息化建设	18
d.	Fishermen Vessel Reduction and Industry Transition 渔民减船转产	18
e.	Fishery Resource Conservation and Enhancement 渔业资源养护	19
f.	Fishing Moratorium Subsidy 休禁渔补贴	20
g.	Aquaculture Subsidies 池塘标准化和工厂化循环用水改造等水产养殖基础设施建设	21

3.2	Vessel Renovation and Construction Subsidies	22
3.2.1	Evolution of China's Vessel Renovation and Construction Subsidies Program	22
3.2.2	Special Transfer Payments 中央财政转移地方专项资金	25
a.	Vessel Decommissioning and Renovation 船舶报废拆解更新	28
b.	Fisheries Development 渔业发展	34
i.	Construction of Fisheries Equipment and Facilities 渔业装备设施建设	34
ii.	DWF Base Construction 远洋渔业基地建设补贴	34
iii.	Utilization of International Fisheries Resources 国际渔业资源开发利用补贴	35
c.	Fishermen Vessel Reduction and Industry Transition 渔民减船转产	38
3.3	Guangdong Province Case Study	39
4.	Provincial Government Subsidies	41
4.1	Fisheries Insurance	41
4.2	Subsidies for DWF Catch Transport	45
	INDIRECT SUBSIDIES	47
5.	Tax Exemptions	47
5.1	Catch Import Tax Exemption	47
5.2	Gear Import Tax Exemption	49
5.3	Income Tax Exemption	49
6.	Policy Bank Support	50
7.	Discussion and Conclusion	52
	Supplementary Materials	59

## **List of Figures and Tables**

Table 1: 2019 Fisheries Development and Vessel Decommissioning Subsidy, Portion for Fishing Vessel Disposal, Renovation and Fisheries Equipment Construction	29
Table 2a: Upper Limits for Vessel Renovation and Construction Subsidies per DWF Vessel by Vessel Type (in Chinese)	31
Table 2b: Upper Limits for Vessel Renovation and Construction Subsidies per DWF Vessel by Vessel Type (English Translation)	32
Table 3: 远洋渔船国际渔业资源开发利用补助系数 [Utilization of International Fisheries Resources DWF Vessel Subsidy Coefficients]	37
Figure 1: Zhejiang Fisheries Mutual Insurance Subsidies (in RMB 10,000), 2013–2017	44
Table 4: China Fisheries Subsidies, 2019	53
Figure 2: Proportions of Harmful and Beneficial Marine Capture Subsidies	56
Figure 3: Domestic and DWF Shares of Capture Fisheries Subsidies	56
Figure 4: Domestic and DWF Shares of Capture Fisheries Subsidies, with Breakdown of Direct and Indirect Subsidies	57
Table 5: Chinese Central Government Expenditures on Fisheries and Aquaculture in 2014	59
Table 6: Chinese Central Government Expenditures on Fisheries and Aquaculture in 2016	61

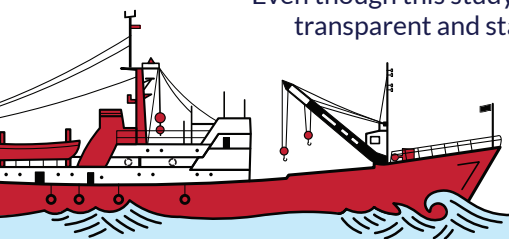
# Chinese Fisheries Subsidies Anchor Distant-Water Fleet

## New study finds domestic fuel subsidies down, but government reporting less transparent

Many governments pay subsidies to the fishing industry to support economic activity, employment, and the food supply. But such subsidies can lead to unsustainable fishing by incentivizing harvest that would not be profitable in the absence of government support.

In its 13th five-year plan, for 2016–2020, the Chinese government acknowledged the need to reduce the environmental impact of fishing. New research—led by Tabitha Grace Mallory, Chen Hao, and Leng Danyan of the China Ocean Institute and the University of Washington—appears to confirm that China is enacting this policy, for example, by reducing fuel subsidies, especially for the domestic fishing industry. However, the study also documents decreasing transparency in the public information provided on Chinese fishing subsidies and that subsidies now flow disproportionately to the distant-water fishing (DWF) industry.

Even though this study focuses on China, it makes clear that all fishing nations need to report subsidies in a more transparent and standardized way if the international community is to track and curb harmful subsidies.



### KEY FINDINGS

- From 2014 to 2019, capture fisheries subsidies from China's central government declined from CNY 27.2 billion to CNY 20.2 billion.
- However, several changes to data reporting over the last decade have reduced transparency. For example, in 2012, China stopped reporting the fuel subsidies given to distant-water fishing (beyond its territorial waters).
- By compiling numerous data sources and estimating missing data, researchers found that Chinese subsidies for DWF account for 49% of harmful subsidies.
- Most of the subsidies for DWF go to vessels fishing on the high seas. The study estimates this total as CNY 6.9 billion (58%).
- DWF fuel subsidies have decreased, but subsidies for construction of DWF bases, which began in 2016, now make up 57% of direct subsidies supporting DWF.
- Indirect subsidies in the form of tax breaks and preferential loans provide significant support to the DWF industry. Indirect subsidies accounted for 58% of total subsidies to the DWF industry.

### RECORDS SHOW DECREASE IN FUEL SUBSIDIES ...



From the 2019 estimated data, China has decreased its fuel subsidies to 40% of 2014 levels, as intended in the Ministry of Finance and Ministry of Agriculture "Notice about Adjusting Domestic Fisheries and Aquaculture Fuel Subsidy Policy in order to Promote Sustainable and Healthy Fisheries Development" in 2015. That reduction comes predominantly from domestic fuel subsidies, which have decreased from CNY 24 billion amount in 2014 to CNY 9.2 billion in 2019. DWF fuel subsidies are estimated to have decreased from CNY 2.7 billion in 2011—when they were last officially reported—to approximately CNY 953 million in 2019.

### ... BUT REPORTING CHANGES MAKE THEM HARDER TO TRACK

Even though subsidies have decreased over time, so too has transparency. Subsidies funding used to be reported in detail in the annual fisheries yearbook but have only been reported in aggregate since 2016. Most subsidy programs are now subsumed under lump sum payments to provinces which have discretion to spend across categories and are not required to report back to the central level the breakdown of their subsidies spending.

#### Critical items

● Itemized ● Aggregate

	PREVIOUS	NOW
Fuel	●	●
Construction	●	●
Other harmful	● ●	● ●

### ... AND SUPPORT TO DISTANT-WATER FISHING REMAINS HIGH

China's DWF subsidies policies are still strongly capacity-enhancing and do not match the subsidies reductions of its domestic policies.

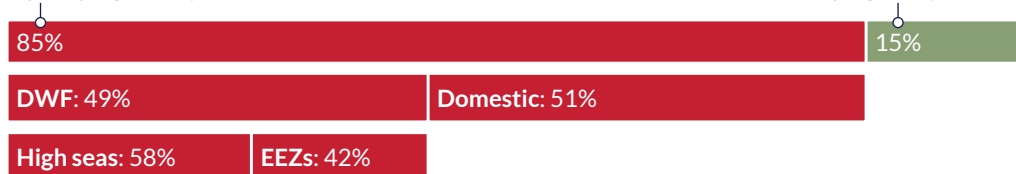
Although the DWF industry receives 49% of harmful subsidy funds, it only accounts for 22% of China's total catch. And even though fuel subsidies have decreased, the central government provided CNY 2.9 billion toward the construction of DWF bases.

Of the DWF funding, an estimated CNY 6.9 billion is going to high seas vessels (58%), and CNY 5.0 billion to vessels operating in foreign EEZs. Furthermore, indirect subsidies in the form of tax breaks and preferential loans now account for 58% of all subsidies going to the DWF industry.

### FLOW OF HARMFUL SUBSIDIES

Harmful: CNY 24.1 billion

Beneficial: CNY 4.1 billion



## CHINA'S SUBSIDIES COME THROUGH MANY AVENUES

China's central government provides most of the nation's fishing subsidies but gives provincial and other governments authority to distribute the majority of them through two programs, general transfer payments (GTP) and special transfer payments (STP).

In 2019, GTPs totaled CNY 11.7 billion. Of this, an estimated CNY 9.2 billion went to domestic fuel subsidies. STP totaled CNY 8.6 billion—an estimated CNY 7.1 billion for fisheries development, including port building—and improvements to fishing vessels and the rest for reducing the number of vessels, considered a beneficial subsidy.

Provincial governments provided about CNY 1 billion in 2019, almost all of it to support insurance premiums for fishing vessels. A final category of subsidies was indirect government expenditures, such as tax exemptions, estimated at CNY 6.9 billion. Two tax exemptions account for almost all of this total—one for the tax on corporate income and another for the import tax on catch caught by the DWF industry and brought back to China. Preferential loans through policy banks also provide an indirect subsidy.

## BREAKDOWN OF \$4.2 BILLION USD (CNY 28.2 BILLION) OF CHINA CAPTURE FISHERIES SUBSIDIES, 2019

### DIRECT SUBSIDIES: \$3.1 BILLION (CNY 21.3 BILLION)

Key ■ Beneficial ■ Harmful  
■ Ambiguous ■ Aquaculture

#### CENTRAL GOVERNMENT SUBSIDIES (中央政府对渔业的财政投入): \$3.0 BILLION (CNY 20.27 billion)

General transfer payments, GTPs (中央下放到省级的一般性转移支付资金): \$1.7 billion (CNY 11.66 billion)

Spent at provincial level: \$1.7 billion (CNY 11.3 billion)

- Production cost subsidies to fishermen (渔民的生产成本补贴)/fuel subsidies (渔船柴油涨价补贴): \$1.4 billion (CNY 9.2 billion)
- Aquaculture pond standardization, water recirculation construction, construction of other aquaculture infrastructures (池塘标准化和工厂化循环用水改造等水产养殖基础设施建设): \$1 billion (CNY 7.1 billion) [Not included in total]
- Fisheries resource conservation/stock enhancement (渔业资源养护/增殖放流): \$148 million (CNY 1.0 billion)
- Fishing ports and navigation beacons (渔港和航标建设): \$86 million (CNY 580 million)
- Fishing vessel reduction and industry transition (减船转产): \$44 million (CNY 300 million)
- Fishery and fishery administration informatization construction (渔业渔政信息化建设): \$30 million (CNY 200 million)
- Fishing moratorium subsidy (休禁渔补贴): \$5 million (CNY 34 million)

■ Spent at central and municipal levels: \$52 million (CNY 349 million)

Special transfer payments, STPs (中央财政转移地方专项资金): \$1.3 billion (CNY 8.6 billion)

Fisheries development (渔业发展): \$834 million (CNY 5.7 billion)

- Construction of fisheries equipment and facilities (渔业装备设施建设): \$693 million (CNY 4.7 billion)
  - DWF bases (远洋渔业基地): \$425 million (CNY 2.9 billion)
  - Inland fishing ports, domestic (内陆渔港): \$179 million (CNY 1.2 billion)
  - Marine ranching (海洋牧场), domestic: \$89 million (CNY 605 million)
- Utilization of international fisheries resources (国际渔业资源开发利用): \$141 million (CNY 953 million)

■ Fishing vessel reduction and industry transition (减船转产): \$222 million (CNY 1.5 billion)

Vessel decommissioning and renovation (渔船报废拆解、更新改造): \$216 million (CNY 1.5 billion)

- DWF vessel decommissioning and renovation: \$114 million (CNY 773 million)
- Domestic vessel decommissioning and renovation: \$102 million (CNY 687 million)

#### PROVINCIAL GOVERNMENT SUBSIDIES: \$154 MILLION (CNY 1.0 BILLION)

Insurance premiums: \$148 million (CNY 1.0 billion)

DWF catch transport: \$6 million (CNY 40 million)

### INDIRECT SUBSIDIES: \$1.0 BILLION (CNY 6.9 BILLION)

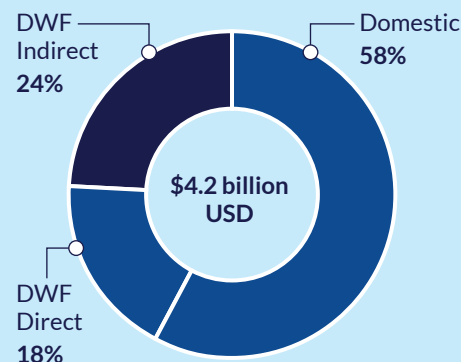
Tax exemptions: \$936 million (CNY 6.3 billion)

- Income tax exemption: \$522 million (CNY 3.5 billion)
- Catch import tax: \$414 million (CNY 2.8 billion)
- Gear import tax exemption: 0

Policy bank loan interest: \$81 million (CNY 547 million)

### SIGNIFICANT SHARE OF INDIRECT SUBSIDIES TO DWF

Indirect subsidies in the form of tax breaks and preferential loans contributed a higher share of DWF support than direct subsidies.



## DATA SOURCES

The researchers compiled their data mainly from primary-source Chinese language materials. One key source was the China Fisheries Yearbook, which, up until 2015, provided details of China's fisheries subsidies programs. To make up for changes in reporting that resulted in missing data, the researchers used alternative sources—including other government publications, media reports, and interviews—and used conservative estimates based on trends in the available data.

For more information on methods and future publication, visit:  
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# 1 Introduction

Member countries of the World Trade Organization (WTO) are working to negotiate an agreement on fisheries subsidies in order to meet target 14.6 of the Sustainable Development Goals (SDG), which called for the elimination and prohibition by 2020 of subsidies that contribute to overcapacity, overfishing and illegal, unreported and unregulated (IUU) fishing.<sup>1</sup> Subsidies distort the cost-benefit calculation of fishing enterprises, making fishing profitable when it would not be in the absence of such support. Not only are subsidies economically inefficient, they also threaten fisheries sustainability by expanding fishing effort beyond natural limits.<sup>2</sup> The WTO's goal of achieving an agreement on fisheries subsidies by 2020 was disrupted by the COVID-19 pandemic, but efforts are now directed at reaching an agreement in 2021.<sup>3</sup> Such an agreement would be the culmination of nearly two decades of effort on this issue, which began with the 2001 Doha Ministerial Declaration. In addition to the basic task of committing to and hammering out an agreement, addressing challenges such as transparency in reporting and potential loopholes in the scope and definitions is key to arriving at an effective agreement.

This report provides a case-study analysis of the capture fisheries subsidies programs of the People's Republic of China. As the world's largest fishing nation and a significant subsidizer of its fishing industry, which includes China's sizable distant water fishing (DWF) fleet, China's subsidy program has an impact on the sustainability of global fish stocks, and the country plays a major role in the WTO negotiations on fisheries subsidies.<sup>4</sup> Understanding how China's fisheries financing system works is therefore one of the key challenges in considering China's part in the provision of global fishing subsidies. Furthermore, China has other financing measures, such as favorable bank lending programs that are relevant to understanding indirect support measures given to China's fishing industry.

This study also provides an implementation test for the policies China initiated at the beginning of the 13<sup>th</sup> Five-Year Plan (2016–2020) to increase sustainability in marine fisheries. If the robustness of a state's policy commitments can be evaluated by analyzing whether policy developments (our “qualitative data”) are rhetorical, institutional, or financial, we certainly have rhetorical data (such as policy statements that are low cost for the government) and institutional data (such as the creation of a training center that is mid cost for the government) from this five-year period.<sup>5</sup> But observable financial actions are the evaluative measure for the deepest level of policy commitment since they are higher cost and higher risk for the government. In 2015, China

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<sup>1</sup> World Trade Organization (WTO), Negotiations on Fisheries Subsidies, [https://www.wto.org/english/tratop\\_e/rulesneg\\_e/fish\\_e/fish\\_e.htm](https://www.wto.org/english/tratop_e/rulesneg_e/fish_e/fish_e.htm).

<sup>2</sup> Monro, Gordon and Sumaila, Rashid, “The Impact of Subsidies upon Fisheries Management and Sustainability: the Case of the North Atlantic,” *Fish and Fisheries*, Vol. 3, 2002, pp. 233–250.

<sup>3</sup> World Trade Organization, “WTO members committed to keeping up momentum in fisheries subsidies negotiations,” 14 December 2020, [https://www.wto.org/english/news\\_e/news20\\_e/fish\\_14dec20\\_e.htm](https://www.wto.org/english/news_e/news20_e/fish_14dec20_e.htm).

<sup>4</sup> Mallory, Tabitha, “Fisheries Subsidies in China: Quantitative and Qualitative Assessment of Policy Coherence and Effectiveness,” *Marine Policy*, Vol. 68, 2016, pp. 74–82.

<sup>5</sup> For more on this evaluative approach, see Kallender-Umezū P, Pekkanen SM, *In Defense of Japan: From the Market to the Military in Space Policy*, Stanford, CA: Stanford University Press, 2010.

announced that by 2019 it would decrease fisheries fuel subsidies to 40 percent of 2014 levels.<sup>6</sup> Thus, one way to analyze China's implementation and enforcement of its policy announcements on sustainable fisheries is to examine the financing of its initiatives. Other tests of enforcement and compliance—such as scientific stock assessment, and maritime monitoring, control and surveillance—also remain important and necessary.

China provides both direct and indirect subsidies to the fishing industry, and the support comes both from the central government and provincial government budgets. The study estimates that China provided CNY 28.192 billion to the capture fisheries industry (about USD 4.16 billion) in 2019.<sup>7</sup> The CNY 28.192 billion does not include at least CNY 7.1 billion that supported aquaculture. The total for capture fisheries includes CNY 21.308 billion in direct subsidies, with 20.268 billion from the central government and CNY 1.040 billion from provincial governments. For indirect subsidies, we estimate that the industry received an effective subsidy of CNY 6.336 billion in tax exemptions, and CNY 548 million in interest savings from preferential loans from policy banks. We estimate that CNY 24.066 billion (85 percent) of the capture subsidies were harmful in nature, CNY 4.092 billion (15 percent) were beneficial, and CNY 33.58 million (0.01 percent) were ambiguous. Of the 28.192 billion for capture fisheries, we estimate that CNY 11.876 billion (42 percent) went to the DWF industry. Of the total harmful subsidies, 49 percent went to DWF.

## 1.1 Methodology and Sources

This study relied mostly on primary-source Chinese language materials, including government publications, media reports, and interviews. We examined government laws, regulations, policies, notifications, and analyses and comprehensively cited those that are instrumental to China's fisheries subsidies program. We also drew upon peer-reviewed academic literature and journalistic accounts to complement our analysis. In cases where we had incomplete data, such as incomplete reporting for provincial subsidies, we estimated amounts to account for these information gaps (as detailed in the relevant sections below).

Our estimate is for 2019, for which the existing data are the most complete, and 2019 was the year for which China set a fuel-subsidy-reduction goal, as elaborated below. Because of the nature of Chinese budgeting, some data are estimated by taking the annual average from sums earmarked for five-year increments.

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<sup>6</sup> 财政部、农业部 [Ministry of Finance and Ministry of Agriculture], *关于调整国内渔业捕捞和养殖业油价补贴政策促进渔业持续健康发展的通知*, 财建 [2015] 499 号 [Notice about Adjusting Domestic Fisheries and Aquaculture Fuel Subsidy Policy in order to Promote Sustainable and Healthy Fisheries Development (Document 2015 No. 499)], 25 June 2015, [http://jjs.mof.gov.cn/zhengwuxinxi/zhengcefagui/201507/t20150709\\_1272152.html](http://jjs.mof.gov.cn/zhengwuxinxi/zhengcefagui/201507/t20150709_1272152.html).

<sup>7</sup> Using an exchange rate of 6.77 CNY to the USD, an average of the exchange rates from 2016 through 2019.



## 2 China's Role in the Provision of Fisheries Subsidies

### 2.1 China's Fisheries and Aquaculture Production

China is the world's largest producer of aquatic goods, reportedly producing 64.804 million tons in 2019, which accounted for about 36 percent of the global total.<sup>8</sup> China produced 50.791 million tons of aquaculture products, accounting for 61 percent of global aquaculture production, and 14.013 million tons from capture fisheries, which was 17 percent of global capture production. Of China's capture fisheries, according to China's official statistics, China's domestic marine fisheries produced 10.002 million tons, and domestic freshwater fisheries produced 1.841 million tons.<sup>9</sup> DWF accounted for 2.170 million tons.<sup>10</sup> China's aquatic goods sector overall was valued at CNY 2.64 trillion in 2019, with total primary aquatic production valued at CNY 1.29 trillion. Primary capture fisheries production was valued at CNY 211.6 billion for marine capture and CNY 39.8 billion for freshwater capture.

### 2.2 Financing Policies, Structure and Budget Sources

China organizes its economic planning in five-year increments. China's National Five-Year Plans for Economic and Social Development, issued by the National Development and Reform Commission, set out broad goals for China's economy.<sup>11</sup> The five-year plan model was borrowed from the Soviet Union, and China's first five-year plan was launched in 1953. The purpose of five-year plans is to align economic goals with the overarching policy objectives of the senior leadership, and guide the efforts of various government agencies who must implement these policies. Five-year plans are significant because they capture the core thinking of the Chinese central authority. Beginning with the 11<sup>th</sup> Five-Year Plan in 2006, China's five-year plans have shifted from specific industrial targets to more general guidelines. The word for plan (计划) was changed to a word meaning "vision and guideline (规划)." Once drafted by the National Development and Reform Commission (NDRC), which used to be the State Planning Commission, five-year plans are then approved by the National People's Congress. The various agencies within the State Council issue more specific, sectorial five-year plans that identify development targets.

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<sup>8</sup> 农业部 [Ministry of Agriculture], *中国渔业统计年鉴 2020* [*China Fishery Statistical Yearbook 2020*], 北京: 中国农业出版社 [Beijing: China Agricultural Press], 2020; FAO, *The State of World Fisheries and Aquaculture (SOFIA)—Sustainability in Action*, 2020, <http://www.fao.org/3/ca9229en/ca9229en.pdf>. The latest FAO data are from 2018.

<sup>9</sup> China considers all fisheries production in the Yellow Sea, East China Sea, and South China Sea to be part of the domestic industry, even if the fishing activity occurs outside of what would be China's exclusive economic zone (EEZ) according to international law.

<sup>10</sup> There are recognized problems with Chinese fisheries statistics. Some Chinese experts think actual aquaculture production is only 70 percent of what is officially reported, and domestic capture may be even less, perhaps 65 percent. DWF is likely underreported. Watson, Reg and Pauly, Daniel, "Systematic distortions in world fisheries catch trends," *Nature*, Vol. 414, No. 29, November 2001; and Pauly, Daniel, et al., "China's Distant Water Fisheries in the 21<sup>st</sup> Century," *Fish and Fisheries*, 2013; plus personal communication.

<sup>11</sup> For a good overview of China's five-year planning system, see Kennedy, Scott and Johnson, Christopher K., *Perfecting China, Inc.: The 13<sup>th</sup> Five-Year Plan*, Washington, D.C.: Center for Strategic and International Studies, 2016, 51pp.

While overcapacity in the domestic fishing industry was apparent to policymakers from the early 1980s, capacity-building for the DWF industry was the predominant goal through the 12<sup>th</sup> Five-year period ending in 2015. China's ratification of the UN Convention on the Law of the Sea (UNCLOS) accelerated expansion of DWF as domestic fishing grounds shrank. In the 10<sup>th</sup> Five-Year Plan, China introduced its official “going out” (走出去) policy, a strategy that encourages Chinese companies to search for new markets and investment opportunities abroad.<sup>12</sup> The plan specifically called for “strengthening China's fisheries resources and ecological protection of fishing areas, and to actively develop aquaculture and distant water fisheries” (加强渔业资源和渔业水域生态保护, 积极发展水产养殖和远洋渔业). Expansionary targets for the DWF industry were supported by a generous subsidies program, peaking in the 2010s at an estimated USD 7.2 billion, which accounted for 21 percent of total global fisheries subsidies, and 27 percent of global harmful subsidies.<sup>13</sup>

Policy changes toward a more moderate environmental impact commenced around 2015 and 2016 with the start of the 13<sup>th</sup> Five-Year Plan period (for 2016–2020). Alongside the announcement of a more general “marine ecological civilization building” (海洋生态文明建设) policy, specific policies targeted a “stricter” approach toward illegal fishing.<sup>14</sup> On DWF specifically, over the 13<sup>th</sup> Five-year period, China announced the creation of a DWF compliance and training center; an expansion of the observer program; a cap on the number of DWF vessels; an IUU fishing blacklist; better DWF regulations and transshipment measures; and its first high-seas fishing moratoria.<sup>15</sup>

<sup>12</sup> 中央人民政府 [PRC Central Government], *国民经济和社会发展第十个五年计划纲要* [National Economic and Social Development Tenth Five-year Plan], 15 March 2001, [www.people.com.cn/GB/shizheng/16/20010318/419582.html](http://www.people.com.cn/GB/shizheng/16/20010318/419582.html).

<sup>13</sup> Sumaila, Rashid, et al., “Updated Estimates and Analysis of Global Fisheries Subsidies,” *Marine Policy*, Vol. 109, 2019, <https://doi.org/10.1016/j.marpol.2019.103695>.

<sup>14</sup> 海洋局 [State Oceanic Administration], 《国家海洋局海洋生态文明建设实施方案》(2015–2020) [“National Plan for Building a Marine Ecological Civilization” (2015–2020)], 20 July 2015, [http://www.zgkyb.com/yw/20150720\\_19494.htm](http://www.zgkyb.com/yw/20150720_19494.htm); 农业部网站 [MOA Website], 农业部: “严”字当头渔业执法监管工作成效显著 [Ministry of Agriculture: “Strict” Is the Chinese Character Leading the Work of Fisheries Enforcement and Supervision to Achieve Remarkable Success], 27 December 2017, [http://www.gov.cn/xinwen/2017-12/27/content\\_5250720.htm](http://www.gov.cn/xinwen/2017-12/27/content_5250720.htm).

<sup>15</sup> 农业部办公厅 [Ministry of Agriculture General Office], *远洋渔业国家观察员管理实施细则* [Distant Water Fisheries National Observer Program Management and Implementation Specifications], 1 December 2016, [http://www.moa.gov.cn/govpublic/YYJ/201612/t20161209\\_5403493.htm](http://www.moa.gov.cn/govpublic/YYJ/201612/t20161209_5403493.htm); 农业农村部, [Ministry of Agriculture and Rural Affairs], 农业部办公厅关于部分远洋渔业企业及渔船违法违规问题和处理意见的通报 [Notification about the Views of the Ministry of Agriculture General Office on the Problem and Handling of Illegal Distant Water Fishing Companies and Vessels], March 2018, [http://www.moa.gov.cn/nybg/2018/201803/201805/t20180528\\_6143244.htm](http://www.moa.gov.cn/nybg/2018/201803/201805/t20180528_6143244.htm); 农业部 [Ministry of Agriculture], “十三五”全国远洋渔业发展规划 [“Thirteenth Five” National Distant Water Fishing Development Plan], 21 December 2017, [http://www.moa.gov.cn/gk/ghjh\\_1/201712/t20171227\\_6128624.htm](http://www.moa.gov.cn/gk/ghjh_1/201712/t20171227_6128624.htm); 农业农村部 [Ministry of Agriculture and Rural Affairs], *远洋渔业管理规定* [Distant Water Fishing Management Regulations], 10 February 2020, [http://www.gov.cn/zhengce/zhengceku/2020-03/13/content\\_5490763.htm](http://www.gov.cn/zhengce/zhengceku/2020-03/13/content_5490763.htm); 农业农村部 [Ministry of Agriculture and Rural Affairs], 农业农村部关于加强远洋渔业公海转载管理的通知 [Ministry of Agriculture and Rural Affairs Notice on Strengthening Management of Distant Water Fishing High Seas Transshipment], 19 May 2020, [http://www.moa.gov.cn/gk/tzgg\\_1/tz/202005/t20200521\\_6344904.htm](http://www.moa.gov.cn/gk/tzgg_1/tz/202005/t20200521_6344904.htm); 农业农村部 [Ministry of Agriculture

China's subsidies financing structure and reporting has also changed considerably in the past few years, resulting in decreased transparency. China used to issue a detailed report of its fisheries subsidies programs and amounts in the annual *China Fisheries Yearbook* volume, however in 2016, this detailed reporting ceased (see Supplementary Materials). China used to report the total amount of fuel subsidies provided to the industry, including the proportions provided to the domestic versus distant-water fishing fleets, but China stopped reporting the fuel subsidies given to the DWF industry after 2011. Now, instead of reporting funding that directly supports fuel subsidies, the Chinese central government has altered its subsidy programs so that fishing enterprises receive general funding that they can use to support their operations, which includes fuel subsidies. The Chinese central government no longer tracks criteria that determine how much money in fuel subsidies a given vessel is granted—these allocations are now made at subnational levels of government (provincial-level and below). China issued a notification of its subsidies, including agricultural subsidies, to the WTO in 2019, detailing fisheries subsidies programs for 2017 and 2018, but did not include an estimate for fuel subsidies because of these policy changes.<sup>16</sup>

The next sections provide an overview of China's fisheries financing and subsidies program, including and analysis of direct funding mechanisms from the central-level and subnational-level governments as well as indirect support to the fishing industry, including tax breaks and preferential loans.

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and Rural Affairs], 农业农村部关于加强公海鱿鱼资源养护促进我国远洋渔业可持续发展的通知 [Ministry of Agriculture and Rural Affairs Notice on Strengthening the Conservation of Squid Resources on the High Seas and Promoting the Sustainable Development of Distant Water Fisheries], 1 June 2020, [http://www.moa.gov.cn/gk/tzgg\\_1/tz/202006/t20200602\\_6345770.htm](http://www.moa.gov.cn/gk/tzgg_1/tz/202006/t20200602_6345770.htm).

<sup>16</sup> China Delegation to the WTO Committee on Subsidies and Countervailing Measures, "New and Full Notification Pursuant to Article XVI:1 of the GATT 1994 and Article 25 of the Agreement on Subsidies and Countervailing Measures," Document G/SCM/N/343/CHN, 30 June 2019, 249pp.

## **DIRECT SUBSIDIES**

### **3 Central Government Subsidies**

The Chinese government reports that total subsidies from the central government to the entire fishing industry are approximately CNY 24.0 billion annually.<sup>17</sup> The two main programs through which the central government provides subsidies include General Transfer Payments (GTPs; 中央下放到省级的一般性转移支付资金) and Special Transfer Payments (STPs; 中央财政转移地方专项资金). One source reported that GTPs for domestic fisheries total about CNY 16 billion annually, while the STPs include about CNY 4 billion for domestic fisheries and CNY 4 billion for DWF.<sup>18</sup>

The GTP and STP programs as they exist at the end of the 13<sup>th</sup> Five-Year Plan have been shaped by the country's previous policies on fisheries fuel and vessel renovation and construction subsidies. Throughout this section, we will contextualize the current GTP and STP programs in the history of their policy development. The mechanism for fisheries GTPs today largely derives from China's past fuel subsidies policy, while that for fisheries STPs largely originates in the vessel renovation and construction subsidies policy.

#### **3.1 Fuel Subsidies**

Because fuel tends to be the costliest input for the fishing industry, the majority of harmful or capacity-enhancing fisheries subsidies are to offset fuel costs, including for other countries besides China. The adjustments to China's fisheries subsidy policy overall are thus anchored around the reduction of fuel subsidies and the reallocation of funding toward other programs. In order to understand the changes to these policies beginning in 2015, it is helpful to review the fuel subsidy program from its inception.

##### **3.1.1 Evolution of China's Fuel Subsidies Program**

China established a fuel subsidies program in 2006 in response to the increasing cost of fisheries production. That year, the Ministry of Agriculture (MOA; 农业部) and the Ministry of Finance (MOF; 财政部) jointly provided CNY 3.18 billion in diesel subsidies to fishing enterprises

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<sup>17</sup> The total CNY 24.0 billion has also been mentioned by local governments, see for example 王振权 [Wang Zhenquan], 推动浙江省远洋渔业高质量发展之财政思考 [Thoughts on Promoting Zhejiang Province Distant Water Fishing High Quality Financing], November 2019, [http://czt.zj.gov.cn/art/2019/11/22/art\\_1228972395\\_40466103.html](http://czt.zj.gov.cn/art/2019/11/22/art_1228972395_40466103.html).

<sup>18</sup> 中国农村网 [China Rural News], 渔业油价补贴综合性支持政策 [Fisheries Fuel Subsidies Comprehensive Support Policy], 23 April 2020, [http://journal.crnews.net/nmwz/2020n/2020nd5q/zccs/133667\\_20200423123636.html](http://journal.crnews.net/nmwz/2020n/2020nd5q/zccs/133667_20200423123636.html).

operating motorized fishing vessels in Chinese domestic waters, across both the capture and aquaculture sectors.<sup>19</sup> Similar subsidies to the DWF industry began in 2007.<sup>20</sup>

China launched the program as a response to the increasing price of diesel on the Chinese domestic market. The price of international crude oil had risen sharply since 2003, while the price of China's domestic refined oil was substantially lower because of price controls. The price difference disincentivized Chinese oil refiners from continuing production of refined oil for the Chinese domestic market, eventually interfering with the functioning of the economy.<sup>21</sup> To address this problem, in 2006 the National Development and Reform Commission (NDRC, 国家发改委), in conjunction with the State Council, increased the ex-factory price (出厂价) of gasoline and diesel by CNY 300 and 200 per ton, respectively, while offsetting the increased costs by providing subsidies to disadvantaged groups and public welfare sectors, including the fisheries industry, which would receive the same favorable fuel prices accorded to the Chinese military.<sup>22</sup> As the NDRC policy entered into force, the domestic diesel price soared to nearly CNY 6,000 per ton in 2006—an increase from CNY 4,000 per ton in 2004—and thus increased the cost of national fisheries production by CNY 5.68 billion.<sup>23</sup>

In 2008, the State Council initiated reforms for the pricing and taxing of refined oil (成品油价格和税费改革), imposing a higher consumption tax on refined oil while terminating the long-standing collection of road maintenance fees (公路养路费).<sup>24</sup> This policy, also known as the

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<sup>19</sup> *Ibid.*; 新华社 [Xinhua News], 农业部渔业局: 柴油补助五年惠及 2000 多万渔民 [Ministry of Agriculture Bureau of Fisheries: Diesel Fuel Subsidy Helps Over 20 Million Fishermen Over Five Years], 中央政府门户网站 [Central Government Website], 7 March 2011, [http://www.gov.cn/jrzg/2011-03/07/content\\_1818622.htm](http://www.gov.cn/jrzg/2011-03/07/content_1818622.htm).

<sup>20</sup> The DWF industry initially did not receive as much attention as domestic fisheries. DWF industry stakeholders lobbied the central government to support the DWF industry, which finally led to the inclusion of the DWF industry in the list of fuel subsidy recipients, see 中工网 [China Industrial Network], 迎接工会十五大 (26) 工会组织与职工同呼吸、共命运 [Meet the 15<sup>th</sup> National Congress of Trade Unions (26) Trade Union Organizations and Workers Together in a Single Breath], 14 October 2008, [http://www.taiwan.cn/zt/szzt/zggh/ghcj/hhcj/200810/t20081014\\_761629.html](http://www.taiwan.cn/zt/szzt/zggh/ghcj/hhcj/200810/t20081014_761629.html).

<sup>21</sup> 中央政府门户网站 [China Central Government Website], 国家发展改革委提高成品油价格水平 [NDRC Raises Oil Price Levels], 27 March 2006, [http://www.gov.cn/banshi/2006-03/27/content\\_237280.htm](http://www.gov.cn/banshi/2006-03/27/content_237280.htm).

<sup>22</sup> 国务院办 [The State Council], 《国务院办公厅关于转发发展改革委等部门完善石油价格形成机制综合配套改革方案和有关意见的通知》(国办发 [2006] 16 号) [“Notice of Opinions from the State Council on the National Development and Reform Commission's Perfecting the Comprehensive Reform of the Fuel Pricing System” Document 2006 No. 16], 2006; 国家发展改革委关于调整成品油价格的通知 (发改电 [2006] 64 号) [“Notice of the NDRC Notice on the Price Adjustment for Refined Oil” Document 2006 No. 64], 26 March 2006, [http://www.gov.cn/gzdt/2006-03/26/content\\_236868.htm](http://www.gov.cn/gzdt/2006-03/26/content_236868.htm).

<sup>23</sup> 农业部渔业局: 柴油补助五年惠及 2000 多万渔民 [MOA Bureau of Fisheries: Diesel Subsidies Over Five Years Have Benefitted More Than 20 Million Fishermen], 7 March 2011, [http://www.gov.cn/jrzg/2011-03/07/content\\_1818622.htm](http://www.gov.cn/jrzg/2011-03/07/content_1818622.htm).

<sup>24</sup> 国务院关于实施成品油价格和税费改革的通知 国发 [2008] 37 号 [State Council Notice on the Implementation of the Reform of Refined Oil Prices and Taxes], 18 December 2008, [http://www.gov.cn/zwgg/2008-12/19/content\\_1182128.htm](http://www.gov.cn/zwgg/2008-12/19/content_1182128.htm).

“Fee-Switched-to-Tax” policy (“费改税”政策), further increased the price of refined oil.<sup>25</sup> In response, the central government would subsidize fuel to the fishing industry through special transfer payments, with the amount of the subsidy to be determined by an increase or decrease in the price of refined oil, with the exact amount to be set by the MOF in conjunction with other relevant departments. The new system would begin in 2009, and the MOF issued further details that same year.<sup>26</sup>

Following on this policy, in 2009 the MOF and the MOA jointly announced measures formally establishing a plan for the provision of fuel subsidies to the fishing industry.<sup>27</sup> The measures stated that all legal fish producers, including both domestic and distant-water fisheries as well as aquaculture producers that operated for at least three months a year, were eligible for the subsidy. Auxiliary fishing vessels were not eligible. The subsidy kicked in when the price of oil reached CNY 4400 a ton and when the price of diesel reached CNY 3870 (prices that were established in the 2006 oil price reform), and stopped when the prices fell below these levels. The subsidy was determined according to the type of fishing operations and power of the vessel engine. These measures continued through the duration of the 12<sup>th</sup> Five-Year Plan (2011–2015).

### 3.1.2 2015 Announcement of Fuel Subsidy Program Adjustments

In June 2015, the MOF and MOA announced a decision to reduce domestic fisheries fuel subsidies by 2019 to 40 percent of the amount provided in 2014, which was officially reported as CNY 24.2 billion.<sup>28</sup> Central-level subsidies would be provisioned to the local level for allocation through two types of transfer payments—80 percent through GTPs and 20 percent through STPs. Fuel subsidies would no longer be linked to the amount of fuel consumed, and the fuel price would be determined by the market. The new system was also intended to reduce reliance on central-government decisions and support, and to increase efficiency at the local level. The share of non-fuel subsidy programs (退坡资金) would also gradually expand as proportions of the total amount of subsidies. Beneficial subsidies such as initiatives to transition fishermen to other

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<sup>25</sup> 俞松立、水柏年、葛超锋、徐元凯、冀萌萌 [Yu Songli, Shui Bainian, Ge Chaofeng, Xu Yuankai, Ji Mengmeng], “渔业柴油补贴政策实施中存在问题及改革建议 [Issues in the Implementation of Fisheries Fuel Subsidy Policy and Improvement Suggestions],” *管理观察 [Management Observer]*, 2016, 33: 54–57.

<sup>26</sup> 财政部 [Ministry of Finance], 关于成品油价格和税费改革后进一步完善种粮农民部分困难群体和公益行业补贴机制的通知 (财建 [2009] 1 号) [Notice on Further Improving the Mechanism of Subsidies for Grain Farmers, Low-Income Groups and Public Service Industries after the Petroleum Fuels Price and Tax Reform], 1 January 2009, <https://www.waizi.org.cn/law/11982.html>.

<sup>27</sup> 财政部 农业部 [Ministry of Finance and Ministry of Agriculture], 渔业成品油价格补助专项资金管理暂行办法 (财建 [2009] 1006 号) [Interim Measures for the Administration of Special Funds for Fisheries Fuel Subsidies (MOF 2009 No. 1006)], 31 December 2009, [http://www.gov.cn/gongbao/content/2010/content\\_1629134.htm](http://www.gov.cn/gongbao/content/2010/content_1629134.htm).

<sup>28</sup> 财政部、农业部 [Ministry of Finance and Ministry of Agriculture], 关于调整国内渔业捕捞和养殖业油价补贴政策促进渔业持续健康发展的通知, 财建 [2015] 499 号 [Notice about Adjusting Domestic Fisheries and Aquaculture Fuel Subsidy Policy in order to Promote Sustainable and Healthy Fisheries Development (Document 2015 No. 499)], 25 June 2015, [http://www.gov.cn/xinwen/2015-07/13/content\\_2895987.htm](http://www.gov.cn/xinwen/2015-07/13/content_2895987.htm).

industries (转产转业) and increase the energy-efficiency and sustainability of fishing vessels would increase over the same time period.<sup>29</sup>

In April 2016, China's MOF, MOA, Ministry of Transport (MOT), MOA, and State Forestry Administration (SFA) announced that beginning in 2015, DWF fuel subsidies were subsumed by the existing Central Government Budget Vessel Decommissioning and Standardization Subsidy (中央财政船舶报废拆解和船型标准化补贴) that funds the development and exploitation of international fisheries resources; the renovation and construction of DWF fishing vessels; and the construction of domestic and overseas DWF bases.<sup>30</sup> This latter policy development for DWF will be discussed further in section 3.2.

### 3.1.3 General Transfer Payments 中央下放到省级的一般性转移支付资金

The fisheries industry receives GTPs from the central government.<sup>31</sup> GTPs, also known as unconditional transfers, are financial allocations made by the central government to provincial governments that face financial deficiency, and their use and re-allocation among stakeholders is largely at the discretion of the provincial governments.<sup>32</sup> In its subsidies notification to the WTO, China cites two policies as the legal basis for GTPs.<sup>33</sup> In a second WTO document featuring responses to questions from the U.S. delegation, China has stated that the second policy will be replaced by a new policy in the next five-year plan.<sup>34</sup>

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<sup>29</sup> 财政部 [Ministry of Finance], 财政部、农业部联合部署渔业油价补贴政策调整工作 [Ministry of Finance and Ministry of Agriculture Deploy Fisheries Fuel Subsidies Policy Adjustment Work], 9 July 2015, [http://www.gov.cn/xinwen/2015-07/09/content\\_2894870.htm](http://www.gov.cn/xinwen/2015-07/09/content_2894870.htm).

<sup>30</sup> 财政部、交通运输部、农业部、国家林业局 [Ministry of Finance, Ministry of Transport, Ministry of Agriculture, National Bureau of Forestry], 关于调整农村客运、出租车、远洋渔业、林业等行业油价补贴政策的通知 [Notice on the Policies of Adjusting Fuel Subsidies for the Industries of Rural Passenger Transport, Taxi, Distant Water Fishing, and Forestry], 13 April 2016, [http://www.fdi.gov.cn/1800000121\\_23\\_73039\\_0\\_7.html](http://www.fdi.gov.cn/1800000121_23_73039_0_7.html).

<sup>31</sup> 王波、李茂华 [Wang Bo, Li Maohua], “渔业油价补贴政策调整工作思考与建议 [Reflection and Suggestions on the Adjustment of Fuel Price Subsidy Policy for the Fisheries Industry]”, *中国水产 [China Fisheries]*, 2018, 10: 34–38.

<sup>32</sup> 朱光、李平、姜永华, [Zhu Guang, Li Ping, and Jiang Yonghua], “专项转移支付、一般性转移支付与地方政府公共服务支出—基于专项转移支付分项数据的空间计量分析 [Special Transfer Payments, General Transfer Payments and Local Government Public Service Expenditures—Based on the SDM Analysis of Special Transfer Payment Sub-items]”, *华东经济管理 [East China Economic Management]*, 2019, 33:145–151.

<sup>33</sup> These documents are: 财政部、农业部 [Ministry of Finance and Ministry of Agriculture], 关于调整国内渔业捕捞和养殖业油价补贴政策促进渔业持续健康发展的通知, 财建 [2015] 499 号 [Notice about Adjusting Domestic Fisheries and Aquaculture Fuel Subsidy Policy in order to Promote Sustainable and Healthy Fisheries Development (Document 2015 No. 499)], 25 June 2015, [http://jjs.mof.gov.cn/zhengwuxinxi/zhengcefaagui/201507/t20150709\\_1272152.html](http://jjs.mof.gov.cn/zhengwuxinxi/zhengcefaagui/201507/t20150709_1272152.html); and 农业部办公厅 [Ministry of Agriculture General Office], 农业部办公厅关于印发国内渔业捕捞和养殖业油价补贴政策调整相关实施方案的通知 (农办渔 [2015] 65 号) [MOA General Office Notice on the Issuance of the Domestic Fisheries and Aquaculture Fuel Price Subsidy Policy Adjustment Implementation Plan (MOA Fisheries (2015) No. 65)], 2015. See China WTO Notification Document G/SCM/N/343/CHN.

<sup>34</sup> That is, MOA Fisheries (2015) No. 65. China Delegation to the WTO Committee on Subsidies and Countervailing Measures, “Responses to Questions Posed by the United States Regarding the New and Full Notification of China,” Document G/SCM/Q2/CHN/93, 27 October 2020, 13pp.

Fisheries GTPs are composed of a few different programs. One program consists of payments directly made as production cost subsidies to fishermen (渔民的生产成本补贴). This program appears to be the means through which fuel subsidies are provided to the domestic fishing industry, with the amount depending on a number of parameters including but not limited to vessel length, operation type, and number of operation days—however fuel consumption is not one of the parameters. Payments are provided in the form of funding through the local municipal governments (市县统筹资金). Sub-provincial governments collect, pre-review, and compile program applications for further review and approval by the provincial governments. In local-government documents, this GTP is often referred to as the “Fisheries Fuel Subsidy Policy Adjustment GTP” (渔业油价补贴政策调整一般转移).<sup>35</sup>

Other programs supported include: navigation beacon construction in fishing ports (渔港航标建设); fishery and fishery administration informatization construction (渔业渔政信息化建设); reduction of the number of fishing vessels and industry transition (减船转产); fisheries resource conservation and enhancement (渔业资源养护); fishing moratorium subsidy (休禁渔补贴); and subsidies for aquaculture, such as aquaculture pond standardization, and water re-circulation construction, and the construction of other aquaculture infrastructure (池塘标准化和工厂化循环用水改造等水产养殖基础设施建设).<sup>36</sup>

In the National General Public Budget Expenditure, the central government lists a program entitled “Subsidy for Refined Oil Price Reform for Fisheries” (成品油价格改革对渔业的补贴), which amounted to CNY 17.695 billion in 2019.<sup>37</sup>

In addition to the national budget, the central government also provides a budget for central-level funding, and includes CNY 349 million for the “Subsidy for Refined Oil Price Reform for Fisheries.”<sup>38</sup> This amount likely went to the China National Fisheries Corporation, a state-owned enterprise engaged in DWF that is the only fishing enterprise registered at the central level.

Thus, total central-level GTPs were reported by the central government to be CNY 18.044 billion for 2019. In the next section, we estimate what proportion of these GTPs went to fuel subsidies.

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<sup>35</sup> For example, see 邹城市农业农村局 [Zoucheng City Bureau of Agriculture and Rural Affairs], 关于邹城市2019年国内渔业油价补贴政策调整一般转移支付项目竞争立项结果的公示 [Announcement on the Outcome of the Zoucheng City 2019 Domestic Fisheries Fuel Price Subsidy Policy Adjustment GTP Competition Project], 3 July 2020, [http://www.zoucheng.gov.cn/art/2020/7/3/art\\_24186\\_2575062.html](http://www.zoucheng.gov.cn/art/2020/7/3/art_24186_2575062.html).

<sup>36</sup> China WTO Notification Document G/SCM/N/343/CHN.

<sup>37</sup> 财政部 [Ministry of Finance], 2019年全国一般公共预算支出决算表 [National General Public Budget Expenditure], [http://yss.mof.gov.cn/2019qgczjs/202007/t20200731\\_3559718.htm](http://yss.mof.gov.cn/2019qgczjs/202007/t20200731_3559718.htm). The amount was CNY 18.5 billion in 2017 and CNY 18.1 billion in 2018.

<sup>38</sup> 财政部 [Ministry of Finance], 2019年中央本级支出决算表 [2019 Central Level General Public Budget Expenditure], [http://yss.mof.gov.cn/2019qgczjs/202007/t20200706\\_3544623.htm](http://yss.mof.gov.cn/2019qgczjs/202007/t20200706_3544623.htm).



### 3.1.3a Domestic Fisheries Fuel Subsidies 渔民的生产成本补贴

Fuel subsidies were intended to decrease to 40 percent of the official 2014 level by 2019, and all provinces and provincial-level entities were required by the MOA to achieve the same goal in decreasing their respective provision of fuel subsidies for domestic fisheries.<sup>39</sup> Fuel subsidies for DWF were absorbed by the subsidy program for the utilization of international fisheries resources and are not considered in this section.

Because the central government no longer tracks the proportion of fisheries subsidies provided for fuel, we must estimate the amount of domestic fisheries fuel subsidies that were provided over the period 2015–2019. The most accurate approach would be to add up the domestic fisheries fuel subsidies for each province and provincial subregion, however most of this data is not accessible to the public. Therefore, we calculate the average ratio of domestic fisheries fuel subsidies to GTP for three provinces (Guangdong, Shandong, and Zhejiang) for which data are available, and estimate domestic fisheries fuel subsidies by multiplying the national GTP by this average ratio.

Based on the amount of domestic fisheries subsidies received by the province in 2014, the central government will provide the province with the same amount of transfer payments in each year for five consecutive years (2015–2019), with 80 percent as a GTP and 20 percent as STP.<sup>40</sup> Each province uses the 80 percent proportion as subsidies for the costs associated with domestic fisheries production and for the reduction or transition out of fishery operations (转产转业).<sup>41</sup> The national sum of the above transfer payment of each year from 2015 to 2019 is fixed at CNY 20 billion.<sup>42</sup> A portion of the 80 percent provided as GTP may be used by the provincial government, while the remaining is transferred to municipal levels as fuel and other fisheries subsidies.

To estimate the percentage of subsidies used for fuel for Guangdong Province, we analyzed the three cities of Maoming (茂名), Jiangmen (江门), and Zhongshan (中山). Maoming received CNY 1.126 billion as a GTP from the provincial government over 2015–2019, of which CNY 701 million was used for domestic fisheries fuel subsidies.<sup>43</sup> Jiangmen received CNY 2.2 billion

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<sup>39</sup> 财政部 [Ministry of Finance], 财政部、农业部联合部署渔业油价补贴政策调整工作 [Ministry of Finance and Ministry of Agriculture Deploy Fisheries Fuel Subsidies Policy Adjustment Work], 9 July 2015, [http://www.gov.cn/xinwen/2015-07/09/content\\_2894870.htm](http://www.gov.cn/xinwen/2015-07/09/content_2894870.htm).

<sup>40</sup> 财政部、农业部 [Ministry of Finance and Ministry of Agriculture], 关于调整国内渔业捕捞和养殖业油价补贴政策促进渔业持续健康发展的通知, 财建 [2015] 499 号 [Notice about Adjusting Domestic Fisheries and Aquaculture Fuel Subsidy Policy in order to Promote Sustainable and Healthy Fisheries Development (Document 2015 No. 499)], 25 June 2015, [http://www.gov.cn/xinwen/2015-07/13/content\\_2895987.htm](http://www.gov.cn/xinwen/2015-07/13/content_2895987.htm).

<sup>41</sup> Later, some provinces used the 80 percent GTP proportion to support vessel renovation and construction and other activities as well, as detailed by the Guangdong Province plan.

<sup>42</sup> 搜狐 [Sohu], 农业农村部: 渔业油价补助拟覆盖渔港改造, 渔获物定港上岸 [MARA: Fisheries Fuel Price Subsidies Will Cover Fishing Port Construction, Fisheries Get Fixed Ports to Land Catch], 5 July 2019, [https://m.sohu.com/a/324950968\\_769126/](https://m.sohu.com/a/324950968_769126/).

<sup>43</sup> 海洋与渔业杂志 [Ocean and Fisheries Magazine], “广东茂名: 借油补政策调整契机 做大做强海洋渔业 [Guangdong Maoming: Taking Advantage of the Fuel Subsidy Policy Adjustment to Make Marine Fisheries Big and

as a GTP from the provincial government over 2015–2019, of which CNY 680 million was used for domestic fisheries fuel subsidies.<sup>44</sup> Zhongshan received CNY 120 million as a GTP from the provincial government over 2015–2019, of which CNY 28.66 million was used for domestic fisheries fuel subsidies.<sup>45</sup>

Total fuel subsidies for the three cities were thus CNY 1.41 billion while total GTPs to the cities were CNY 3.4 billion, meaning that the fuel subsidies were on average 41 percent of the GTPs received by the cities, which we use as the average for Guangdong Province overall. The GTP transferred by the provincial government to lower levels accounted for 88.06 percent of the overall GTP, which was in turn 80 percent of the total central government transfer payments.<sup>46</sup> Therefore, we can estimate that the province-wide domestic fisheries fuel subsidies are 36 percent of the GTP allocated to the province by the central government ( $=0.41 \times 0.8806$ ). Province-wide domestic fisheries fuel subsidies account for 29 percent of the total central government transfer payments (both the GTP and STP) ( $=0.36 \times 0.80$ ), or CNY 5.10 billion ( $0.29 \times \text{CNY } 3.516 \text{ billion} \times 5$ ). Thus, the cumulative, province-wide domestic fisheries fuel subsidies over the five-year period was CNY 5.10 billion, while CNY 3.516 billion was the amount of domestic fisheries fuel subsidies provided to Guangdong in 2014.

For Shandong, the GTP over the same five years was CNY 9.324 billion, which included domestic fisheries fuel subsidies of CNY 6.020 billion.<sup>47</sup> With the STP, the total central government transfer payments over the five years would be CNY 11.65 billion ( $= \text{CNY } 9.324 \text{ billion} / 0.80$ ).

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Strong],” 水产养殖网 [Aquatic Goods and Aquaculture Net], 13 November 2020, [http://www.shuichan.cc/news\\_view-410293.html](http://www.shuichan.cc/news_view-410293.html).

<sup>44</sup> 海洋与渔业杂志 [Ocean and Fisheries Magazine], 江门: 全面提升渔船“硬实力” [Jiangmen: Fully Raising Fishing Vessel “Hard Power”], 水产养殖网 [Aquatic Goods and Aquaculture Net], 17 November 2020, [http://m.shuichan.cc/news\\_view-410470.html](http://m.shuichan.cc/news_view-410470.html).

<sup>45</sup> 李易珊 [Li Yishan], 中山: 油价补贴发放“零投诉” 五年补贴超 2800 万元 [Zhongshan: Fuel Price Subsidy Granted “Zero Complaints” Five-year Subsidy Exceeds 28 Million Yuan], 搜狐 [Sohu], 20 November 2020, [https://www.sohu.com/a/433282361\\_309591](https://www.sohu.com/a/433282361_309591).

<sup>46</sup> As disclosed in the Guangdong plan, the provincial government will intercept 11.94 percent of the 80 percent GTP proportion to support DWF. The provincial-level share did not appear to support any funding of domestic fuel subsidies.

<sup>47</sup> 山东省海洋局 [Shandong Province Bureau of Oceans], 山东省调整国内渔业捕捞和养殖业油价补贴政策实施方案 (初稿) [Shandong Province Implementation Plan on the Adjustment of Domestic Fisheries Capture and Aquaculture Fuel Subsidies Policy (Draft)], 5 January 2016, [http://hyj.shandong.gov.cn/hdjl/dczt/201601/t20160105\\_3618672.html](http://hyj.shandong.gov.cn/hdjl/dczt/201601/t20160105_3618672.html).

For Zhejiang, CNY 12.3 billion was provided as domestic fisheries fuel subsidies over the five years.<sup>48</sup> Domestic fisheries fuel subsidies in 2014 were CNY 4.32 billion.<sup>49</sup> Thus the overall total transfer payment over the five years is calculated to be CNY 21.6 billion ( $=4.32 \times 5$ ).

The total domestic fisheries subsidies for the three provinces were CNY 5.10 billion + CNY 6.02 billion + CNY 12.3 billion = CNY 23.42 billion. The total transfer payments (both the GTP and STP) to the three provinces was CNY 17.58 billion + CNY 11.65 billion + CNY 21.6 billion = CNY 50.83 billion, where the CNY 17.58 billion is the total amount the central government allocated as transfer payment to Guangdong Province over the 5-year period. Therefore, the province-averaged ratio of domestic fisheries fuel subsidies to the total transfer payments is 0.46 ( $=23.42/50.83$ ).

If the nationwide total for the domestic transfer payments was CNY 20 billion per year, and CNY 100 billion over 2015–2019, this means approximately CNY 46 billion ( $= \text{CNY } 100 \text{ billion} \times 0.46$ ) was provided for domestic fisheries fuel subsidies over 2015–2019, equivalent to about CNY 9.2 billion per year. This is just an average value, and domestic fisheries fuel subsidies actually declined year to year from 2015 to 2019. China planned to decrease domestic fisheries fuel subsidies to 40 percent of the 2014 level by the end of the 13<sup>th</sup> Five-Year Plan, namely targeting the goal of CNY 8 billion ( $=\text{CNY } 20 \text{ billion} \times 40\%$ ) for the domestic fuel subsidies of the year 2019. However, the actual domestic fuel subsidies of the year 2019 are not disclosed to the public. Therefore, we use the average value instead, which is slightly higher than the expected CNY 8 billion.

### 3.1.3b Fishing Ports and Navigation Beacon Subsidies 渔港航标建设

In 2019, the Chinese government spent an estimated CNY 1.79 billion on fishing ports and navigation beacon construction (渔港和航标建设), of which CNY 1.21 billion was for inland fishing ports and CNY 580 million was for the renovation of level-two coastal fishing ports and sheltered anchorages.

The MOA issued a plan covering 2016–2020 to provide CNY 3.62 billion to renovate and upgrade level-two coastal fishing ports and sheltered anchorages (沿海二级渔港和避风锚地) and CNY 1.744 billion to renovate and upgrade inland fishing ports (内陆渔港), which include coastal central fishing ports (中心渔港) and level-one fishing ports (一级渔港).<sup>50</sup> Because the policy did not enter into effect until January 2018, we assume that the funding was distributed in

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<sup>48</sup> 浙江财政 [Zhejiang Finance], 浙江省出台国内渔业油价补贴调整政策, 促进海洋渔业可持续发展 [Zhejiang Province Domestic Fisheries Fuel Subsidy Policy Adjustment Issues, Advancing the Sustainable Development of Marine Fisheries], 16 March 2016, [https://mp.weixin.qq.com/s?sub&\\_\\_biz=MjM5MDM5MTEzNw==&mid=420209311&idx=1&sn=38e2ffd92caf0b6141d8ac1c55d96b97&&scene=3&subscene=10000&clicktime=1617730186&enterid=1617730186#rd](https://mp.weixin.qq.com/s?sub&__biz=MjM5MDM5MTEzNw==&mid=420209311&idx=1&sn=38e2ffd92caf0b6141d8ac1c55d96b97&&scene=3&subscene=10000&clicktime=1617730186&enterid=1617730186#rd).

<sup>49</sup> 温岭海洋与渔业的博客 [Wenling Ocean and Fisheries Blog], 2013 年度渔业油价补助发放工作全面启动 [2013 Fisheries Fuel Subsidies Work Is Fully Launched], 新浪博客 [Sina Blog], 9 December 2014, [http://blog.sina.com.cn/s/blog\\_ecfde1d30102vdxm.html](http://blog.sina.com.cn/s/blog_ecfde1d30102vdxm.html).

<sup>50</sup> 农业部 [Ministry of Agriculture], 渔港升级改造和整治维护规划 [Fishing Port Upgrading Renovation and Improvement Maintenance Plan], January 2018, [http://www.moa.gov.cn/nybg/2018/201802/201805/t20180515\\_6142141.htm](http://www.moa.gov.cn/nybg/2018/201802/201805/t20180515_6142141.htm).

2018, 2019, and 2020. If the funding was allocated equally each year, in 2019 CNY 1.21 billion was provided for level-two coastal fishing ports and sheltered anchorages, and CNY 580 million for inland fishing ports. Inland fishing ports were constructed by the central government (which implies that the inland fishing ports are of higher importance and more highly supervised), and subsidies for these ports are provided through STPs, likely under the portion “Fisheries Development” of the program “Fisheries Development, Vessel Decommissioning and Renovation.” Level-two coastal fishing ports and sheltered anchorages were constructed by provincial and local governments, and thus subsidies are provided through GTPs.

### **3.1.3c Fisheries and Administrative Informatization Construction 渔业渔政信息化建设**

China spent approximately CNY 200 million in 2019 on the construction of information systems for fishing vessels and fisheries administration.<sup>51</sup> This program includes the building of a communication network for marine fishing vessels, including short-wave and ultra-short-wave systems on vessels and on-shore platforms, and satellite monitoring systems.

### **3.1.3d Fishermen Vessel Reduction and Industry Transition 渔民减船转产**

The MOA announced in 2017 that by 2020, China would reduce the number of motorized marine fishing vessels (海洋捕捞机动渔船; excluding DWF vessels) by 20,000 and reduce total engine power by 1,500,000 kW.<sup>52</sup> The policy also set reduction goals for each province. For fishermen willing to give up fishing vessels and transition to other industries (减船转产), the central government would provide subsidies at a rate of CNY 5000 per kW, while encouraging local governments to provide additional subsidies. The 2017 policy increased the subsidy rate for fishermen vessel reduction and industry transition from CNY 2500 per kW in 2015.<sup>53</sup>

The subsidies for vessel reduction and industry transition are in the form of an STP from the central government and totaled CNY 5.5 billion over 2016–2019.<sup>54</sup> Except for 2016 when the

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<sup>51</sup> 农业部渔业渔政管理局 张显良 [Ministry of Agriculture Fisheries Administration Bureau Zhang Xianlang], 加快推进渔业信息化的战略思考 [Accelerate the Advancement of Fisheries Informatization Strategic Thinking], 农村工作通讯-中国农村网 [Rural Work Dispatch-China Rural Net], 6 March 2018, [http://journal.crnews.net/ncgztscs/2018/dsiq/snlt/89504\\_20180306025919.html](http://journal.crnews.net/ncgztscs/2018/dsiq/snlt/89504_20180306025919.html).

<sup>52</sup> 农业部 [Ministry of Agriculture], 农业部关于进一步加强国内渔船管控 实施海洋渔业资源总量管理的通知 [MOA on the Increase in Control over Domestic Fishing Vessels, Notice on the Implementation of Marine Fisheries Resources Total Management], 12 January 2017, [http://www.moa.gov.cn/nybgb/2017/derq/201712/t20171227\\_6130861.htm](http://www.moa.gov.cn/nybgb/2017/derq/201712/t20171227_6130861.htm).

<sup>53</sup> 财政部、农业部 [Ministry of Finance and Ministry of Agriculture], 关于调整国内渔业捕捞和养殖业油价补贴政策促进渔业持续健康发展的通知, 财建 [2015] 499 号 [Notice about Adjusting Domestic Fisheries and Aquaculture Fuel Subsidy Policy in order to Promote Sustainable and Healthy Fisheries Development (Document 2015 No. 499)], 25 June 2015, [http://www.gov.cn/xinwen/2015-07/13/content\\_2895987.htm](http://www.gov.cn/xinwen/2015-07/13/content_2895987.htm).

<sup>54</sup> 韩超 [Han Chao], “‘十三五’以来拆解渔船 20414 艘 海洋捕捞渔船数量压减任务提前完成 [Since the ‘13<sup>th</sup> Five’ 20414 Fishing Vessels Have Been Decommissioned, the Task of Reducing Fishing Pressure by Reducing Marine Fishing Vessels Has Been Completed],” 农民日报, 19 January 2020, [http://www.agri.cn/V20/ZX/nyyw/202001/t20200119\\_7285897.htm](http://www.agri.cn/V20/ZX/nyyw/202001/t20200119_7285897.htm).

amount was CNY 1.0 billion, the central government provided CNY 1.5 billion each year for 2017–2020.<sup>55</sup>

Given the need to meet the mandatory goals set by the MOA, local governments mostly provide additional subsidies on top of the rate of CNY 5000 per kW. For example, Yangjiang (阳江), Guangdong Province, provides an additional subsidy rate of CNY 3000 per kW in both 2015 and 2016, CNY 2000 in 2017, as well as CNY 1000 in both 2018 and 2019.<sup>56</sup> These additional subsidies come from the portion of the GTP that is allocated by the provincial government to local municipal governments (地方统筹). In the case of Yangjiang, the ratio of this GTP-sourced subsidies to the STP-sourced subsidies in 2019 is 1000 : 5000, or 0.2. Assuming that this ratio applies to other cities across China in 2019, we estimate that the total amount of GTP used at local municipal levels as subsidies for 减船转产 is CNY 1.5 billion x 0.2 = CNY 300 million.

### 3.1.3e Fishery Resource Conservation and Enhancement 渔业资源养护

Subsidies for fishery resource conservation and enhancement (渔业资源养护) includes programs for stock enhancement (增殖放流) and marine ranching / constructing marine pastures (海洋牧场). Subsidies for stock enhancement are reported to be approximately CNY 1.0 billion per year, including for 2019.<sup>57</sup> The funding for stock enhancement is provided through GTPs at the local-government level. Subsidies for marine ranching are provided through STPs and are discussed below.

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<sup>55</sup> 船舶报废拆解和船型标准化补贴 [Vessel Decommissioning and Standardization Subsidy] 2016–2020: 财政部关于下达 2016 年船舶报废拆解和船型标准化补贴 (渔民减船转产) 的通知(财农〔2016〕169 号), 21 November 2018, [http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzhbt/201811/t20181121\\_3072961.htm](http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzhbt/201811/t20181121_3072961.htm); 财政部关于拨付 2017 年渔业发展与船舶报废拆解更新补助 (渔民减船转产) 的通知 (财农〔2017〕63 号), 21 November 2018, [http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzhbt/201811/t20181121\\_3072963.htm](http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzhbt/201811/t20181121_3072963.htm); 财政部关于下达 2018 年渔业发展与船舶报废更新 (渔民减船转产) 补助资金预算的通知(财农〔2018〕52 号), 21 November 2018, [http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzhbt/201811/t20181121\\_3072964.htm](http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzhbt/201811/t20181121_3072964.htm); 财政部关于下达 2019 年渔业发展与船舶报废拆解更新 (渔民减船转产) 补助资金预算的通知(财农〔2019〕31 号), 30 April 2019, [http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzhbt/201904/t20190430\\_3238522.htm](http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzhbt/201904/t20190430_3238522.htm); and 财政部关于下达 2020 年渔业发展与船舶报废拆解更新 (渔民减船转产) 补助资金预算的通知, 24 June 2020, [http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzhbt/202006/t20200624\\_3538545.htm](http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzhbt/202006/t20200624_3538545.htm).

<sup>56</sup> 李易珊 [Li Yishan], 【加“油”广东渔业】阳江: 减船转产并驾齐驱 [“(Fuel” Guangdong Fisheries) Yangjiang: Reducing Vessels and Transitioning Run Neck and Neck], 搜狐 [Sohu], 17 November 2020, [https://www.sohu.com/a/432489605\\_309591](https://www.sohu.com/a/432489605_309591).

<sup>57</sup> 农业农村部渔业渔政局 [MARA Bureau of Fisheries and Fisheries Enforcement], “十三五”渔业亮点连载 | 水生生物资源养护制度不断健全 力度不断加大 [13<sup>th</sup> Five Fisheries Highlights Series | Aquatic Species Protection System is Continuously Made Sound, Effort Continuously Expanded], 4 January 2021, [http://www.yyj.moa.gov.cn/gzdt/202101/t20210104\\_6359369.htm](http://www.yyj.moa.gov.cn/gzdt/202101/t20210104_6359369.htm).

### 3.1.3f Fishing Moratorium Subsidy 休禁渔补贴

China's fishing moratorium comes in two forms: an inland freshwater fishing ban (禁渔) and a domestic marine fishing seasonal moratorium (休渔).<sup>58</sup> Although the Ministry of Agriculture and Rural Affairs (MARA; 农业农村部—formerly the MOA) encourages each province to use GTPs to provide subsidies to fishermen during fishing moratoria, this practice is not mandatory, and therefore most local municipal governments do not provide support.<sup>59</sup> Guangdong Province is the only province that has a provincial-level program to provide this subsidy.<sup>60</sup>

For each qualified, legally registered vessel engaging in inland freshwater fishing, the Guangdong policy provides moratorium subsidies of at least CNY 2200 per year per person for up to two qualified fishermen.<sup>61</sup> Qualified fishermen—possessing a fishing vessel crew certificate (渔业船员证书)—on domestic marine fishing vessels may receive annual moratorium subsidies of at least CNY 2100 per person, with the number of eligible recipients limited to the maximum allowable number of fishermen onboard the vessel.

In 2019, the Guangdong provincial government allocated CNY 33.58 million to local municipal governments as fishing moratorium subsidies, which we also take as the total GTP used nationwide for fishing moratorium subsidies.<sup>62</sup>

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<sup>58</sup> 黄进 [Huang Jin], 开渔了! 休渔和禁渔, 吃货们别“傻傻分不清楚” [Time to Fish! Fishing Moratorium and Fishing Ban, Consumers Shouldn't Be “Fools Not Differentiating”], 南方网 [Southcn.com], 16 August 2019, <https://kb.southcn.com/kb/59e5b1674d.shtml>.

<sup>59</sup> 农业部办公厅 [MOA General Office], 关于做好 2018 年海洋伏季休渔工作的通知 [Notice on Completing the 2018 Ocean Summer Seasonal Moratorium Work], 16 March 2018, <http://www.ffi.com.cn/index.php/cms/zhengcezhixun/2393.html?typeid=7>. Guigang City in Guangxi Province does not have a policy in place, see 补贴咨询 [Subsidies Consultation], 贵港日报社 [Guigang Daily News], 13 May 2019, <http://wz.ggnews.com.cn/index.php?m=show&id=106494>.

<sup>60</sup> 油补以后到底有没有? 农业部文件这样说的! 附油补、船舶改造补助标准 [Is There a Future after Fuel Subsidies? This Is What the MOA Document Says! About the Fuel Subsidy and Vessel Renovation Subsidy Standards], 22 July 2017, [https://www.sohu.com/a/159111996\\_741677](https://www.sohu.com/a/159111996_741677).

<sup>61</sup> 广东省海洋与渔业厅、广东省财政厅 [Guangdong Ocean and Fisheries Bureau and Guangdong Finance Bureau], 广东省休(禁)渔渔民生产生活补助发放实施方案, 粤财农[2018]25号 [Guangdong Province Fisheries Moratorium (Ban) Fishermen Production Livelihood Subsidy Release and Implementation Plan, Document (2018) No. 25], 6 March 2018,

<http://www.lechang.gov.cn/website/govPublic/upload/0069739032019/userfiles/file/201908/115-114112-4710127281178-127920201731-893159101-87-4762-98-67-717211-12426-278-92119202020182125%20-99.pdf>.

<sup>62</sup> 广东省财政厅 [Guangdong Finance Bureau], 关于下达 2019 年省级休(禁)渔渔民生产生活补助资金的通知, 粤财农[2019]160号 [Notice on the 2019 Provincial Level Fisheries Moratorium (Ban) Fishermen Production Subsidy Fund, Document (2019) No. 160], 8 October 2019, [http://czt.gd.gov.cn/gkmlpt/content/2/2642/post\\_2642353.html#86](http://czt.gd.gov.cn/gkmlpt/content/2/2642/post_2642353.html#86). Although some local municipal governments in provinces outside of Guangdong also provide fishing moratorium subsidies, the aggregate amount is likely to be negligible compared to Guangdong's provincial total due to Guangdong's province-wide implementation of this policy, and the size of Guangdong's fishing population. In 2019, the population directly involved in capture fishing (捕捞业) was 244,263 in Guangdong in 2019—the largest among all Chinese provinces—followed by Shandong (192,837) as the second and Fujian (179,353) as the third, see China Fishery Statistical Yearbook 2020.

### 3.1.3g Aquaculture Subsidies 池塘标准化和工厂化循环用水改造等水产养殖基础设施建设

Aquaculture pond standardization (鱼塘标准化) and construction of water re-circulation aquaculture factories (工厂化循环水改造) are two types of aquaculture programs that receive subsidies through GTPs.<sup>63</sup> Local governments are encouraged but not required to provide such subsidies as appropriate. Local governments are not motivated to spend GTP funding on aquaculture pond standardization and construction of water re-circulation aquaculture factories unless the central government sets targets for them to meet. There has been a target for aquaculture pond standardization since 2016 but no target for construction of water re-circulation aquaculture factories.

In 2016, the State Council announced that the proportion of healthy-aquaculture demonstration areas (水产健康养殖示范面积比重)—defined as the ratio of healthy-aquaculture demonstration areas to nationwide total aquaculture area—was expected to increase from 45 percent in 2015 to 65 percent by 2020.<sup>64</sup> To be considered a healthy-aquaculture demonstration area, the aquaculture ponds must first be standardized, which indirectly motivates local governments to attach importance to aquaculture pond standardization. In 2019, China's total freshwater aquaculture area was 5116.32 (x 1000) hectares, with ponds being the dominant type (2644.73 x 1000 hectares).<sup>65</sup> Assuming an annual incremental increase in the proportion of standardized ponds, the proportion would have been 57 and 61 percent in 2018 and 2019, respectively. The national total aquaculture area in 2018 was 7189.52 (x1000 hectares), so the demonstration areas of healthy aquaculture are  $7189.52 \text{ (x1000 hectares)} \times 57\% = 4098 \text{ (x1000) hectares}$ . The national total aquaculture area in 2019 is 7108.50 (x1000) hectares, so the demonstration areas are  $7108.50 \text{ (x1000)} \times 61\% = 4,336 \text{ (x1,000) hectares}$ . The difference, 238 (x1000) hectares, is the amount of demonstration areas that China increased from the end of 2018 to the end of 2019. This amount is assumed to be dominated by newly standardized ponds.<sup>66</sup>

The subsidy rate for aquaculture pond standardization ranged from CNY 1000 to 3000 per Chinese mu (亩) from 2018 to 2021.<sup>67</sup> We thus assume a subsidy rate of CNY 2000 per Chinese

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<sup>63</sup> 财建 [2015] 499 号.

<sup>64</sup> 国务院 [State Council], 关于印发全国农业现代化规划 (2016–2020 年) 的通知 [Announcement on the Issuance of the National Agricultural Modernization Plan (2016–2020)], 17 October 2016, [http://www.moa.gov.cn/nybg/b/2016/shiyiqi/201711/t20171128\\_5922419.htm](http://www.moa.gov.cn/nybg/b/2016/shiyiqi/201711/t20171128_5922419.htm).

<sup>65</sup> *China Fishery Statistical Yearbook 2020*.

<sup>66</sup> Note: 鱼塘 does not only refer to freshwater aquaculture and can also be used in mariculture, see for example 吴一桂 [Wu Yigui], “创建国家渔业健康养殖示范县 [Creating a National Fisheries Healthy Aquaculture Demonstration County],” <https://new.qq.com/rain/a/20201027a02vx800>.

<sup>67</sup> CNY 1000 was cited in 养殖户福利来了, 每亩补贴 1000 元! 海南琼中计划投入 105 万元开展水产养殖池塘补贴工作 [Social Welfare for Aquaculture Households Has Arrived, a 1000 Yuan Subsidy for Every Mu! Hainan Qiongzong Plans on Investing 1.05 Million Yuan in Subsidies to Develop Aquaculture Ponds], 13 October 2018, [https://www.sohu.com/a/259251232\\_174909](https://www.sohu.com/a/259251232_174909); CNY 3000 was cited in 佛山市高明区农业农村局 [Foshan City Gaoming District Bureau of Agriculture and Rural Affairs], 关于征求《佛山市高明区养殖池塘标准化改造和尾水治理财政资金补助及验收方案》意见的公告 [Notice of Views on “Foshan City Gaoming District Aquaculture Ponds Standardization Renovation and Water Management Administration Finance, Subsidy and Inspection Plan],

mu for aquaculture pond standardization in 2019. We thus calculate subsidies for aquaculture pond standardization in 2019 to be  $238 \times 15,000 \text{ Chinese mu} \times \text{CNY } 2000 = \text{CNY } 7.1 \text{ billion}$ .

Although aquaculture factories (养殖工厂) are also a type of aquaculture site, their areas are negligible. Aquaculture factories is included under the category “other” measuring 129.54 (x1000) hectares. Because construction of water re-circulation aquaculture factories is not mandatory, subsidies for this program are low. For example, two years after the issue of National Agricultural Modernization Plan (2016–2020), Yantai City was the first in Shandong Province to provide municipal-level subsidies for construction of water re-circulation aquaculture factories, but the subsidies only amounted to CNY 1 million.<sup>68</sup> Thus we consider subsidies for construction of water re-circulation aquaculture factories to be negligible (zero).

### 3.2 Vessel Renovation and Construction Subsidies

Another large subsidy program, in addition to China’s fuel subsidies, is the program to support the upgrading of China’s marine fishing vessels through renovation of existing fishing vessels and the construction of new vessels. This program is now known as the “Central Governmental Subsidy Fund for Fisheries Development, Vessel Decommissioning and Renovation, and Fisheries Vessel Reduction and Industry Transition” (中央渔业发展与船舶报废拆解更新及渔民减船转产补助资金), and is provided through STPs as discussed below.

#### 3.2.1 Evolution of China’s Vessel Renovation and Construction Subsidies Program

Subsidies for the renovation and construction of marine fishing vessels were issued sporadically and only by subnational governments before 2012. Subnational subsidies for the renovation and construction of domestic marine fishing vessels date back to at least 2009 and possibly earlier.<sup>69</sup> Local government subsidies for the renovation and construction of DWF vessels began in 2008.<sup>70</sup> The central government subsidies program for the renovation and construction of both domestic

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23 August 2021, [http://www.gaoming.gov.cn/fsgmnyncej/gkmlpt/content/4/4971/post\\_4971141.html#4383](http://www.gaoming.gov.cn/fsgmnyncej/gkmlpt/content/4/4971/post_4971141.html#4383); and CNY 2000 was cited in 陕西省农业农村厅 [Shaanxi Province Bureau of Agriculture and Rural Affairs], 关于印发中央渔业发展项目实施方案的通知 [Notice of the Issuance of the Central Government Fisheries Development Program Implementation Plan], 4 June 2021, <http://njtg.nercita.org.cn/baseInfos/detail.shtml?id=108643>. Note: 1000 hectares = 15,000 Chinese mu.

<sup>68</sup> 烟台市海洋发展和渔业局 [Yantai City Ocean Development and Fisheries Bureau], 对市政协十三届三次会议第 133247 号提案的答复 [Third Session of the 13<sup>th</sup> Municipal CCP Response to Proposal 133247], 28 June 2019, [http://www.yantai.gov.cn/art/2019/6/28/art\\_27598\\_2462100.html](http://www.yantai.gov.cn/art/2019/6/28/art_27598_2462100.html).

<sup>69</sup> As disclosed by a 2010 news report, the Shanghai Municipal Agriculture Commission “would continue providing subsidies in 2010 for the renovation of inshore fishing vessels,” which implies that such subsidies had been previously provided, in 2009 or earlier, see 搜狐 [Sohu], “上海市农委发布致农民公开信全面介绍支农政策 [Shanghai Municipal Agriculture Commission Issues Open Letter to Farmers Comprehensively Introducing Policy to Support Agriculture],” 29 March 2010, <http://news.sohu.com/20100329/n271179729.shtml>.

<sup>70</sup> 浙江省 [Zhejiang Province Oceans and Fisheries Bureau], 浙江省远洋渔业项目与资金管理办法 [Zhejiang Province Measures on the Management of Distant Water Fisheries Programs and Funding], 14 January 2008, <http://www.zsdwf.com/shownews.asp?newsid=87>.



marine fishing and DWF vessels was launched in 2012.<sup>71</sup> Beginning in September 2012, subsidies for the renovation and construction of DWF vessels amounted to more than CNY 4.2 billion annually.<sup>72</sup> In 2012 alone, the central government provided CNY 8.01 billion for the renovation of marine fishing vessels and construction of fishery administration equipment (渔政装备), which was the largest ever single subsidy to the Chinese fishing industry.<sup>73</sup>

The national-level subsidies policy was driven by multiple factors, including the goal of building China into a maritime great power, as mentioned in then-president Hu Jintao's November 2012 report to the 18th National Party Congress.<sup>74</sup> As the then-president of the State Oceanic Administration (SOA) Liu Xigui argued, this maritime power strategy would be crucial for China to continue its development since China's export-oriented economy faced an ever-growing dependence on marine resources, making it necessary to maintain and expand Chinese rights and interests into maritime spaces outside Chinese jurisdiction.<sup>75</sup>

Likely feeding into the 18th National Party Congress report was research conducted by the Chinese Academy of Engineering (CAE). In 2011, the CAE conducted a major consulting project that concluded that China's marine fishing equipment was at a low technical level, hindering the development of marine fisheries.<sup>76</sup> Based on this research, in September 2012, twenty-seven CAE academicians proposed promoting marine fisheries as a strategic industry by speeding up the renovation and upgrading of fisheries equipment, which was acknowledged by the State Council and supported by other relevant ministries.<sup>77</sup>

Pressure came from international standards as well. The 2012 Cape Town Agreement (CTA) sets standards for the safety of high-seas fishing vessels that are 24 meters in length or more.<sup>78</sup> At the

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<sup>71</sup> As retrospectively disclosed by the MOA in 2016, see 农业部办公厅 [Ministry of Agriculture], 2016 年国家落实发展新理念加快农业现代化 促进农民持续增收政策措施 [In 2016 the Nation Implemented the New Development Concept to Accelerate the Modernization of Agriculture, Advance the Continued Increase of Farmer Incomes], 30 March 2016, [http://www.moa.gov.cn/gk/zcfg/qnhnzc/201603/t20160330\\_5076285.htm](http://www.moa.gov.cn/gk/zcfg/qnhnzc/201603/t20160330_5076285.htm).

<sup>72</sup> 中央人民政府 [Central Government], 2014 国家深化农村改革、促进农民增收等政策措施 [In 2014, the Nation Deepens Rural Reform, Advances Policy Measures Like Increasing Rural Incomes], 25 April 2014, [http://www.gov.cn/xinwen/2014-04/25/content\\_2666455.htm](http://www.gov.cn/xinwen/2014-04/25/content_2666455.htm).

<sup>73</sup> 农业部网站 [MOA], 农业部: 预计 2012 年全国水产品总产量达 5906 万吨 [MOA: Nationwide Aquatic Products Reach Estimated Total Volume of 59.06 Million Tons in 2012], 24 December 2012, [http://www.gov.cn/govweb/gzdt/2012-12/24/content\\_2297343.htm](http://www.gov.cn/govweb/gzdt/2012-12/24/content_2297343.htm).

<sup>74</sup> Full text of Hu Jintao's report at 18th Party Congress, 27 November 2012, [http://www.china-embassy.org/eng/zt/18th\\_CPC\\_National\\_Congress\\_Eng/t992917.htm](http://www.china-embassy.org/eng/zt/18th_CPC_National_Congress_Eng/t992917.htm).

<sup>75</sup> 刘赐贵: 十八大报告首提“海洋强国”具有重要现实和战略意义 [Liu Xigui: 18<sup>th</sup> NPC Report Introducing “Maritime Great Power” Has Important Practical and Strategic Significance], 10 November 2012, [http://www.xinhuanet.com/politics/2012-11/10/c\\_113656862.htm](http://www.xinhuanet.com/politics/2012-11/10/c_113656862.htm).

<sup>76</sup> 中国海洋工程与科技发展战略研究 [“Strategic Research on China's Marine Engineering and Science & Technology Development”], 2011.

<sup>77</sup> 张巧玲 [Zhang Qiaoling], 27 院士建议提升海洋渔业为战略产业 [“27 Academicians Suggest Elevating Fisheries to Become a Strategic Industry”], 中国科学报 [China Science Report], 18 September 2012, <http://news.sciencenet.cn/sbhtmlnews/2012/9/263509.shtm>.

<sup>78</sup> The Cape Town Agreement replaces the Torremolinos Protocol of 1993, which built upon the 1977 Torremolinos International Convention for the Safety of Fishing Vessels, and will enter into force once 22 States with a total of 3,600 eligible fishing vessels ratify or accede to the Agreement. International Maritime Organization (IMO), 11

end of 2011, only 9.15 percent and 7.88 percent of Chinese domestic marine fishing vessels and DWF vessels, respectively, met the safety criteria set by the CTA.<sup>79</sup>

Two important guiding documents were issued at the ministry level, the first jointly issued by the NDRC and the MOA supporting vessel renovation.<sup>80</sup> The MOA also issued a second document at the end of 2012 which included details about the motivations for DWF vessel renovations.<sup>81</sup> These motivations included the intention to promote China's fishing capacity in tuna, squid, and saury; to convert domestic fishing vessels into DWF vessels; to expand fishing operations in the exclusive economic zones (EEZs) of other countries (过洋性渔); and to increase the application of high-performance materials in vessels. These renovations fell in the following categories: construction of ultra-low temperature tuna longliners, tuna purse seiners, and large processing trawlers (拖网加工船) to replace old fishing vessels; the construction of standardized and professional squid fishing vessels to promote the renovation and upgrading of squid fishing vessels; the construction of a proper number of professional low-temperature tuna longliners and saury fishing vessels to enhance China's capacity in fisheries resource exploitation; the renovation of fishing vessels operating in the EEZs of other countries; the renovation and conversion of qualified domestic fishing vessels into DWF vessels; the development of new types of specialized fishing vessels that meet international market standards and the standards of bilateral fishing agreements; the development of energy-saving, environment-friendly, and safe fishing vessels; and the promotion of the manufacturing and application of fiberglass (玻璃钢) in fishing vessels.

Subsidies to support fishing vessel construction and renovation also affect the development of the shipbuilding industry. Penglai Jinglu Fisheries Co. Ltd. (蓬莱京鲁渔业有限公司)—which was established in June 1990 and became the Shandong Huiyang Group (山东汇洋集团) in 2006—consists of five subsidiary companies, with one fishing company using the same name as Penglai Jinglu Fisheries Co. Ltd., one shipbuilding company named Penglai Zhongbai Jinglu

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October 2012, <https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2018/10/the-cape-town-agreement-explained>.

<sup>79</sup> 周安昌 [Zhou Anchang], “我国渔业结构和远洋渔业装备的现状亟需改变 [Urgent Need to Improve the Current Situation of China's Fisheries Structure and Distant Water Fishing Equipment],” *船舶与配套* [Ships and Ancillaries], 2012, pp. 32–38.

<sup>80</sup> 国家发展改革委、农业部关于加强 2012 年海洋渔船更新改造项目管理的指导意见 (发改农经 [2012] 2935 号) [“Guidance of the National Development and Reform Commission and the Ministry of Agriculture on Strengthening the Program Management of Marine Fishing Vessel Renovation in 2012” (NDRC MOA (2012) No. 2935)]. This document was not accessible online to the general public as of 18 October 2020. The policy appears to have been influential as it was frequently mentioned by local governments as the policy basis for the renovation of marine fishing vessels. For example, in 2014 Guangdong Province was granted permission by the MOA to renovate the fishing fleet operating in the Spratly waters in the South China Sea, see 农业部关于核准广东省第二批南沙生产骨干船队更新建造计划的通知 (农渔发[2014] 14 号) [“Notice of the Ministry of Agriculture on the Approval of Guangdong Province's Renovation and Construction Plan for the Second Batch of the Spratly Island Backbone Fleet” MOA (2014) No. 14], 12 March 2014, [http://www.moa.gov.cn/govpublic/YYJ/201405/t20140514\\_3903584.htm](http://www.moa.gov.cn/govpublic/YYJ/201405/t20140514_3903584.htm).

<sup>81</sup> 农业部 [Ministry of Agriculture], 农业部关于促进远洋渔业持续健康发展的意见 [“Ministry of Agriculture Opinion on Promoting Sustainable and Healthy Development of Distant Water Fisheries”], 20 November 2012, [http://www.moa.gov.cn/nybg/2012/dsyq/201805/t20180516\\_6142357.htm](http://www.moa.gov.cn/nybg/2012/dsyq/201805/t20180516_6142357.htm).

Shipbuilding Co. Ltd. (蓬莱中柏京鲁船业有限公司), and three other companies.<sup>82</sup> The shipbuilding company operated until the 2008 global financial crisis, which nearly bankrupted the company.<sup>83</sup> In 2012, China's policy for providing fisheries subsidies to support the construction and renovation of marine fishing vessels was launched, and provided the fishing industry with subsidies of more than CNY 4.2 billion.<sup>84</sup> Taking advantage of this policy, Penglai Jinglu Fisheries Co. Ltd. applied to the MOA for the construction of 12 new 77-meter-long saury and squid fishing vessels. The MOA approved the application and provided subsidies of CNY 156 million to Penglai Jinglu Fisheries Co. Ltd., which in turn placed an order with the shipbuilding company, thereby helping it thrive again.

The shipbuilding industry not only received governmental subsidies as payment through the “intermediary” fishing enterprises, but also received funds from policy banks through fishing enterprises. In 2013, the Export-Import Bank of China (EXIM Bank, 中国进出口银行) provided CNY 20 billion in loans—an increase of 40 percent over 2012—to help Chinese ship owners invest in their fleets, which would ultimately help the shipbuilding industry obtain more orders.<sup>85</sup> The steel industry, as an upstream supplier for the shipbuilding industry, would also benefit from these subsidies.

### 3.2.2 Special Transfer Payments 中央财政转移地方专项资金

STPs are provided by the central government to the provincial level for a particular purpose. To request a STP, provincial governments submit applications to MARA and the MOF for review and approval. Once approved, the central government transfers funds to the provincial governments, which further allocate the funds to local municipal governments for program implementation.

China's STPs are provided through a major program called the “Central Government Subsidy Fund for Fisheries Development, Vessel Decommissioning and Renovation, and Fishermen Vessel Reduction and Industry Transition” (中央渔业发展与船舶报废拆解更新及渔民减船转产补助资金). This program is also called the “Vessel Decommissioning and Standardization Subsidy” (船舶报废拆解和船型标准化补贴).<sup>86</sup> These STPs are also sometimes referred to as

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<sup>82</sup> 蓬莱京鲁渔业有限公司 [Penglai Jinglu Fisheries Co. Ltd.], <https://www.jinglu.cn/list-9-1.html>.

<sup>83</sup> 农业部渔业渔政管理局 [MOA Fisheries Bureau of Fisheries Enforcement and Management], 海洋渔船更新改造项目实施效果的生动体现——京鲁船业重生记 [The Marine Fishing Vessel Renovation and Construction Program Implementation's Vivid Embodiment—Jinglu Shipbuilding's Rebirth], 18 May 2015, [http://www.shuichan.cc/news\\_view-244237.html](http://www.shuichan.cc/news_view-244237.html).

<sup>84</sup> 农业部网站 [MOA Website], “2014 国家深化农村改革、促进农民增收等政策措施 [2014 The Nation Deepens Rural Reform, Advances the Implementation of Policies to Increase Rural Incomes],” 25 April 2014, [http://www.gov.cn/xinwen/2014-04/25/content\\_2666455.htm](http://www.gov.cn/xinwen/2014-04/25/content_2666455.htm).

<sup>85</sup> 今年“国船国造”有补贴 [Subsidies Will Be Provided for Domestic Construction of Chinese Ships This Year], *船与配套 [Ships and Ancillaries]*, 2013, pg. 131, <https://www.ixueshu.com/h5/document/ab79a487ed7605dd449189241e9138b9318947a18e7f9386.html>.

<sup>86</sup> 财政部 [Ministry of Finance], 专项转移支付, 船舶报废拆解和船型标准化补贴 [STP Expenditures, Vessel Decommissioning and Standardization Subsidy],

the “Fisheries Fuel Subsidies Policy Adjustment STP” (渔业油价补贴政策调整专项转移支付).<sup>87</sup> China’s WTO notifications cite two policies as the legal basis for the Vessel Decommissioning and Standardization Subsidy.<sup>88</sup> The overall program is composed of three subcomponents: Fisheries Development; Vessel Decommissioning and Renovation; and Fishermen Vessel Reduction and Industry Transition.

There is less clarity about STPs than GTPs. There is no individual line item in the National General Public Budget Expenditure for STPs for fisheries, or for the Vessel Decommissioning and Standardization Subsidy. Examining provincial-level documents indicates that the program may be included in an item called “Other Public Road and Waterways Transport Expenditures (其他公路水路运输支出).<sup>89</sup> According to other central government sources, this program had a budget of CNY 39.9 billion nationwide for the period 2015–2019, or about CNY 8 billion per year.<sup>90</sup> In 2019, CNY 6.5 billion was reportedly allocated for Fisheries Development and Vessel Decommissioning and Renovation.<sup>91</sup> CNY 1.5 billion was allocated for Fishermen Vessel Reduction and Industry Transition.<sup>92</sup>

The figures for 2019 generally seem to be in line with China’s WTO Notifications, which state that the Vessel Decommissioning and Standardization Subsidy has five programs that were funded at a total of CNY 8.130 billion in 2018 (and CNY 8.073 billion in 2017). Three programs

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[http://www.mof.gov.cn/zhuantihuigu/cczqzyzfglbf/zxzyzf\\_7788/cbbfcjhcxzbzht/](http://www.mof.gov.cn/zhuantihuigu/cczqzyzfglbf/zxzyzf_7788/cbbfcjhcxzbzht/); 今年中央渔业油补贴政策资金下达 [Fisheries Fuel Subsidies Funding Has Been Issued From the Central Government], *海洋与渔业 (Ocean and Fisheries)*, 2017, 8:1-1, <http://www.cqvip.com/QK/88802X/201708/672947337.html>. Despite the name, the program supports more than just vessel decommissioning and standardization.

<sup>87</sup> 农业部新闻办公室 [Ministry of Agriculture News Office], 农业部部署渔业油价补贴政策调整专项转移支付项目实施工作 [MOA Deploys Fisheries Fuel Price Subsidy to Adjust Special Transfer Payment Program], 23 December 2016, [http://www.moa.gov.cn/hdllm/zbft/hyyyzyglzdg/xgxw/201612/t20161223\\_5416274.htm](http://www.moa.gov.cn/hdllm/zbft/hyyyzyglzdg/xgxw/201612/t20161223_5416274.htm).

<sup>88</sup> These are: 财政部 [Ministry of Finance], 《船舶报废拆解和船型标准化补助资金管理办法》(财建〔2015〕977号) [Circular concerning the Issuance of the Measures on the Management of the Vessel Decommissioning and Standardization Subsidy (MOF Circular Cai Jian No. 977 of 2015)], 9 November 2015, <https://www.waizi.org.cn/law/9636.html>; 财政部 [Ministry of Finance], 《财政部关于〈船舶报废拆解和船型标准化补助资金管理办法〉的补充通知》(财建〔2016〕418号) [Supplementary Circular concerning the Measures on the Management of the Vessel Decommissioning and Standardization Subsidy (MOF Circular Cai Jian No. 418 of 2016)], 18 June 2016, <https://www.waizi.org.cn/law/11945.html>.

<sup>89</sup> 广东省财政厅 [Guangdong Province Department of Finance], 关于渔业发展与船舶报废拆解更新补助资金清算的通知(粤财工〔2018〕313号) [Notice on the Fisheries Development and Vessel Decommissioning and Renovation Subsidy Accounting (Guangdong Finance [2018] no. 313)], 8 January 2019, [http://czt.gd.gov.cn/tzgg/content/post\\_1055372.html](http://czt.gd.gov.cn/tzgg/content/post_1055372.html).

<sup>90</sup> 财政部 [Ministry of Finance], 关于下达2019年渔业发展与船舶报废拆解更新补助资金预算的通知, 财建〔2019〕175号 [Notice on the Issuance of the 2019 Fisheries Development, Vessel Decommissioning and Renovation Subsidy Fund Budget, MOF (2019) No. 175], 14 April 2019, [http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzht/201904/t20190428\\_3236216.htm](http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzht/201904/t20190428_3236216.htm).

<sup>91</sup> *Ibid.*, see second attachment on the website.

<sup>92</sup> 财政部 [Ministry of Finance], 关于下达2019年渔业发展与船舶报废拆解更新(渔民减船转产)补助资金预算的通知(财农〔2019〕31号) [Notice on the Issuance of the 2019 Fisheries Development, Vessel Decommissioning and Renovation (Fishermen and Vessel Transition) Subsidy Fund Budget, MOF (2019) No. 31], 30 April 2019, [http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzht/201904/t20190430\\_3238522.htm](http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzht/201904/t20190430_3238522.htm).

received funding of CNY 7.998 billion each year in 2018 and 2017. Two of these programs are for Fisheries Development—the construction of fishery equipment and facilities (such as artificial reefs, deep-water aquaculture cages, and public projects in offshore fishing bases); and the conservation and utilization of international fishery resources. The third is Vessel Decommissioning and Renovation—reducing the number of fishing vessels and transitioning fishermen out of the industry; scrapping, dismantling, and renovating fishing vessels. Another CNY 1.5 billion was devoted to a fourth program, the reduction of marine fishing vessels and transitioning fishermen out of the industry (Fishermen Vessel Reduction and Industry Transition). The fifth program, which seems to be an addition to the Vessel Decommissioning and Renovation program—the decommissioning and renovation of seagoing transport vessels ahead of schedule, the dismantling of inland vessels, and the renovation and building of new model vessels—was funded at CNY 132.41 million and CNY 75.70 million for 2018 and 2017, respectively.<sup>93</sup>

An academic source states that there are nine types of STPs from the central government for the fishing industry.<sup>94</sup> These programs include: (1) reduction and industry transition for marine fishing vessels (海洋捕捞渔船减船转产); (2) construction of artificial reefs (人工鱼礁建设); (3) construction of wind- and wave-resistant deep-water aquaculture bellows (抗风浪深水养殖风箱); (4) renovation of domestic fishing vessels (国内渔船更新改造); (5) construction of public facilities such as fishing harbors and beacons (渔港航标等公共设施); (6) construction of navigational and safety equipment for marine fishing vessels (海洋渔船通导与安全装备建设); (7) renovation and construction of distant water fishing vessels (远洋渔船更新改造); (8) construction of distant water fishing bases (远洋渔业基地建设补贴); and (9) exploitation of international fisheries resources (国际渔业资源开发利用补贴). Were we to slot these into the three main subcomponent programs described above, Fisheries Development would be composed of programs (2) and (3) for aquaculture, and programs (5), (6), (8) and (9) for marine capture. Vessel Decommissioning and Renovation would include programs (4) is dedicated to domestic fisheries and (7) for DWF vessels. Fishermen Vessel Reduction and Operation Conversion would consist of program (1). Programs (7), (8), and (9) are dedicated to DWF. The way in which subsidy information for DWF enterprises is disclosed on the websites of local governments seems to indicate that central-government subsidies to the DWF industry are limited to STP programs (7), (8), and (9).<sup>95</sup> The central government subsidies to the DWF enterprises are neither directly related to catch volumes nor to the amount of fuel consumed.

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<sup>93</sup> China WTO Notification Document G/SCM/N/343/CHN.

<sup>94</sup> 王波, 李茂华 [Wang Bo, Li Maohua], “渔业油价补贴政策调整工作思考与建议 [Reflection and Suggestions on the Adjustment of Fuel Price Subsidy Policy for the Fisheries Industry]”, *中国水产* [China Fisheries], 2018, 10: 34–38.

<sup>95</sup> 中国农村网 [China Rural News], 渔业油价补贴综合性支持政策 [Fisheries Fuel Subsidies Comprehensive Support Policy], 23 April 2020, [http://journal.crnews.net/nmwz/2020n/2020nd5q/zccs/133667\\_20200423123636.html](http://journal.crnews.net/nmwz/2020n/2020nd5q/zccs/133667_20200423123636.html).

### 3.2.2a Vessel Decommissioning and Renovation Subsidy

The MOF reports that the Fisheries Development and Vessel Decommissioning Subsidy for the subprograms Fishing Vessel Disposal, Renovation and Fisheries Equipment Construction totaled CNY 6.153 billion in 2019, with CNY 2.5 billion and CNY 3.65 billion for the domestic and DWF sectors, respectively (see Table 1).<sup>96</sup> The MOA has also stated that DWF subsidies total approximately 4.0 billion CNY each year.<sup>97</sup> According to the definitions provided by the WTO, these amounts include not just the vessel decommissioning and renovation program, but also the fisheries equipment construction program. The fisheries equipment construction program includes funding for artificial reefs, deep-water aquaculture cages, and public projects in offshore fishing bases.

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<sup>96</sup> 财政部 [Ministry of Finance], 财政部关于下达 2019 年渔业发展与船舶报废拆解更新补助资金预算的通知 (财建〔2019〕175 号) [Ministry of Finance Notification on the 2019 Fisheries Development and Vessel Decommissioning and Renovation Subsidy Budget Estimates (Finance [2019] no. 175)], 14 April 2019, [http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzht/201904/t20190428\\_3236216.htm](http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzht/201904/t20190428_3236216.htm); 财政部 [Ministry of Finance], 财政部关于下达 2018 年渔业发展与船舶报废拆解更新补助资金预算的通知 (财建〔2018〕297 号) [Ministry of Finance Notification on the 2018 Fisheries Development and Vessel Decommissioning and Renovation Subsidy Budget Estimates (Finance [2018] No. 297)], 19 June 2018, [http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzht/201807/t20180710\\_2954868.htm](http://jjs.mof.gov.cn/zxzyzf/cbbfcjhcxzbzht/201807/t20180710_2954868.htm).

<sup>97</sup> 农业农村部 [Ministry of Agriculture and Rural Affairs], 2019 年国家强农惠农富农政策措施 [2019 National Policy Measures to Strengthen, Benefit, and Enrich Agriculture], 19 June 2019, [http://www.moa.gov.cn/gk/zcjd/201906/t20190619\\_6317976.htm](http://www.moa.gov.cn/gk/zcjd/201906/t20190619_6317976.htm).

**Table 1: 2019 Fisheries Development and Vessel Decommissioning Subsidy, Portion for Fishing Vessel Disposal, Renovation and Fisheries Equipment Construction**

<b>2019 年渔业发展与船舶报废拆解更新补助资金 (渔船报废拆解、更新改造和渔业装备设施建设部分) 分配总表 2019 Fisheries Development and Vessel Decommissioning Subsidy (For Fishing Vessel Disposal, Renovation and Fisheries Equipment Construction)</b>				
Unit: RMB				
地区 (单位) Area	合计 Total	国内渔业 Domestic	远洋渔业 DWF	DWF as % of Total
北京 Beijing	5,440,000	0	5,440,000	100%
天津 Tianjin	11,600,000	360,000	11,240,000	97%
河北 Hebei	130,520,000	98,640,000	31,880,000	24%
辽宁 Liaoning	206,690,000	121,250,000	85,440,000	41%
大连 Dalian	442,560,000	135,460,000	307,100,000	69%
吉林 Jilin	8,000,000	8,000,000	0	0%
黑龙江 Heilongjiang	8,000,000	8,000,000	0	0%
上海 Shanghai	125,190,000	550,000	124,640,000	100%
江苏 Jiangsu	145,720,000	126,240,000	19,480,000	13%
浙江 Zhejiang	1,259,750,000	184,550,000	1,075,200,000	85%
宁波 Ningbo	121,790,000	82,750,000	39,040,000	32%
福建 Fujian	1,086,090,000	390,580,000	695,510,000	64%
厦门 Xiamen	48,120,000	3,600,000	44,520,000	93%
江西 Jiangxi	16,000,000	16,000,000	0	0%
山东 Shandong	1,077,100,000	358,330,000	718,770,000	67%
青岛 Qingdao	402,370,000	112,280,000	290,090,000	72%
湖南 Hunan	24,000,000	24,000,000	0	0%
广东 Guangdong	542,370,000	494,850,000	47,520,000	9%
深圳 Shenzhen	118,580,000	0	118,580,000	100%
广西 Guangxi	166,740,000	130,770,000	35,970,000	22%
海南 Hainan	174,050,000	174,050,000	0	0%
四川 Sichuan	8,000,000	8,000,000	0	0%
云南 Yunnan	16,000,000	16,000,000	0	0%
陕西 Shaanxi	8,000,000	8,000,000	0	0%
合计 Total	6,152,680,000	2,502,260,000	3,650,420,000	59%

To calculate the portion of the subsidy that was only for domestic vessel decommissioning and renovation, we subtracted CNY 1.21 billion for inland fishing ports and CNY 605 million for marine ranching (both of which were described in the GTP section above) to get CNY 687.26 billion.

The CNY 3.65 billion for DWF includes both the vessel decommissioning and renovation program and the DWF bases program, so we estimated the portion for DWF vessel decommissioning and renovation based on the information we have.

The central-government subsidies for the renovation and construction of DWF vessels depend on the fishing vessel gear and physical parameters. In 2016, the then-MOA issued a key document detailing subsidy standards for DWF-related programs.<sup>98</sup> The notice mandates that central-government subsidies for vessel renovation and construction should not exceed 30 percent of the total cost of the renovation or construction (after exclusion of costs associated with imported equipment), and should not exceed the upper limit of the subsidy, whichever comes first, with the upper limit per vessel depending on the fishing type, length, and gross tonnage of the vessel, totally 19 categories (see Tables 2a and 2b). Newly built professional Antarctic krill fishing and processing vessels command the highest maximum allowable amount at CNY 150 million per vessel, followed by rebuilt professional Antarctic krill fishing and processing vessels with a maximum allowable amount of CNY 30 million. Tuna purse seiners also have a maximum allowable amount of CNY 30 million. The smallest maximum allowable amount, CNY 2.4 million, goes to three types of vessels: steel tuna longliners weighing 200 tons with a length of 30 meters or more; professional squid jigging vessels weighing 450 tons with a length of 45 meters or more; and other fishing vessels operating in the EEZs of other countries and weighing 200 tons with a length of 30 meters or more. Thus, the DWF vessel decommissioning and renovation subsidy total depends on the vessel composition of the fleet, however we do not have that breakdown.

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<sup>98</sup> 农业部办公厅 [Ministry of Agriculture General Office], 农业部办公厅关于印发远洋渔业油补贴政策调整实施方案的通知 (农办渔 [2016] 43 号) [Ministry of Agriculture General Office Notice on the Implementation Plan for Adjusting Fuel Subsidies to Distant Water Fisheries (MOA Fisheries (2016) No. 43)], 20 July 2016.



**Table 2a: Upper Limits for Vessel Renovation and Construction Subsidies per DWF Vessel by Vessel Type (in Chinese)**

序号	船型	主要船型参数 (总吨位, 船长)	补助金额上限 (万元/艘)
1	金枪鱼围网船	1500 总吨且船长 65 米以上	3000
2	金枪鱼延绳钓船	超低温金枪鱼延绳钓船	500 总吨且船长 40 米以上
3		玻璃钢金枪鱼延绳钓船	250 总吨且船长 30 米以上
4		钢质金枪鱼延绳钓船	400 总吨且船长 40 米以上
5		钢质金枪鱼延绳钓船	200 总吨且船长 30 米以上
6	秋刀鱼捕捞船	1400 总吨且船长 65 米以上	1200
7	专业鱿鱼钓船	专业鱿鱼钓船	1200 总吨且船长 65 米以上
8		专业鱿鱼钓船	900 总吨且船长 55 米以上
9		专业鱿鱼钓船	500 总吨且船长 50 米以上
10		专业鱿鱼钓船	450 总吨且船长 45 米以上
11	双甲板拖网渔船	1500 总吨且船长 55 米以上	650
12	网渔船	双甲板拖网渔船	300 总吨且船长 30 米以上
13	中上层围网渔船 (不含三角虎网)	400 总吨且船长 45 米以上	350
14	其它过洋性渔船	200 总吨且船长 30 米以上	240
15	远洋渔业辅助船	4000 总吨且船长 100 米以上	1800
16		3000 总吨且船长 85 米以上	1200
17		2000 总吨且船长 70 米以上	800
18	专业南极磷虾捕捞加工船 (新建)	7000 总吨且船长 100 米以上	15000
19	专业南极磷虾捕捞加工船 (改造)	4000 总吨且船长 90 米以上	3000

**Table 2b: Upper Limits for Vessel Renovation and Construction Subsidies per DWF Vessel by Vessel Type (English Translation)**

Serial number	Vessel type		Main parameters (Gross tonnage, vessel length)	Maximum allowable amount of subsidies (RMB 10,000 /vessel)
1	Tuna purse seiner		1,500 tons with a length of 65 meters or more	3,000
2	Tuna longliner	Ultra-low temperature tuna longliner	500 tons with a length of 40 meters or more	1,000
3		Fiberglass tuna longliner	250 tons with a length of 30 meters or more	300
4		Steel tuna longliner	400 tons with a length of 40 meters or more	280
5		Steel tuna longliner	200 tons with a length of 30 meters or more	240
6	Saury fishing vessel		1,400 tons with a length of 65 meters or more	1,200
7	Professional squid jigging vessel	Professional squid jigging vessel	1,200 tons with a length of 65 meters or more	1000
8		Professional squid jigging vessel	900 tons with a length of 55 meters or more	800
9		Professional squid jigging vessel	500 tons with a length of 50 meters or more	350
10		Professional squid jigging vessel	450 tons with a length of 45 meters or more	240
11	Double-deck trawler	Double-deck trawler	1,500 tons with a length of 55 meters or more	650
12		Double-deck trawler	300 tons with a length of 30 meters or more	450
13	purse seiner (without “triangular tiger seine” <sup>99</sup> ) operating for pelagic fish (中上层鱼类)		400 tons with a length of 45 meters or more	350
14	Other fishing vessels in the EEZs of other countries		200 tons with a length of 30 meters or more	240
15	Auxiliary vessels for DWF		4,000 tons with a length of 100 meters or more	1,800
16			3,000 gross tons with a length of 85 meters or more	1,200
17			2,000 tons with a length of 70 meters or more	800
18	Professional Antarctic krill fishing and processing vessel (newly built)		7,000 tons with a length of 100 meters or more	1,5000
19	Professional Antarctic krill fishing and processing vessel (rebuilt)		4,000 tons with a length of 90 meters or more	3,000

<sup>99</sup> This is the literal translation for “三角虎网”, which is not a formal Chinese term. The formal term is “单船有囊围网,” which may be translated as “single-vessel bag seine.” 农业部办公厅 [MOA General Office], 关于加强“三角虎网”作业管理工作的通知 [Notice on the Strengthening of “Triangular Tiger Seine” Management Work], 25 August 2014, [http://www.moa.gov.cn/govpublic/YYJ/201501/t20150120\\_4341921.htm](http://www.moa.gov.cn/govpublic/YYJ/201501/t20150120_4341921.htm).

Thus, in order to estimate the DWF vessel decommissioning and renovation program, we calculate the average subsidy per vessel. Putuo District in Zhoushan City, Zhejiang Province, received CNY 228 million for the renovation of 34 DWF vessels in 2016; CNY 180 million for 28 DWF vessels in 2018; and CNY 96 million for the renovation of 16 distant-water squid vessels in 2019.<sup>100</sup> Fuzhou, Fujian Province, received a total of CNY 320 million in central government subsidies in 2019 for the renovation of 67 DWF vessels, which averages out to CNY 4.78 million per vessel.<sup>101</sup> Averaging these amounts works out to approximately CNY 5.684 million per vessel.<sup>102</sup> During the 13th Five-Year Plan (2016–2020), MARA renovated 679 DWF vessels.<sup>103</sup> Assuming that these vessels were uniformly distributed across the five years, 136 vessels (=679/5) were renovated in 2019.<sup>104</sup> Using the average subsidy rate of CNY 5.684 million per vessel, the 136 DWF vessels are estimated to have received CNY 772.99 million in total.

Thus, the subsidy for Vessel Decommissioning and Renovation provides an estimated CNY 688 million for the domestic sector and 773 million for the DWF fishing sector, for a total of CNY 1.46 billion.

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<sup>100</sup> 舟山市人民政府 [Zhoushan City People's Government], 普陀区获中央远洋渔船更新改造资金 2.28 亿元 [Putuo District Receives Central Government Distant Water Fishing Vessel Renovation and Construction Funding of 228 Million Yuan], 27 September 2016, [http://www.zhoushan.gov.cn/art/2016/9/27/art\\_1276170\\_4863431.html](http://www.zhoushan.gov.cn/art/2016/9/27/art_1276170_4863431.html); 普陀区委区政府办公室 [Putuo District Committee District Government Office], 我区远洋渔船更新改造项目再获中央补助 1.87 亿元 [Our District DWF Vessel Renovation and Construction Program Receives Another 187 Million Yuan in Central Government Subsidies], 5 November 2018, [http://www.putuo.gov.cn/art/2018/11/5/art\\_1416233\\_23125134.html](http://www.putuo.gov.cn/art/2018/11/5/art_1416233_23125134.html); 舟山普陀区人民政府 [Zhoushan Putuo District People's Government], 普陀区海洋与渔业局 2019 年重点工作完成情况 [Putuo District Ocean and Fisheries Bureau Key Work Completed in 2019], 20 January 2020, [http://www.putuo.gov.cn/art/2020/1/20/art\\_1443499\\_41772951.html](http://www.putuo.gov.cn/art/2020/1/20/art_1443499_41772951.html).

<sup>101</sup> 海渔局 [SOA], 福州市海洋与渔业局 2019 年工作总结及 2020 年工作思路 [Fuzhou City Ocean and Fisheries Bureau 2019 Work Summary and 2020 Work Line of Thinking], 24 March 2020, [http://hyj.fuzhou.gov.cn/zz/zwgk/ghjh\\_3376/202004/t20200416\\_3249667.htm](http://hyj.fuzhou.gov.cn/zz/zwgk/ghjh_3376/202004/t20200416_3249667.htm).

<sup>102</sup> The Zhoushan average was CNY 6.46 million per vessel.

<sup>103</sup> “十三五”渔业亮点连载 | 转型升级步伐加快 渔业高质量发展取得实效 [“13<sup>th</sup> Five-Year Plan” Fisheries Highlights Serial | The Pace of Transformation and Upgrading Increased, the High-Quality Development of Fisheries Achieved Substantial Results], 8 December 2020, [http://www.yyj.moa.gov.cn/gzdt/202012/t20201208\\_6357773.htm](http://www.yyj.moa.gov.cn/gzdt/202012/t20201208_6357773.htm).

<sup>104</sup> Subsidies are provided in installments across multiple years once renovation has commenced (“先建后补、按建造进度分批拨付”), providing further rationale for dividing the total by five years, see 农业农村部办公厅 [MARA General Office], 关于配合做好 2018 年船舶报废拆解和船型标准化（远洋渔业）补助资金发放工作的通知 [Notice on the Implementation of the 2018 Vessel Decommissioning and Standardization (Distant-Water Fishing) Subsidy Fund], 20 September 2018, [http://www.moa.gov.cn/nybgf/2018/201809/201810/t20181023\\_6161297.htm](http://www.moa.gov.cn/nybgf/2018/201809/201810/t20181023_6161297.htm).

### 3.2.2b Fisheries Development 渔业发展

Fisheries development includes two main programs: construction of fisheries equipment and facilities, and utilization of international fisheries resources. The estimate for Fisheries Development is CNY 5.645 billion.

#### i. Construction of Fisheries Equipment and Facilities 渔业装备设施建设

This category includes programs mainly for domestic fisheries, including aquaculture. Programs include CNY 1.21 billion for inland fishing ports, and CNY 605 million for marine ranching.

Subsidies for marine ranching (海洋牧场) in 2019 are not directly reported, but can be estimated. In 2017, the MOA reported that by 2016 China had invested approximately CNY 5.58 billion on marine ranching.<sup>105</sup> A news story reported that by 2020 China had invested more than CNY 8 billion on marine ranching.<sup>106</sup> Therefore, over the four-year period 2017–2020, China invested approximately CNY 2.42 billion (CNY 8 billion - CNY 5.58 billion) for marine ranching. Assuming that this amount was equally allocated each year, we estimate that the expenditure in 2019 was CNY 605 million (= CNY 2.42 billion / 4). The CNY 605 million for marine ranching is provided through STPs. The funding is provided at the national level and under supervision of the central government.

#### ii. DWF Base Construction 远洋渔业基地

In July 2016, a policy issued by the MOF announced the allowance of the vessel decommissioning and standardization subsidy to support the domestic and overseas construction of DWF bases when the “projects are for public benefit” (公益性项目), in addition to the existing programs on the “renovation and construction of DWF fishing vessels” and “development and utilization of international fisheries resources.”<sup>107</sup> The subsidy for

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<sup>105</sup> 农业部 [MOA], 关于印发《国家级海洋牧场示范区建设规划(2017–2025 年)》的通知, 农渔发(2017) 39 号 [Notice on the Release of the National-Level Marine Ranching Demonstration Site Building Plan (2017–2025), Fisheries (2017) No. 39], 31 October 2017, [http://www.gov.cn/gongbao/content/2018/content\\_5277757.htm](http://www.gov.cn/gongbao/content/2018/content_5277757.htm).

<sup>106</sup> 农民日报 [Farmer Daily News], 休渔禁渔全覆盖 放鱼护鱼入人心——我国渔业与资源保护协调 [Fishing Moratorium Coverage Puts Fish Enhancement and Conservation into People’s Hearts—China’s Fisheries and Resource Protection Coordination], 23 July 2021, <http://www.shuichan1.com/gnsc/440.html>.

<sup>107</sup> 财政部 [Ministry of Finance], 财政部关于《船舶报废拆解和船型标准化补助资金管理办法》的补充通知 (财建〔2016〕418 号) [Supplementary Circular concerning the Measures on the Management of Subsidy Funds for Scrapping and Dismantling Vessels and Ship Type Standardization (MOF Circular Cai Jian No. 418 of 2016)], 18 June 2016, <https://www.waizi.org.cn/law/11945.html>. Although the supplementary notice does not elaborate on the definition of 公益性项目, this term may be defined as projects that are intended to provide public services, such as infrastructure, to all stakeholders for the DWF base. Our interpretation is based on the context of the policy as well as related reports about the use of the term in China’s fishery industry. For example, one government document considers the breakwater, revetment, and wharf of a fishing port as “public benefit infrastructure” (公益性基础设施), see 港口区政府办 [Gangkou District Government Office], 企沙渔港经济区产业项目 [Qishayu Port Economic Zone Industrial Program], 7 January 2019, [http://www.fcgs.gov.cn/zxzx/zsyx/zsxn/201901/t20190107\\_73357.html](http://www.fcgs.gov.cn/zxzx/zsyx/zsxn/201901/t20190107_73357.html).

construction of DWF bases is in line with China's goal of consolidating the DWF supply chain as stated in the 13<sup>th</sup> Five-Year Plan for Fisheries, linking production to processing and logistics, including through the construction of integrated fishing bases and reinforced logistical support capability.<sup>108</sup> For DWF base construction, the notice stipulates that central government subsidies should not exceed 30 percent of the total investment that the Chinese DWF enterprise will make for the public welfare part of the base, and should not exceed CNY 50 million per base, whichever comes first.

We estimate the amount provided toward DWF base construction to be CNY 2.877 billion. We subtracted the amount provided for DWF vessel decommissioning and renovation (CNY 773 million) from the total amount provided to DWF vessel decommissioning, renovation and fisheries equipment and facilities (CNY 3.65 billion), as discussed above.

### iii. Utilization of International Fishery Resources 国际渔业资源开发利用

As mentioned above, in April 2016, China's MOF, MOT, MOA, and SFA announced that beginning in 2015, DWF fuel subsidies would also be a part of the vessel decommissioning and standardization subsidy.<sup>109</sup> The program for utilization of international fisheries resources appears to be the way in which fuel subsidies are provided to the DWF industry.

For a given vessel, the product of its engine power x number of days eligible for subsidies x a daily subsidy coefficient provides a "per-vessel subsidy base" (单船补助基数) in tons of fuel consumed. Vessel power is specified on the vessel certificate but within an upper limit. The number of eligible days for subsidies is defined as the monitored number of days in operation or the effective number of days in operation as confirmed by the MOA's DWF program (农业部远洋渔业项目确认的有效天数), whichever is smaller. The subsidy coefficient takes on one of four different values (0.00492, 0.00369, 0.00328, and 0.00246) depending on the type of fishing (see Table 3). These coefficients refer to the amount of fuel consumed in tons over 24 hours per 1 kW of engine power.<sup>110</sup> By multiplying the subsidy base per vessel by a unit subsidy (i.e., subsidy per ton of fuel consumed), one can calculate the subsidies to a single vessel for

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<sup>108</sup> 农业部 [MOA], 农业部关于印发《全国渔业发展第十三个五年规划》的通知 [MOA Announcement of the "National Fisheries 13<sup>th</sup> Five-Year Plan"], 31 December 2016, [http://www.moa.gov.cn/nybg/2017/derq/201712/t20171227\\_6131208.htm](http://www.moa.gov.cn/nybg/2017/derq/201712/t20171227_6131208.htm); 农业部 [Ministry of Agriculture], "十三五"全国远洋渔业发展规划 [“Thirteenth Five” National Distant Water Fishing Development Plan], 21 December 2017, [http://www.moa.gov.cn/gk/ghjh\\_1/201712/t20171227\\_6128624.htm](http://www.moa.gov.cn/gk/ghjh_1/201712/t20171227_6128624.htm).

<sup>109</sup> 财政部、交通运输部、农业部、国家林业局 [MOF, MOT, MOA, State Forestry Administration], 关于调整农村客运、出租车、远洋渔业、林业等行业油价补贴政策的通知 (财建〔2016〕133号) [Notice on the Policies of Adjusting Fuel Subsidies for the Industries of Rural Passenger Transport, Taxi, Distant Water Fishing, and Forestry (Cai Jian (2016) No. 133)], 13 April 2016, [http://xxgk.mot.gov.cn/2020/jigou/cwsjs/202006/t20200623\\_3310613.html](http://xxgk.mot.gov.cn/2020/jigou/cwsjs/202006/t20200623_3310613.html).

<sup>110</sup> The fuel consumption rate of a single domestic fishery vessel on average is set to 0.000205 ton/kW·hour, equivalent to 0.00492 ton/kW·day, which is similar to the daily coefficients in Table 1 (for DWF vessels). This explanation can be found (implicitly) in 农办渔【2015】65号

(<http://www.ceiuo.com/zjlz/xwzx/tzgg/202010/P020201023342247716022.pdf>)

exploiting international fishery resources. The subsidy per ton of fuel consumed varied by year, which was CNY 1331 in 2018; CNY 1331 in 2019; and CNY 1064.6 in 2020.<sup>111</sup>

The subsidy base (补助基数) for DWF companies is not disclosed to the public. Therefore, we use the reported catch tonnage and the approximate subsidies per ton of catch to estimate the subsidies for utilization of international fishery resource.<sup>112</sup> The subsidy rate in practice is averaged from the annual reports of publicly listed DWF enterprises. SKMIC's 2019 report states that the company captured 15,119,998 tons of fish and obtained CNY 66,809,700 in subsidies for the utilization of international fisheries resources, equivalent to a subsidy rate of CNY 441.9 per ton.<sup>113</sup> ZOFCO's 2019 report states that the company captured 47,016 tons of fish and obtained CNY 20,504,756.24 in subsidies for the utilization of international fisheries resources, equivalent to a subsidy rate of CNY 436.1 per ton of catch.<sup>114</sup> Therefore, the average, CNY 439 per ton of catch, is taken as the subsidy rate.<sup>115</sup> China produced 2,170,152 tons of DWF catch in 2019, so the total subsidy for the utilization of international fisheries resources is estimated as CNY 953 million (=CNY 439 per ton × 2,170,152 tons of catch).

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<sup>111</sup> The first amount was calculated using the subsidies for single vessels and the subsidy base per vessel as disclosed by the Wenling City municipal government in Zhejiang Province, 市港航口岸和渔业管理局 [Bureau of City Ports and Fisheries Management Bureau], 关于温岭市 2018 年度远洋渔船国际渔业资源开发利用补助资金拟发放对象的公示 [Announcement of Targets for the Wenling City 2018 DWF Vessel Subsidy for the Development and Exploitation of International Fisheries Resources], 1 November 2019, [http://www.wl.gov.cn/art/2019/11/1/art\\_1574875\\_39687338.html?xxgkhide=1](http://www.wl.gov.cn/art/2019/11/1/art_1574875_39687338.html?xxgkhide=1). The latter two amounts were directly reported by the Liaoning Province Department of Agriculture and Rural Affairs, 2020 年渔业发展与船舶报废拆解更新 (远洋渔业) 补助资金公示 [Announcement on the 2020 Fisheries Development, Vessel Decommissioning and Renovation (DWF) Subsidy Funding], 23 August 2020, [http://nync.ln.gov.cn/tzgg/202007/t20200723\\_3912807.html](http://nync.ln.gov.cn/tzgg/202007/t20200723_3912807.html).

<sup>112</sup> 农办渔【2016】43 号.

<sup>113</sup> 上海开创国际海洋资源股份有限公司 2019 年年度报告 [Shanghai Kaichuang Marine Int'l Co., Ltd., 2019 Annual Report], 16 April 2020, [https://pdf.dfcfw.com/pdf/H2\\_AN202004171378196746\\_1.pdf](https://pdf.dfcfw.com/pdf/H2_AN202004171378196746_1.pdf).

<sup>114</sup> 山东省中鲁远洋渔业股份有限公司 2019 年年度报告 [Shandong Zhonglu Oceanic Fisheries Co., Ltd. 2019 Annual Report], March 2020, [https://pdf.dfcfw.com/pdf/H2\\_AN202003261376997274\\_1.pdf](https://pdf.dfcfw.com/pdf/H2_AN202003261376997274_1.pdf).

<sup>115</sup> The 2019 report of another publicly listed company, CNFC Overseas Fisheries Co., Ltd. (COFC) shows a total capture of 15,928 tons with CNY 63,181,000 in subsidies for utilization of international fisheries resources, equivalent to CNY 3966.7 per ton, which is far greater than that of SKMIC and ZOFCO. The reason for this abnormally high subsidy rate is unclear, though it may be because COFC is a flagship company, owned by the central government rather than by a local government, and thus may be privileged with a higher subsidy rate. Regardless, such a high subsidy rate is not typical for other Chinese DWF enterprises and we thus consider it to be an outlier. 中水集团远洋股份有限公司 [China Fisheries Group DWF Shares Co., Ltd.], 2019 年年度报告 [2019 Annual Report], April 2020, [http://quotes.money.163.com/f10/ggm\\_x\\_000798\\_6019119.html](http://quotes.money.163.com/f10/ggm_x_000798_6019119.html).

**Table 3: 远洋渔船国际渔业资源开发利用补助系数 [Utilization of International Fisheries Resources DWF Vessel Subsidy Coefficients]**

类别 Category	作业类型 Operation Type	补助系数（每日） Subsidy Coefficient (per day)
	大型拖网加工、公海拖网、金枪鱼围网、超低温及低温金枪鱼延绳钓、鱿鱼钓、秋刀鱼舷提网 Large processing trawlers, high seas trawlers, tuna purse seiners, ultra-low and low temperature tuna long-liners, squid jiggers, saury nets	0.00369
	过洋性拖网、中上层围网、冰鲜金枪鱼延绳钓 EEZ trawlers, pelagic purse seiners, freezer tuna long-liners	0.00328
	过洋性定置网、刺网、钓具（延绳钓、钩钓、刺钓、杯钓等）、笼壶以及其他未列明作业类型 EEZ fixed net, fishing gear (long-line hooks, hooks, cup hooks, etc), lobster pots and other not listed types	0.00246
	南极磷虾拖网加工（以进出 CCAMLR 公约区为界） Antarctic krill processing trawlers (limited to those entering CCAMLR Convention Area)	0.00492

Subsidies for utilization of international fisheries resources appear to constitute the predominant proportion of the subsidies that DWF enterprises receive as a form of income (与收益相关的政府补助), given information in the annual reports of several large Chinese DWF enterprises.<sup>116</sup> In these reports, government subsidies to DWF enterprises are usually divided into two types, one as a form of income (与收益相关的政府补助) and the other as a form of assets (与资产相关的政府补助). The latter refers to subsidies not directly used in calculation of profits (defined as annual income minus annual costs) that enterprises earn in the year they received the subsidies, for example the renovation and construction of fishing vessels. But not all subsidies for the renovation and construction of fishing vessels are considered assets—if the subsidies are provided only to compensate for expenses that have already been incurred by the enterprise for the renovation or construction, they will be considered as a form of income.

<sup>116</sup> 张艳萍, 政府补助的分类与会计确认 [Classification and Accounting of Governmental Subsidies], 会计之友 [Friends of Accounting], 2014, 57–59; 财政部关于印发修订《企业会计准则第 16 号——政府补助》的通知 [Notice of the Ministry of Finance on Issuing the Revised “Accounting Standard No. 16 for Business Enterprises—Governmental Subsidies], 10 May 2017, [http://www.gov.cn/gongbao/content/2017/content\\_5237716.htm](http://www.gov.cn/gongbao/content/2017/content_5237716.htm).

The 2019 report from CNFC Overseas Fisheries Co., Ltd. (COFC; 中水集团远洋股份有限公司 or 中水渔业) disclosed that the company received CNY 63,181,000 in subsidies for exploitation of international fisheries resources as a form of income, and CNY 65,788,865 in total income-related subsidies, with the former accounting for 96 percent of the latter.<sup>117</sup> Moreover, the subsidies for exploitation of international fisheries resources received by COFC in 2019 exceeded the company's profits of CNY 20.36 million, indicating that without the subsidies for exploitation of international fisheries resources the company's 2019 profits would have been negative. The 2019 report from Shandong Zhonglu Oceanic Fisheries Co., Ltd (ZOFCO; 山东省中鲁远洋渔业股份有限公司) reported that subsidies for exploitation of international fisheries resources accounted for 88 percent of total income-related subsidies (CNY 20,504,756 and CNY 23,209,608, respectively).<sup>118</sup> The 2019 report from Shanghai Kaichuang Marine Int'l Co., Ltd. (SKMIC; 上海开创国际海洋资源股份有限公司) reported that subsidies for exploitation of international fisheries resources were 89 percent of total income-related subsidies (CNY 66,809,700 and CNY 75,234,400, respectively).<sup>119</sup>

### **3.2.2c Fishermen Vessel Reduction and Industry Transition 渔民减船转产**

The STP for Fishermen Vessel Reduction and Industry Transition was CNY 1.5 billion in 2019 (see section 3.1.3d).

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<sup>117</sup> Not all subsidies are actually obtained in the year they are reported. Some subsidies are guaranteed by the government to be provided for the enterprise but at a later date, and such subsidies are referred to "deferred subsidies." Accordingly, the related income is referred to as "deferred income," which is also disclosed in the reports of DWF enterprises. The total income-related subsidies may include subsidies from subnational government funding. For example, the 2019 report from Zhonglu Oceanic Fisheries Co., Ltd (ZOFCO; 山东省中鲁远洋渔业股份有限公司) disclosed that the company received CNY 1,621,411 in subsidies for transporting tuna catch back to China. This type of subsidy is listed in juxtaposition with the subsidy for the exploitation of international fisheries resources, suggesting that it does not belong to this subsidy program. An earlier third-party audit report indicated that subsidies for tuna transportation was provided by the Qingdao Municipal Bureau of Finance, the city in which ZOFCO is headquartered, see 山东省中鲁远洋渔业股份有限公司, 审计报告, 大信审字 [2019] 第 3-00024 号 [Shandong Zhonglu Oceanic Fisheries Co., Ltd., Audit Report, Daxing Verification (2019) No. 3-00024], [http://pdf.dfcfw.com/pdf/H2\\_AN201903071303728145\\_1.pdf](http://pdf.dfcfw.com/pdf/H2_AN201903071303728145_1.pdf); 中水集团远洋股份有限公司, 2019 年年度报告 [CNFC Overseas Fisheries Co., Ltd. 2019 Annual Report], [https://pdf.dfcfw.com/pdf/H2\\_AN202004091377847516\\_1.pdf](https://pdf.dfcfw.com/pdf/H2_AN202004091377847516_1.pdf).

<sup>118</sup> 山东省中鲁远洋渔业股份有限公司 2019 年年度报告 [Shandong Zhonglu Oceanic Fisheries Co., Ltd. 2019 Annual Report], March 2020, [https://pdf.dfcfw.com/pdf/H2\\_AN202003261376997274\\_1.pdf](https://pdf.dfcfw.com/pdf/H2_AN202003261376997274_1.pdf).

<sup>119</sup> 上海开创国际海洋资源股份有限公司 2019 年年度报告 [Shanghai Kaichuang Marine Int'l Co., Ltd., 2019 Annual Report], 16 April 2020, [https://pdf.dfcfw.com/pdf/H2\\_AN202004171378196746\\_1.pdf](https://pdf.dfcfw.com/pdf/H2_AN202004171378196746_1.pdf).



### 3.3 Guangdong Province Case Study

Over the five-year period between 2015 and 2019, the central government allotted CNY 17.58 billion, or CNY 3.516 billion each year, to Guangdong Province in the form of direct fisheries subsidies, of which 80 percent was provided as a GTP (CNY 2.81 billion per year) and 20 percent was provided as an STP (CNY 703.25 million).<sup>120</sup>

At the provincial level, the GTP was divided into two portions. The first portion, referred to as provincial-level planning (省级统筹) and accounting for 12 percent of the GTP, was used for provincial expenditures, totaling CNY 1.6795 billion for five years (or CNY 335.9 million per year).<sup>121</sup> Provincial-level expenditures supported nine programs: DWF (远洋渔业); information technology for fisheries and fishery administration (渔业渔政信息化); fishery law enforcement equipment (渔业执法装备); fishery insurance (渔业保险); fisheries breeding engineering (渔业种业工程); fisheries resource survey and ecological environment monitoring (渔业资源调查与生态环境监测); loan guarantee for fishing vessel renovation (渔船更新改造贷款风险担保); design of standard fishing vessel design (标准渔船设计); and strategy research and policy promotion for fishery development (渔业发展战略研究与政策宣贯). For these programs, the funding is directly allocated by the provincial government to specific project implementers, such as a fisheries enterprise or a department directly affiliated with the provincial government.

The DWF portion of the GTP provincial-level expenditures was allotted CNY 800 million over 2015–2019 (or about CNY 160 million per year). These seven programs included: the building and purchase of DWF vessels (CNY 93.6 million per year); fisheries access fees (入渔费, CNY 24 million per year); transportation of catch harvested by the Chinese fleet back to China (自捕鱼回运费, CNY 23.2 million per year); exploration and implementation of new fisheries programs (开拓新项目, CNY 4.4 million per year); DWF base construction (CNY 5.2 million per year); DWF talent training (CNY 2 million per year); and insurance for DWF vessels and crew safety (CNY 7.6 million per year).

The second portion, referred to as local-level planning (地方统筹) and accounting for 88 percent, for a total of CNY 12.3855 billion over five years (CNY 2.477 billion per year), was further sub-divided and transferred (切块下达) to various local municipal governments, which independently decide how to further allocate the funding among local stakeholders.<sup>122</sup> This local-level GTP supported ten programs: fishing vessel fuel subsidies (渔船油补); fishing vessel reduction and industry transition (减船转产); fishing vessel renovation and construction (渔船更新改造); livelihood subsidies for fishermen during the fishing moratorium (支持休禁渔渔民生

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<sup>120</sup> 广东省海洋与渔业局、广东省财政厅 [Guangdong Province Ocean and Fisheries Bureau and Guangdong Province Finance Office], 广东省国内渔业捕捞和养殖业油价补贴政策调整总体实施方案 (粤海渔 [2016] 88号) [Overall Implementation Plan of Guangdong Province for Adjusting the Oil Price Subsidy Policy for the Domestic Capture Fisheries and Aquaculture (Guangdong Ocean and Fisheries [2016] No. 88)], 29 June 2016, [http://www.gd.gov.cn/zwfgk/wjk/zcfgk/content/post\\_2532397.html](http://www.gd.gov.cn/zwfgk/wjk/zcfgk/content/post_2532397.html).

<sup>121</sup> *Ibid.*

<sup>122</sup> *Ibid.*

产生活); fisheries resources protection and ecological recovery (支持开展渔业资源养护及生态修复); aquaculture infrastructure construction (水产养殖基础设施建设); fishing port and public facilities construction (渔港航标及公共基础设施建设); fishing safety equipment (渔业安全装备建设); fishermen training for fisheries operation skills (开展渔民 (含港澳流动渔民) 生产技能培训); and fisheries law enforcement (开展渔业生产秩序整治行动).

The STP was intended to support fishermen vessel reduction and industry transition (渔民减船转产) and fishing vessel renovation and construction (渔船更新改造). Guangdong's plan did not provide detailed information about the STP, though it is almost certainly a component of the national fund for the 2019 Central Governmental Subsidies for Fisheries Development, Vessel Decommissioning and Renovation, and Fishermen Vessel Reduction and Industry Transition (2019 中央渔业发展与船舶报废拆解更新及渔民减船转产补助资金).<sup>123</sup>

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<sup>123</sup> 广东省财政厅 [Guangdong Province Department of Finance], 关于下达 2019 年中央渔业发展与船舶报废拆解及渔民减船转产更新补助资金的通知, 粤财农〔2019〕126 号 [Notice on the Issuance of the 2019 Central Government Fisheries Development and Vessel Decommissioning and Renovation and Fishermen Reduction and Transition Subsidy Funding, Document (2019) No. 126], 28 June 2019, [http://czt.gd.gov.cn/tzgg/content/post\\_2526975.html](http://czt.gd.gov.cn/tzgg/content/post_2526975.html).

## 4 Provincial Subsidies

Funding that comes from the central government that is allocated to the provinces is sometimes referred to as “省级统筹” (“provincially coordinated allocation”).<sup>124</sup> Funding that comes from provincial budgets is called “省级配套资金” (“provincially supplemented funding”). This section examines direct subsidies from provincial budgets that supplement central-government funding.

### 4.1 Fisheries Insurance

Both the central and local governments provide subsidies for the insurance premiums for coverage of personal injury and fishing vessels. The central government provides CNY 10 million per year, while the local government subsidies are far greater in amount though considerable diversity exists among the provinces and localities. We estimate the total amount to be CNY 1.0 billion.

China's fishing industry relies on nonprofit mutual insurance because of the high-risk nature of fishing operations.<sup>125</sup> While commercial insurance companies played a larger role in the 1980s, they faced high claims and difficulties conducting on-site damage assessments in a timely manner, and today only insure some large vessels over 250 horsepower and DWF vessels.<sup>126</sup> In 1994, vessel owners formed a mutual insurance association, which became the “China Fishery Mutual Insurance Association” (CFMIA, 中国渔业互保协会) in 2007.<sup>127</sup> However, participation in mutual insurance programs remained low because insurance premiums were high, and the insurers sometimes were unable to pay for claims due to the financial burdens arising from high loss ratios.<sup>128</sup> The pressure increased when China issued the “going out” strategy, and when China began relying more heavily on fishermen to represent China's “maritime rights and interests” in competing for international fisheries resources and assisting with maintaining or expanding maritime claims in disputed waters.<sup>129</sup>

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<sup>124</sup> This term comes from the longer name, for example: “中央财政2017年暨2016年度渔业成品油价格改革补助省级统筹项目” (emphasis added).

<sup>125</sup> 中国保险报 [China Insurance News], 将渔业互助保险纳入中央财政保费补贴范围 [Fisheries Mutual Insurance to Be Included in Central Government Subsidy for Premiums], 12 March 2013, [http://www.shuichan.cc/news\\_view-123806.html](http://www.shuichan.cc/news_view-123806.html).

<sup>126</sup> 孙颖士, 李冬霄 [Sun Yingshi and Li Dongxiao], 关于推进建立政策性渔业保险制度的政策建议 [Suggestions for Current Fishery Insurance System], *中国渔业经济* [China Fisheries Economics], 2009, 1: 60–65.

<sup>127</sup> 中国渔业互保协会 (China Fishery Mutual Insurance Association), <http://www.cfmi.org.cn/index.php?m=content&c=index&a=lists&catid=10>. The original name was 中国渔船船东互保协会 (China Fishing Vessel Owners Mutual Insurance Association).

<sup>128</sup> 陈盛伟 [Chen Shenwei], 王晓丽 [Wang Xiaoli], 我国渔业互助保险研究综述 [A Review of Chinese Fishery Mutual Insurance Research], *中国海洋大学学报 (社会科学版)* [Journal of Ocean University of China (Social Sciences Edition)], 2017, 2: 67–70.

<sup>129</sup> 孙颖士, 李冬霄 [Sun Yingshi and Li Dongxiao], 关于推进建立政策性渔业保险制度的政策建议 [Suggestions for Current Fishery Insurance System], *中国渔业经济* [China Fisheries Economics], 2009, 1: 60–65.

In 2007, the MOA set a goal to increase membership in fisheries mutual insurance programs nationwide by over 50 percent across three years, and called for support to be provided by all levels of government.<sup>130</sup> A subsequent policy issued in 2008 announced nine regions selected to receive in total CNY 10 million a year from the central government to offset the cost of insurance premiums, covering 20 percent of the premiums for personal injury insurance for marine fishermen and 25 percent of insurance premiums for marine fishing vessels.<sup>131</sup> Once this central-level pilot project got underway, local governments also began providing subsidies for fisheries mutual insurance, amounting to CNY 86.8 million in 2008.<sup>132</sup> Local government subsidies rose to CNY 120 million in 2009, which was 12 times higher than the central government subsidies.<sup>133</sup> As China's fisheries mutual insurance programs across the nation were promoted, between 2007 and 2012 the number of both insured fishermen and fishing vessels grew by 83 percent, and the insurance coverage limit for fishermen's personal injury and fishing vessels increased by 552 percent and 285 percent, respectively.<sup>134</sup>

Encouraged by the advances and facing an increasing demand for fisheries mutual insurance because of the rapid expansion of China's fishing industry, in 2012 the MOA issued a five-year plan on the development of national fisheries mutual insurance.<sup>135</sup> One objective—among many others—was to expand the broader program “Central Government Subsidies for Agricultural Insurance Premiums” (中央财政农业保险保费补贴) to include nationwide subsidies for fisheries insurance premiums. In 2013, a higher-level policy was issued calling for implementing

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<sup>130</sup> 农业部 [Ministry of Agriculture], *农业部关于进一步做好渔业互助保险工作的通知*, 农渔发〔2007〕41号 [Ministry of Agriculture Notice on Further Promoting Work on Fisheries Mutual Insurance, MOA Fisheries (2007) No. 41], 29 December 2007, [http://www.yyj.moa.gov.cn/zcjd/201904/t20190419\\_6196654.htm](http://www.yyj.moa.gov.cn/zcjd/201904/t20190419_6196654.htm).

<sup>131</sup> 农业部 [Ministry of Agriculture], *关于下达 2008 年渔业互助保险中央财政保费补贴试点项目资金的通知*, 农财发〔2008〕78号 [Notice on Allocating Central Governmental Funds as Subsidies for Implementation of Fisheries Mutual Insurance in Pilot Regions in 2008, Agriculture Finance (2008) No. 78], 10 July 2008, [http://www.moa.gov.cn/govpublic/CWS/201006/t20100606\\_1533369.htm](http://www.moa.gov.cn/govpublic/CWS/201006/t20100606_1533369.htm); 中国保险报 [China Insurance News], “将渔业互助保险纳入中央财政保费补贴范围 [Fisheries Mutual Insurance to Be Included in Central Government Subsidy for Premiums],” 12 March 2013, [http://www.shuichan.cc/news\\_view-123806.html](http://www.shuichan.cc/news_view-123806.html). The nine regions consisted of two provinces—Jiangsu Province and Hainan Province; six cities in four provinces—Dalian (Liaoning Province), Qingdao and Rizhao (Shandong Province), Fuzhou (Fujian Province), Dongguan and Jiangmen (Guangdong Province); and one county—Daishan (Zhejiang Province). The regions were to receive insurance premium subsidies for marine fishing vessels, except Daishan which would receive insurance premium subsidies for marine fishermen's personal injury.

<sup>132</sup> 中国渔业互保协会 (China Fishery Mutual Insurance Association), “献身渔业 服务渔民——中国渔业互保协会 15 年发展历程回顾 [Dedicated to Fisheries and Serving Fishermen—Review of the 15-Year Development History of the China Fishery Mutual Insurance Association],” *中国水产* [China Fisheries], 2009, 11: 81-85.

<sup>133</sup> 中国渔业互保协会 [China Fisheries Mutual Insurance Association], “对构建渔业风险保障体系和制度的思考 [Thoughts on Building a Fisheries Risk Safeguard Institution and System],” 10 January 2014, <http://www.cfmi.org.cn/index.php?m=content&c=index&a=show&catid=30&id=34>.

<sup>134</sup> 中国保险报 [China Insurance News], “将渔业互助保险纳入中央财政保费补贴范围 [Fisheries Mutual Insurance to Be Included in Central Government Subsidy for Premiums],” 12 March 2013, [http://www.shuichan.cc/news\\_view-123806.html](http://www.shuichan.cc/news_view-123806.html).

<sup>135</sup> 农业部办公厅关于印发全国渔业互助保险发展“十二五”规划 (2011–2015 年) 的通知 [Notice of the National Fisheries Mutual Insurance Development 12th Five-Year Plan (2011–2015)], 20 August 2012, [http://www.moa.gov.cn/nybg/2012/dbaq/201805/t20180516\\_6142262.htm](http://www.moa.gov.cn/nybg/2012/dbaq/201805/t20180516_6142262.htm).

pilot projects to provide the fishing industry with insurance premium subsidies.<sup>136</sup> The Agricultural Insurance Regulations, which entered into force in 2013, officially extended agricultural subsidies to include insurance coverage of personal injury and fishing vessels.<sup>137</sup> However, it seems as though the objective of providing comprehensive nationwide insurance premium subsidies at the central level was not achieved or was changed.<sup>138</sup>

Sub-central fisheries mutual insurance programs have continued. While nationwide statistical data are unavailable, the ratio of local-to-central government subsidies is likely higher than it was ten years ago, as evidenced by some provincial data. In 2019 and 2020, Fujian Province provided CNY 51 million each year in subsidies to cover 30 percent of fisheries insurance premiums.<sup>139</sup> Thus, Fujian's provincial subsidies alone are 5.1 times as high as the total central government subsidies. Zhejiang Province provides some data on the amounts of insurance premium subsidies categorized by central-, provincial- and lower-level governments, with the total sum increasing from 81.75 to 104.13 million from 2013 to 2017, and the provincial government subsidies accounted for the dominant fraction (see Figure 1). Zhejiang's sub-central insurance subsidies were on average 28 to 44 times higher than central-level subsidies for this five-year period. By 2015, some provinces were covering more than 60 percent of the insurance premiums with government subsidies.<sup>140</sup>

The National Fisheries Mutual Insurance Development 12th Five-Year Plan stated that total amount of premiums (from both subsidies and the fisheries industry) for fisheries mutual insurance was expected to reach CNY 2.0 billion by the end of 2015, and the latest data indicate

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<sup>136</sup> 中共中央 [CCP Central Committee and State Council], 中共中央国务院关于加快发展现代农业进一步增强农村发展活力的若干意见, 2013 年中央一号文件 (全文) [CCP Central Committee and State Council Views on Accelerating the Development of Modernizing Agriculture and Further Enhancing the Vitality of Rural Development, 2013 Central Government Document No. 1 (Full Text)], 31 December 2012, [http://www.moa.gov.cn/ztzl/yhwj2013/zywj/201302/t20130201\\_3213480.htm](http://www.moa.gov.cn/ztzl/yhwj2013/zywj/201302/t20130201_3213480.htm).

<sup>137</sup> 国务院 [State Council], 农业保险条例国务院令 第 629 号 [Agriculture Insurance Regulations, State Council Order No. 629], 12 November 2012, [http://www.gov.cn/zwgg/2012-11/16/content\\_2268392.htm](http://www.gov.cn/zwgg/2012-11/16/content_2268392.htm).

<sup>138</sup> A key 2016 policy did not mention fisheries, see 财政部 [Ministry of Finance], 财政部关于印发《中央财政农业保险保险费补贴管理办法》的通知 (财金〔2016〕123 号) [Ministry of Finance Notice on "Central Governmental Agricultural Insurance Premiums Subsidies Management Measures" (Finance (2016) No. 123)], 19 December 2016, [http://jrs.mof.gov.cn/zxzyzf/nybxbfbt/201801/t20180109\\_2793821.htm](http://jrs.mof.gov.cn/zxzyzf/nybxbfbt/201801/t20180109_2793821.htm).

<sup>139</sup> 福建省财政厅 [Fujian Province Finance Office], 关于预安排 2020 年渔业互助保险省级财政补贴资金的通知, 闽财指 (2019) 374 号 [Notice on the Estimated Allocation for the 2020 Fisheries Mutual Insurance Provincial-Level Subsidies Funding, Fujian Finance (2019) No. 374],

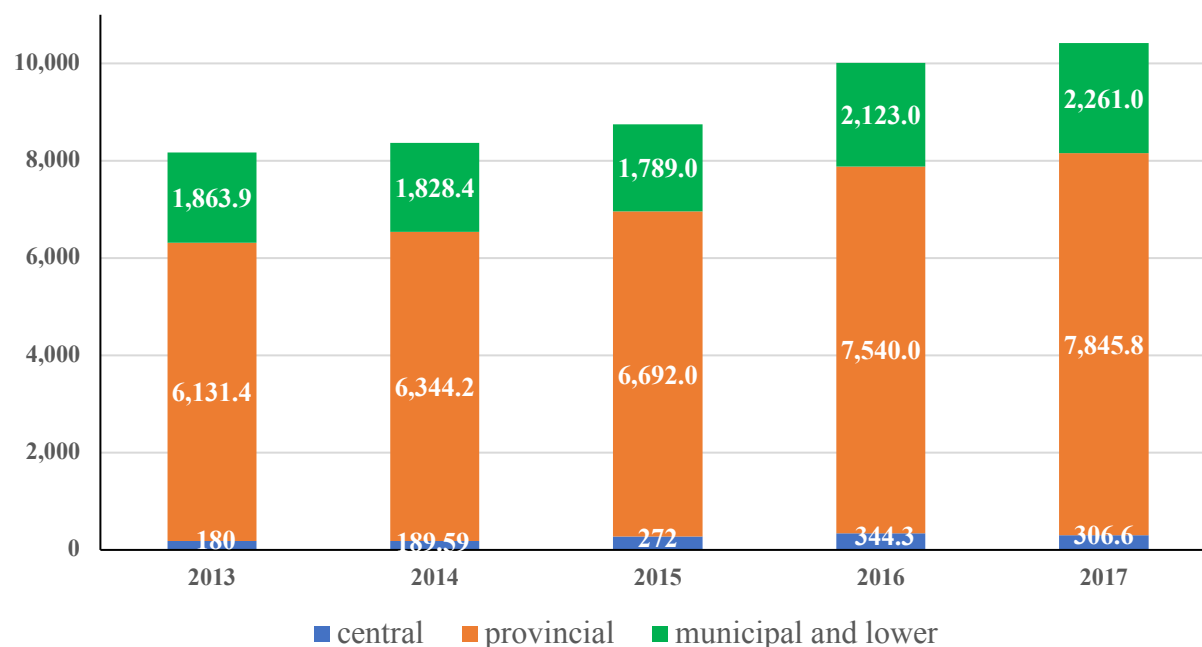
[http://czt.fujian.gov.cn/zfxgkzl/zfxgkml/czzjgl/zjfpwj/202004/t20200413\\_5245891.htm](http://czt.fujian.gov.cn/zfxgkzl/zfxgkml/czzjgl/zjfpwj/202004/t20200413_5245891.htm); 福建省财政厅 [Fujian Province Finance Office], 关于预安排 2020 年渔业互助保险省级财政补贴资金的通知, 闽财指 (2020) 427 号 [Notice on the Estimated Allocation for the 2020 Fisheries Mutual Insurance Provincial-Level Subsidies Funding, Fujian Finance (2020) No. 427], 13 April 2020,

[http://czt.fujian.gov.cn/zwgg/czzj/201904/t20190403\\_4856544.htm](http://czt.fujian.gov.cn/zwgg/czzj/201904/t20190403_4856544.htm); 石狮日报 [Shishi Daily News], 渔业互保省级财政补贴全部预拨到位 [Fisheries Mutual Insurance Provincial Subsidies All Allocated in Advance], 15 October 2019, <http://m.mnw.cn/shishi/news/2209299.html>.

<sup>140</sup> 冯娜娜 [Feng Nana], 渔业互助保险 21 年累计为渔民补偿 33 亿元 [Fisheries Mutual Insurance Has Compensated Fishermen CNY 3.3 Billion Over 21 Years], 11 December 2015, <http://www.cfmi.org.cn/index.php?m=content&c=index&a=show&catid=20&id=1771>.

that the total premium amount was CNY 2.015 billion in 2019.<sup>141</sup> Given that government subsidies pay for at least 50 percent of the premiums, we estimate that government subsidies are at least in CNY 1.0 billion on a national scale.

**Figure 1: Zhejiang Fisheries Mutual Insurance Subsidies (in RMB 10,000), 2013–2017<sup>142</sup>**



<sup>141</sup> Notice of the National Fisheries Mutual Insurance Development 12th Five-Year Plan (2011–2015); 中国渔业互保协会 (China Fishery Mutual Insurance Association), 2019, <http://www.cfmi.org.cn/index.php?m=content&c=index&a=lists&catid=141>. This amount includes subsidies for aquaculture insurance premiums, but aquaculture premiums are a small proportion of the total. In Fujian Province, for example, aquaculture insurance premiums accounted for 8.5 percent of all fisheries insurance premiums, 张静雯 [Zhang Jingwen], 我省渔业互助保险承担风险保额突破 500 亿元 [Our Province's Fisheries Mutual Insurance Total Risk Coverage Exceeds 50 Billion Yuan], 福建省人民政府网 [Fujian People's Government Web], 1 January 2019, <https://mip.chnlib.com/gov/2019-01/897441.html>.

<sup>142</sup> Zhejiang Province Yearbook [浙江年鉴], <https://cyfd.cnki.com.cn/Article/N2019050085000603.htm>. Data from other years are not disclosed.

## 4.2 Subsidies for DWF Catch Transport

Some local governments provide incentives for DWF enterprises to encourage the transportation back to China of catch produced by the Chinese DWF fleet (运回自捕水产品). We estimate that the provinces spent about CNY 40 million on these programs.

The Laoshan District government, in Qingdao, Shandong Province, spent CNY 4.2249 million as subsidies for tuna transportation in 2018.<sup>143</sup> These subsidies were for the ultra-low-temperature transport of tuna, and supported by special funding from Qingdao on DWF development.<sup>144</sup> Data show that the subsidy rate was CNY 1000 per ton of ultra-low-temperature tuna.<sup>145</sup> The tuna subsidy rate of CNY 1000 per ton was established in 2012.<sup>146</sup>

The municipal government of Weihai, Shandong Province, provides CNY 200 per ton of low-temperature tuna; CNY 30 per ton for squid and Antarctic krill; and CNY 50 per ton for other types of species.<sup>147</sup> The municipal government of Zhoushan, Zhejiang Province, provides CNY 300 per ton for chilled, ultra-low-temperature tuna; CNY 200 per ton for fish species in the EEZs of other countries (过洋性鱼类) and low-temperature tuna (bigeye, yellow fin, albacore); as well as CNY 100 per ton for squid, bonito (鲣鱼), Mahi-mahi (鲷鱼), and saury for DWF enterprises registered in Zhoushan. DWF enterprises that are not registered in Zhoushan but land in Zhoushan catch from the Chinese fishing fleet receive the same subsidies except for bonito, Mahi-mahi, and saury.<sup>148</sup> The Guangdong provincial government provides CNY 15,000 per ton for air transportation of chilled fresh tuna and CNY 1000 per ton per landing of other DWF species.<sup>149</sup>

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<sup>143</sup> 崂山区海洋与渔业局 [Laoshan District Ocean and Fisheries Bureau], 2018 年度崂山区海洋与渔业局部门决算 [2018 Laoshan District Ocean and Fisheries Bureau Final Accounting Document], 2018.

<sup>144</sup> 青岛市海洋与渔业局 [Qingdao City Ocean and Fisheries Bureau], 关于青岛市 2017 年度远洋渔业发展专项资金安排公示 [Notice on the Qingdao City 2017 Arrangement of DWF Special Development Funds], 26 July 2018, <https://zyszhjha.com/n12479801/n12480082/180726145606856287.htm>.

<sup>145</sup> *Ibid.*

<sup>146</sup> 青岛市人民政府 [Qingdao Municipal Government], 关于加快远洋渔业发展的意见 [Opinions on Accelerating the Development of Distant Water Fisheries], 26 December 2012, <http://www.qingdao.gov.cn/n172/n68422/n1527/n28172963/121226111617431256.html>.

<sup>147</sup> 威海市人民政府 [Weihai Municipal Government], 支持远洋海产品回运加工 [Support the Transport and Processing of Distant Water Ocean Products], 19 April 2019, [http://www.weihaigov.cn/art/2020/8/31/art\\_70899\\_447.html](http://www.weihaigov.cn/art/2020/8/31/art_70899_447.html).

<sup>148</sup> 陈斌娜 [Chen Binna], 自捕鱼回运交易、水产品加工拓展、招收远洋渔业人才等都有奖励 舟山远洋渔业, 一拨“红利”又来了 [China-Harvested Catch Transport Easier, Seafood Processing Expands, DWF Talent Recruitment Encouraged: Zhoushan DWF “Dividends” Are Back], 舟山晚报 [Zhoushan Evening News], 23 October 2020, [http://dhnews.zjol.com.cn/xinwenzonglan/zhoushanxinwen/202010/t20201023\\_3004031.shtml](http://dhnews.zjol.com.cn/xinwenzonglan/zhoushanxinwen/202010/t20201023_3004031.shtml).

<sup>149</sup> 广东省农业农村厅 [Guangdong Province Office of Agriculture and Rural Affairs], 关于印发 2020 年广东省远洋渔业发展项目入库申报指南的通知, 粤农农计〔2020〕24 号 [Notice Regarding the Issuance of the Entry Application Guidelines for 2020 Guangdong DWF Development Projects, Guangdong Agriculture (2020) No. 24], 8 July 2020, <http://www.jiangmen.gov.cn/jmnyj/attachment/0/139/139579/2094738.pdf>.

The highest amount of this subsidy includes CNY 2000 per ton for tuna landed in Rongcheng, Shandong Province, which is home to China's largest tuna processing base.<sup>150</sup> CNY 15,000 for air transportation of chilled fresh tuna to Guangdong Province was also one of the highest amounts.

To estimate DWF catch transport subsidies, because we do not have the species composition of the transported DWF catch, we assume a subsidies rate of CNY 30 per ton, which was the lowest of all reported rates. In 2019, 1,315,719 tons of DWF catch was transported back to China, meaning total subsidies of CNY 39,471,570.<sup>151</sup>

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<sup>150</sup> 张琦、吴思强 [Zhang Qi and Wu Siqiang], 山东省荣成市远洋渔业全面提升 [Shandong Province Rongcheng City DWF Fully Rises], 中国渔业报 [China Fisheries News], 22 January 2018, <http://www.chinacoop.gov.cn/HTML/2018/01/22/129752.html>; 林永波、李钟芸 [Lin Yongbo and Li Zhongyi], 全国最大金枪鱼加工基地在荣成正式投产 [The Nation's Largest Tuna Processing Base Has Been Officially Put into Production in Rongcheng], 中国网 [China Net], 17 June 2013, <http://news.12371.cn/2013/06/17/ARTI1371441668901989.shtml>.

<sup>151</sup> *China Fishery Statistical Yearbook 2020*.



## INDIRECT SUBSIDIES

While not direct payments from the government to enterprises, indirect subsidies such as tax exemptions and preferential loans function as effective subsidies because they still distort the profit calculations of fishing enterprises.<sup>152</sup>

### 5 Tax Exemptions

China's tax exemptions include import tax exemptions on both catch and fishing equipment as well as income tax exemptions. China's tax exemptions are an issue more for the DWF industry than the domestic capture industry. However aquaculture benefits from some tax exemptions as well.

We calculate tax exemptions to be an effective subsidy amount of CNY 6.336 billion.

#### 5.1 Catch Import Tax Exemption

The MOA and the General Administration of Customs (GAC) jointly issued a policy in 2000 stating that fish species (and processed products) caught by Chinese DWF enterprises operating in the high seas or in the EEZs of other countries in accordance with related agreements would not be subject to import taxes or the import value-added tax (VAT) when transported back to China.<sup>153</sup>

We estimate the import tax exemption on catch to be CNY 2.805 billion for 2019. In 2019, China's DWF enterprises harvested 2.170 million tons valued at CNY 24.354 billion, equivalent to CNY 11,222 per ton.<sup>154</sup> Thus, the 1.316 million tons of DWF catch shipped back to China in 2019 would be worth about CNY 14.765 billion and exempted at a rate of about 19 percent.

The 19 percent exemption rate is based on the sum of the import tariff rate plus the VAT rate, which we estimated to range from 16 to 21 percent. Of the four major types of import tariff currently used by China, China likely uses the most-favored-nation tariff (MFN tariff; 最惠国税率), which applies to imported goods that have China as the place of origin (原产于中华人民共和国境内的进口货物), as catch harvested by Chinese DWF enterprises is likely to be treated as

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<sup>152</sup> van Beers, Cees, Bergh, Jeroen C. J. M. van den Moor, André de and Oosterhuis, Frans, "Determining the environmental effects of indirect subsidies: integrated method and application to the Netherlands," *Applied Economics*, November 2007, Vol. 39 Issue 19, p2465–2482.

<sup>153</sup> 海关总署、农业部 [The MOA and the General Administration of Customs (GAC)], 海关总署、农业部关于印发《远洋渔业企业运回自捕水产品不征税的暂行管理办法》的通知 (署税 [2000] 260 号) [Interim Management Measures on the Non-Taxation of Fishery Species Caught and Brought back by Distant-water Fishing Enterprises (2000, No. 260)], 22 June 2000, <https://www.customslawyer.cn/portal/fkg/detail/id/31523.html>. This policy is still in effect, as evidenced by a MARA announcement citing this policy, see 农业农村部 [MARA], 农业农村部关于确认 2020 年度第八批远洋渔业项目的通知 [MARA Notice Recognizing the 2020 Eighth Batch of Approved DWF Projects], 14 October 2020, [http://www.moa.gov.cn/nybgb/2020/202011/202012/t20201220\\_6358467.htm](http://www.moa.gov.cn/nybgb/2020/202011/202012/t20201220_6358467.htm).

<sup>154</sup> *China Fishery Statistical Yearbook 2020*.

though harvested in China's waters when estimating the tariff exemption.<sup>155</sup> The current MFN tariff imposed by Chinese customs for fish species ranges from 7 to 12 percent, depending on the species.<sup>156</sup> The import VAT has decreased from 11 percent in July 2017 to 10 percent in May 2018, and has been 9 percent since 1 April 2019.<sup>157</sup>

We then confirmed this range and created an average using provincial reports. The Customs Office in Hangzhou, Zhejiang Province, exempted CNY 110 million worth of import taxes for imported DWF products valued at CNY 560 million since the outbreak of the pandemic COVID-19, which implies that the rate of exempted import tax is 19.6 percent.<sup>158</sup> The Customs Office of Qingdao, Shandong Province, exempted CNY 280 million worth of import taxes for imported DWF products valued at CNY 1.49 billion from January to April 2020, which implies an exemption rate of 18.8 percent.<sup>159</sup> In Guangdong Province, Zhanjiang Customs Office exempted CNY 2.36 million for imported DWF products worth CNY 12.85 million between January and April 2020, which implies an exemption rate of 18.4 percent.<sup>160</sup> Given the similarity of the three rates and assuming that the three provinces of Shandong, Zhejiang, and Guangdong—situated along the northern, central, and southern coast—are reasonably representative, we averaged the three rates to obtain a rate of 18.9 percent for the import tax exemption on catch from China's DWF enterprises.

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<sup>155</sup> The other tariffs are the conventional tariff (协定税率), preferential tariff (特惠税率), and general tariff (普通税率). The MFN tariff applies to more nations/regions than the conventional or preferential tariffs do, while the latter two apply to a limited number of specific nations/regions. The general tariff is imposed on goods with an unknown place of origin or from nations/regions that are not on the list for the other three types of import tariffs, but imported fisheries products reported by Chinese DWF enterprises to the GAC have a known place of origin, as their fisheries operations are approved by the MARA, see 国务院关税税则委员会 [State Council Customs Tax Regulations Commission], 中华人民共和国进出口税则 2020 [PRC Import Export Tax Regulations 2020],

<http://gss.mof.gov.cn/gzdt/zhengcefabu/201912/P020191230547817604455.pdf>.

<sup>156</sup> *Ibid.*

<sup>157</sup> 财政部、税务总局 [Ministry of Finance and GAC], 关于简并增值税税率有关政策的通知 (财税〔2017〕37号) [Notice on Policies Related to the Simplification of the Value-Added Tax Rate (MoF and GAC (2017) No. 37)], 28 April 2017, <http://www.chinatax.gov.cn/n810341/n810755/c2590976/content.html>; 财政部、税务总局 [Ministry of Finance and GAC], 税务公报 2018 [Tax Administration Report 2018], 4 April 2018, <http://www.chinatax.gov.cn/n810341/n810765/n3359382/n3359454/c3545207/content.html>; 中新经纬 [China New Today], 增值税改革细则出台！原 16%调整为 13% 原 10%调整为 9% [VAT Reform Details Released! Previous 16% Adjusted to 13%, and Previous 10% Adjusted to 9%], 21 March 2019, <https://baijiahao.baidu.com/s?id=1628617466058321970&wfr=spider&for=pc>.

<sup>158</sup> 马牧青 [Ma Muqing], 杭州海关助远洋渔业“复进口”为企业减免税款 1.1 亿元 [Hangzhou Customs Allows Enterprises to Reduce Tariffs by CNY 110 Million on DWF “Re-Imports”], 中新网浙江 [China New Net Zhejiang], 10 March 2020, <http://www.zj.chinanews.com/jzkzj/2020-03-10/detail-1fzufups9225420.shtml>.

<sup>159</sup> 高勇、刘丽丽 [Gao Yong and Liu Lili], 山东远洋自捕水产品免税额居全国首位 [Shandong DWF Catch Import Tax Exemption is Nation's Highest], 青岛海关 [Qingdao Customs], 29 April 2020, [http://www.customs.gov.cn/qingdao\\_customs/406496/406497/3032109/index.html](http://www.customs.gov.cn/qingdao_customs/406496/406497/3032109/index.html).

<sup>160</sup> 湛关宣 [Zhanjiang Customs News], 湛江海关助力远洋渔业发展 为企业减免税款 236 万元 [Zhanjiang Customs Helps Distant Water Fisheries Development, Exempts Enterprises of 2.36 Million Yuan in Taxes], 24 April 2020, <http://gd.news.163.com/zhanjiang/20/0424/21/FB0Q6GPV04179HUO.html>.

## 5.2 Gear Import Tax Exemption

China had a policy to exempt the import value-added tax (VAT) on fishing gear for DWF enterprises, which was effective for the first three years (1996–1998) of the 9th Five-Year Plan (1996–2000).<sup>161</sup> The policy applied to the import of marine fishing vessels, turbines, deck equipment, refrigeration equipment and other fishing equipment for use in their own operations and that was unable to be produced in China. Because China's manufacturing sector has grown, and technical capabilities has increased, Chinese DWF enterprises likely purchase these materials on the domestic market. Thus, exempted VAT on any imports of gear is likely to be insignificant compare to other subsidy programs.

## 5.3 Income Tax Exemption

China began exempting DWF companies from paying corporate income tax in the mid-1990s.<sup>162</sup> More recently, the PRC Enterprise Income Tax Law mentions fisheries.<sup>163</sup> Article 86 of the follow-on implementation regulations for the income tax law states that primary processing of agricultural products (农产品初加工, including fisheries products) and DWF catch (远洋捕捞) are 100 percent exempted from the enterprise income tax. For mariculture and freshwater culture, the enterprise income tax can be exempted by 50 percent.<sup>164</sup> A 2008 circular specifies the scope of primarily processed agricultural products that may be exempted from enterprise income tax, including qualified aquatic animal products.<sup>165</sup> In 2011, the State Taxation Administration (国家税务总局) issued an announcement specifying that DWF enterprises with a

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<sup>161</sup> 财政部、国家税务总局 [Ministry of Finance, Bureau of State Taxation], 关于远洋渔业企业进口渔用设备免征进口环节增值税的通知 [Notice of the Temporary Exemption of DWF Companies from Paying Value-Added Tax on the Importation of Fishing Equipment (1997) No. 15], 23 January 1997, <http://laws.66law.cn/law-7945.aspx>.

<sup>162</sup> 财政部、税务总局 [Ministry of Finance and GAC], 《关于国有农口企事业单位征收企业所得税问题的通知》(财税字 [1997] 49 号) [Notice on Questions of Enterprise Income Tax Collection for State-owned Agricultural Enterprises], 8 May 1997, <https://www.shui5.cn/article/0a/17812.html>.

<sup>163</sup> 中央政府 [PRC Central Government], 中华人民共和国企业所得税法 (2007) 主席令第六十三号 [People's Republic of China Enterprise Income Tax Law (2007) Presidential Order No. 63], 16 March 2007, [http://www.gov.cn/flfg/2007-03/19/content\\_554243.htm](http://www.gov.cn/flfg/2007-03/19/content_554243.htm).

The article 27 of this law mentions fisheries. China's WTO notifications cite this as the basis for the income tax exemption.

<sup>164</sup> 中央政府 [PRC Central Government], 中华人民共和国企业所得税法实施条例 (2007) 国务院令 第 512 号 [People's Republic of China Enterprise Income Tax Law Implementation Regulations (2007) State Council Order No. 512], 28 November 2007, [http://www.gov.cn/zwgk/2007-12/11/content\\_830645.htm](http://www.gov.cn/zwgk/2007-12/11/content_830645.htm). China's WTO notifications also cite this document as a basis for the income tax exemption.

<sup>165</sup> 财政部 [Ministry of Finance], 国家税务总局关于发布享受企业所得税优惠政策的农产品初加工范围 (试行) 的通知 (财税 [2008] 149 号) [MOF Circular Cai Shui No. 149 of 2008], <http://www.chinatax.gov.cn/chinatax/n362/c4663/content.html>. Another circular, cited by the WTO notifications, provides a supplementary list of the agricultural products to the 2008 circular, but does not mention aquatic animal products, see 财政部 [Ministry of Finance], 国家税务总局关于享受企业所得税优惠的农产品初加工有关范围的补充通知 (财税 [2011] 26 号) [State Taxation Administration Supplementary Notice on the Scope of Agricultural Products and Relevant Initial Processing for which Enterprises Can Enjoy Tax Concessions, MOF Circular Cai Shui No. 26 of 2011], <https://www.shui5.cn/article/86/49714.html>.

fishing permit from the MOA are exempted from corporate income tax on income from DWF activities.<sup>166</sup>

We estimate the exempt corporate income tax (and thus effective subsidy) to be about CNY 3.5 billion. In 2019, China's DWF catch of 2.17 tons was valued at CNY 24.354 billion.<sup>167</sup>

Assuming the DWF catch is eventually completely sold on the market at what it is valued or higher, this amount could be used as a stand-in for DWF revenue, though revenue may be higher if the catch is processed prior to being sold. We assume that 42 percent of the revenue is deductible for operating costs, and thus leaving CNY 14.125 billion as taxable income. The enterprise income tax rate is 25 percent for most enterprises, a rate that has also been confirmed by publicly listed Chinese DWF companies.<sup>168</sup> Thus, the exempted income tax would be 25 percent of 14.125 billion, or CNY 3.531 billion.<sup>169</sup>

## 6. Policy Bank Support

The fishing industry also receives subsidies from China's policy banks (政策性银行) in the form of low-interest, long-term loans, though this support is not disclosed in any bank or government reports, and little data is publicly available. While information about policy-bank loans to domestic fisheries is scarce, we estimate policy-bank loans to the DWF sector to be CNY 2.7 billion for 2019, and that fishing enterprises save CNY 548 million in loan interest.

China's policy banks are state-owned, state-funded banks directly under the leadership of the State Council that operate in specific fields where they are directly or indirectly engaged in policy-financing activities, serving as a macroeconomic management tool to promote the implementation of the Chinese government's socioeconomic policies.<sup>170</sup> China's three policy banks include the Export-Import Bank of China (EXIM Bank, 中国进出口银行); the China Development Bank (CDB, 国家开发银行); and the Agricultural Development Bank of China (ADBC, 中国农业发展银行).

While there is no public systematic reporting of policy-bank loans, some anecdotal reports indicate the kinds of projects funded by the banks. In 2013, the EXIM Bank signed a strategic agreement with the China Overseas Fishery Association (COFA, 中国远洋渔业协会) and began to provide policy-oriented financial support (政策性金融支持) to the Chinese DWF industry,

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<sup>166</sup> 国家税务总局 [State Taxation Administration], 关于实施农林牧渔业项目企业所得税优惠问题的公告, 国家税务总局公告 2011 年第 48 号 [Announcement on Income Tax Incentives for Enterprises Performing Agriculture, Forestry, Animal Husbandry, and Fishery-related Activities, State Taxation Administration (2011) No. 48], 13 September 2011, <http://www.chinatax.gov.cn/chinatax/n810341/n810765/n812156/201109/c1186245/content.html>.

<sup>167</sup> See China Fishery Statistical Yearbook 2020, page 46.

<sup>168</sup> 中华人民共和国企业所得税法 [China Enterprise Income Tax Law]. See also 上海开创国际海洋资源股份有限公司 2019 年年度报告.

<sup>169</sup> The tax would be more accurately calculated using taxable income, which is revenue minus deductible costs, however, there is little data available about operating costs of DWF enterprises.

<sup>170</sup> 搜狐 [Sohu], 银行中的“金饭碗”！三大政策性银行薪资待遇高于公务员 [The “Gold Rice Bowl” of Banks! The Salary at the Three Large Policy Banks Is Higher Than That of Civil Servants], 26 September 2019, [https://www.sohu.com/a/343574070\\_120286828](https://www.sohu.com/a/343574070_120286828).

mainly for the renovation of fishing vessels; construction of overseas fishing bases; and construction of processing plants and logistics facilities in key coastal areas of China.<sup>171</sup> In 2016, the CDB provided CNY 1.4 billion in loans to the Fuzhou Honglong Marine Fishing Company (福州宏龙海洋水产有限公司) to support vessel renovation and the purchase of new vessels.<sup>172</sup> The Fujian-based Hongdong Fishing Company (宏东渔业公司) received a loan of CNY 400 million from the EXIM Bank in 2018 to support the construction of the company's fishing base in Mauritania, which has become China's largest overseas DWF base.<sup>173</sup> In 2019, the ADBC agreed to provide a total of CNY 440 million in loans for the construction of Zhoushan National Distant-water Fishing Base.<sup>174</sup> And in 2020, the EXIM Bank provided special loans as emergency funds (应急资金专项贷款) to DWF enterprises in Fujian Province that faced logistical challenges due to COVID-19, with the first batch of funding amounting to CNY 1.5 billion.<sup>175</sup>

Policy banks provide low-interest, long-term loans that cover up to 30 percent of the cost for the renovation and construction of DWF fishing vessels. The Fujian-based Pingtan Marine Enterprise (PME, 平潭海洋实业), China's second largest DWF enterprise, has explained that when constructing a DWF vessel worth CNY 40 million, PME is able to not only receive central government subsidies of CNY 12 million (30 percent of the vessel cost, the upper limit set for these subsidies), but also get a low-interest loan of CNY 12 million from policy banks.<sup>176</sup> Thus, the policy banks provide funds to match the central government subsidies at a ratio of 1:1. The 1:1 ratio is also substantiated by a news report that mentioned that the CDB or EXIM Bank will provide loans to cover 30 percent of the costs associated with the renovation and construction of DWF vessels.<sup>177</sup>

<sup>171</sup> 赵晓辉 [Zhao Xiaohui], 我国远洋渔业将获进出口银行政策性金融支持 [The Nation's DWF Received EXIM Bank Financing Support], 8 May 2013, <http://www.cinic.org.cn/xw/zcdt/162987.html>.

<sup>172</sup> 安嘉理 [An Jiali], 福建: 银行业服务先行 点亮八闽“蓝色经济” [Fujian: Bank Services Advance, Light Up Fujian's "Blue Economy"], 15 January 2016, <https://wap.stockstar.com/detail/MG2016011500002502>.  
21 世纪经济报道 [21<sup>st</sup> Century Economic News], 北极航行 非洲捕鱼 波黑发电……中企走出去背后都有这家银行 [Arctic Navigation, African Fishing, Bosnia-Herzegovina Electricity ... China's Going Out Enterprises Are All Backed by This Bank], 10 September 2019, <http://finance.eastmoney.com/a/201909101234010084.html>.

<sup>174</sup> 刘青, 张楠慕 [Liu Qing and Zhang Nanmu], 浙江舟山分行 4.4 亿元支持全国首个国家级远洋渔业基地 [Zhejiang Zhoushan Gets 440 Million to Support the Nation's First National-Level DWF Base], 25 August 2019, <http://www.adbc.com.cn/n5/n1021/c34964/content.html>.

<sup>175</sup> 福建: 10 条措施全力推动海洋与渔业企业复工复产 [Fujian: 10 Measures that Fully Promote Ocean and Fisheries Enterprises to Resume Work and and Production], 29 February 2020, <https://finance.sina.com.cn/china/2020-02-29/doc-iimxyqvz6666779.shtml>.

<sup>176</sup> 远洋捕捞业中的戴维斯双击——平潭海洋实业 (PME) 深度报告 [DWF Industry's Davis Double Attack—Pingtan Marine Enterprise (PME) In-Depth Report], 6 February 2017, [http://content.equisolve.net/\\_13270112c9036b023e0901b4e63d43d2/ptmarine/db/124/1130/research\\_report\\_chinese/平潭海洋实业%28PME%29 深度报告+.pdf](http://content.equisolve.net/_13270112c9036b023e0901b4e63d43d2/ptmarine/db/124/1130/research_report_chinese/平潭海洋实业%28PME%29 深度报告+.pdf); 康路 [Kang Lu], 平潭海洋独家回应: 涉嫌欺诈和人口贩卖为无稽之谈 [Pingtan Marine Exclusive Response: Suspected Fraud and Human Trafficking Is Unfounded], 腾讯财经 [Tencent Finance], 17 May 2017, <https://www.zgbfxw.com/portal.php?mod=view&aid=89503>.

<sup>177</sup> 长线财务经验, 纳市捕鱼达人 [Long-term Financial Experience, Accepting City Fishing Talent], 世界经理人网站 [Global Managers Website], 30 April 2015, <http://www.ceonline.com/mycareer/ma/8800073971/02/>.

Chinese policy banks also provide loan-interest, long-term loans to support construction of DWF bases. For example, China has provided Mauritania with low-interest, 20-year-long loans of \$87 million for the construction of a new fishing port.<sup>178</sup> And the Rongcheng Oceans and Fisheries Bureau, in Shandong Province, announced plans to accelerate the construction of fishing bases in Ghana, Uruguay and Fiji, and to assist enterprises in securing low-interest loans from the CDB and EXIM Bank.<sup>179</sup> According to central government regulations, government subsidies will cover up to 30 percent of the costs incurred by Chinese investors for public welfare-related items in the construction of a DWF base.<sup>180</sup> Although the regulations do not indicate whether policy banks match such funds, it is likely that the policy banks do match 30 percent of the costs or more because the policy banks are tasked with the responsibility to assist the Chinese government in implementing its major policies.<sup>181</sup>

Based on the 1:1 matching ratio, we assume that the policy-bank loans for DWF vessel renovation/construction and base construction are approximately equivalent to the central government subsidies for these activities, which are CNY 3.65 billion. Thus, CNY 3.65 billion is taken to be the approximate amount of loans provided by the policy banks for the DWF sector in 2019.

The annual interest rates for policy bank loans may be as low as two to three percent while the interest rates for commercial banks are usually around five percent.<sup>182</sup> Loans for vessel and fishing base construction are likely to be middle term (more than one year and up to five years) or long term (more than five years).<sup>183</sup> To estimate interest savings, we use an annual interest rate of two percent for five years, which would mean CNY 547.5 million (CNY 3.65 billion x 5 years x (5-2)/100 per year) is the amount that fishing enterprises would save in loan interest by borrowing money from policy banks as opposed to commercial banks.

## 7. Discussion and Conclusion

We put the data into tabular format and categorized the marine capture programs based on whether they were beneficial, ambiguous or harmful to sustainability (see Table 4 and Figure 2). We found that 15 percent were beneficial, less than 1 percent were ambiguous, and 85 percent were harmful to sustainability.

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<sup>178</sup> UCN 国际海产资讯 [UCN International Ocean News], 中国提供 8,700 万美元贷款, 为毛里塔尼亚建设大型渔业港口 [China Supplies USD 87 Million Loan to Build a Large Fishing Port in Mauritania], 26 February 2020, <http://www.nbscxh.com/index.php?m=content&c=index&a=show&catid=30&id=8752>.

<sup>179</sup> 荣成市人民政府 [Rongcheng Municipal Government], 市海洋与渔业局在线回答问题 [Municipal Bureau of Oceans and Fisheries on the Line Answering Questions], 8 May 2018, [http://www.rongcheng.gov.cn/art/2018/5/8/art\\_40577\\_1291680.html](http://www.rongcheng.gov.cn/art/2018/5/8/art_40577_1291680.html).

<sup>180</sup> 农办渔 [2016] 43 号.

<sup>181</sup> 华律网整理 [Hualv], 政策性银行的一般职能有哪些 [What Are the Usual Functions of the Policy Banks], 11 March 2020, <https://www.66law.cn/laws/432610.aspx>.

<sup>182</sup> 申贷网 [Shendai Net], 哪些企业才可以直接拿央行的低利息贷款? [What Kinds of Enterprises Can Directly Receive Low-Interest Loans from the Central Bank?], 28 October 2018, <http://shendai.net/articles/620960.html>.

<sup>183</sup> 希财网 [Xicai Net], 长期贷款期限是多少年 长期贷款期限多久合适 [Long-terms Loans Last How Many Years, What Is the Appropriate Long-term Loan Length?], 5 July 2017, <https://www.csai.cn/loan/1238332.html>.

**Table 4: China Fisheries Subsidies, 2019**

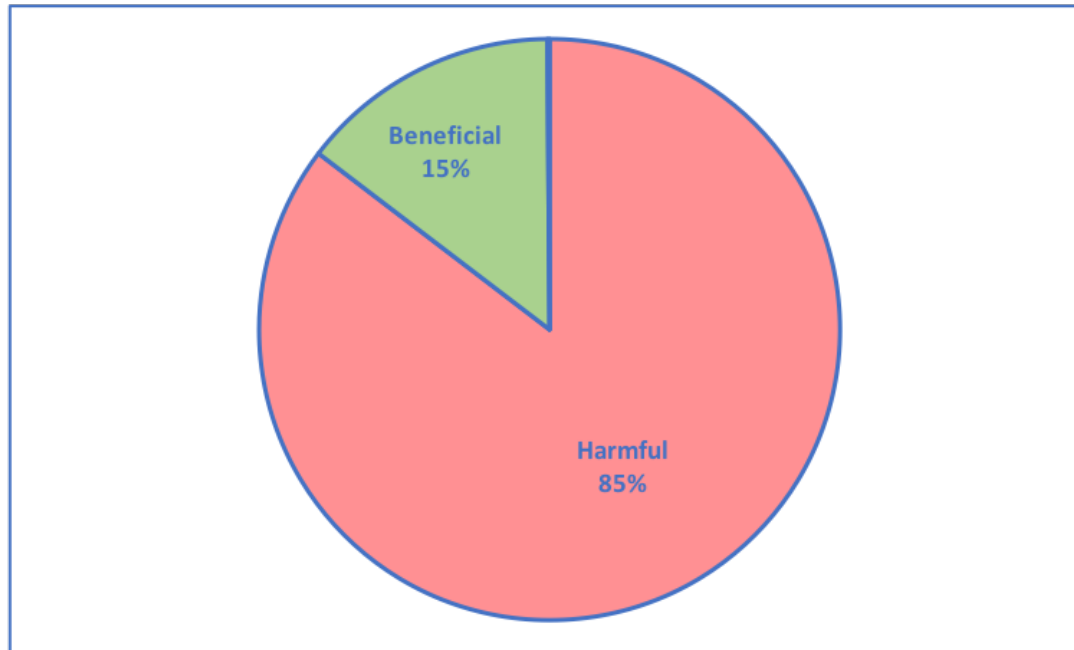
<b>Year: 2019</b> <b>Unit: RMB</b> <b>Expenditure</b>			Beneficial	Ambiguous	
			Harmful	Aquaculture	
	Totals	Breakdown	Breakdown	Breakdown	Breakdown
<b>Direct Subsidies</b>	21,307,956,728				
<b>Central Government Subsidies (中央政府对渔业的财政投入)</b>		20,267,956,728			
<b>General Transfer Payments (GTP, 中央下放到省级的一般性转移支付资金)</b>			11,662,580,000		
Spent at Central-Level				349,000,000	
Spent at Provincial and Municipal Levels				11,313,580,000	
Production Cost Subsidies to Fishermen (渔民的生产成本补贴) / Fuel Subsidies (渔船柴油涨价补贴)					9,200,000,000
Fishing Ports and Navigation 渔港和航标建设					580,000,000
Fishery and Fishery Administration Informatization Construction 渔业渔政信息化建设					200,000,000
Fishing Vessel Reduction and Industry Transition 减船转产					300,000,000

Fisheries Resource Conservation / Stock Enhancement 渔业资源养护/增殖放流					1,000,000,000
Fishing Moratorium Subsidy 休禁渔补贴					33,580,000
Aquaculture: Pond Standardization, Water Re-circulation Construction, and Other Infrastructures 池塘标准化和工厂化循环用水改造等水产养殖基础设施建设					7,100,000,000
<b>Special Transfer Payments (STPs; 中央财政转移地方专项资金)</b>			8,605,376,728		
Vessel Decommissioning and Renovation 渔船报废拆解、更新改造				1,460,246,483	
Domestic Vessel Decommissioning and Renovation					687,260,000
DWF Vessel Decommissioning and Renovation					772,986,483
Fisheries Development 渔业发展				5,645,130,245	
<i>Construction of Fisheries Equipment and Facilities 渔业装备设施建设</i>					
Inland Fishing Ports (Domestic)					1,210,000,000
Marine Ranching 海洋牧场 (Domestic)					605,000,000
DWF Bases					2,877,433,517
Utilization of International Fisheries Resources (DWF)					952,696,728
Fishing Vessel Reduction and Industry Transition 减船转产				1,500,000,000	

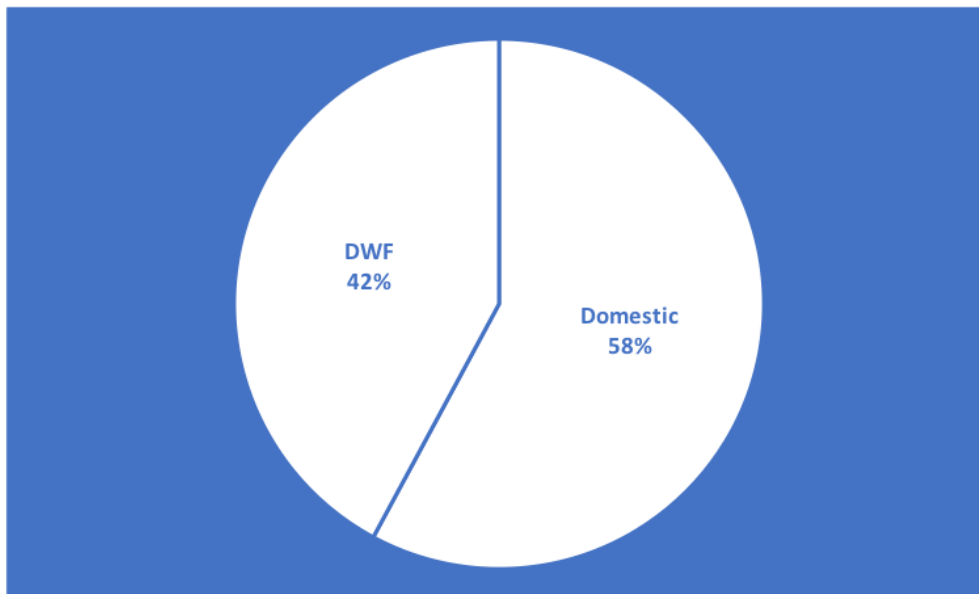


<b>Provincial Government Subsidies</b>		1,040,000,000			
Insurance Premiums			1,000,000,000		
DWF Catch Transport			40,000,000		
<b>Indirect Subsidies</b>	6,883,500,000				
Tax Exemptions			6,336,000,000		
Catch Import Tax Exemption				2,805,000,000	
Gear Import Tax Exemption				0	
Income Tax Exemption				3,531,000,000	
Policy Bank Loan Interest Savings			547,500,000		
Subtotal Direct	21,307,956,728				
Direct in US\$	3,278,147,189				
Subtotal Indirect	6,883,500,000				
Indirect in US\$	1,059,000,000				
<b>Total</b>	<b>28,191,456,728</b>				
<b>US\$</b>	<b>4,337,147,189</b>				

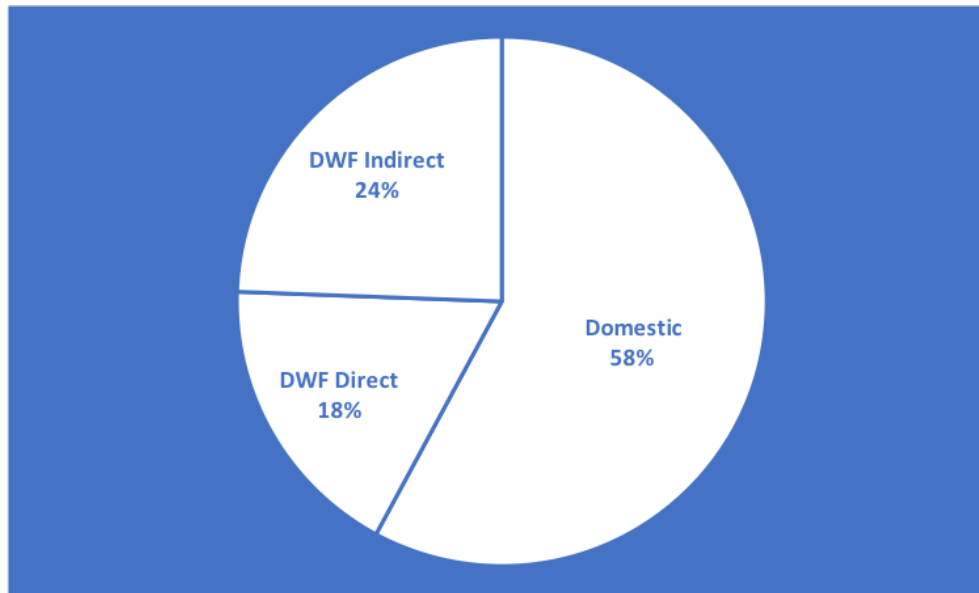
**Figure 2: Proportions of Harmful and Beneficial Capture Subsidies**



**Figure 3: Domestic and DWF Shares of Capture Fisheries Subsidies**



**Figure 4: Domestic and DWF Shares of Capture Fisheries Subsidies, with Breakdown of Direct and Indirect Subsidies**



China has decreased fisheries subsidy funding over the 13<sup>th</sup> Five-Year Plan, and appears to have achieved the goal of decreasing fuel subsidies to 40 percent of official 2014 levels as intended. However this decrease has been accompanied by a loss in transparency because line-items for individual subsidy programs are now lumped into aggregate categories that include both harmful and beneficial subsidies. The researchers were able to estimate the amounts for individual subsidy programs, and found that harmful subsidies are still high, at 85 percent of total subsidies provided to capture fisheries.

Harmful subsidies were disproportionately higher for DWF than for domestic capture fisheries. Thus, China's policies on DWF subsidies do not match that of domestic policies. While China has made progress reducing domestic fisheries subsidies, the government is still capacity-enhancing when it comes to DWF. Even though DWF catch accounted for only 22 percent of China's total catch from capture fisheries, DWF received 49 percent of China's harmful subsidies (or 42 percent of total subsidies) and none of the beneficial subsidies went toward the DWF industry.

Analysis of subsidies programs shows a clear connection to capacity and fishing effort. The top three provincial recipients of the Vessel Decommissioning and Renovation subsidy happen to be the top three producers of DWF catch. Zhejiang Province, which produced 442,155 tons of DWF catch in 2019 (20 percent of China's total DWF production) received 31 percent of the subsidies that same year. Shandong Province, which produced 413,716 tons of DWF catch in 2019 (19 percent of China's total DWF production) received 28 percent of the subsidies. Fujian Province, which produced 516,508 tons in 2019 (24 percent of China's total DWF production) received 20 percent of the subsidies. Fujian's increase, from CNY 441.4 million in 2018 to CNY 740 in 2019, is likely due to the 2019 approval for the construction of China's third national DWF base.

Of subsidies for DWF, the subsidies that support high seas fishing were greater than those for EEZ fishing. For 2019, the official number of DWF vessels was 2701, with 1589 high seas vessels (58.8 percent) and 1112 EEZ vessels (41.2 percent). Based on these proportions, approximately CNY 6.888 billion is supporting high seas fishing. At the same time, China's high seas vessels are larger than EEZ vessels. High seas fishing vessels have an average tonnage per vessel of 762.4 tons while EEZ fishing vessels average 326.8 tons. According to vessel inspection records, in August 2019, high seas vessels had a total gross tonnage of 1,107,000 and EEZ vessels had a total gross tonnage of 351,000—meaning that 76 percent of the gross tonnage was from high seas vessels. If subsidies are provided to the DWF fleet based on gross tonnage, as much as CNY 9.026 billion could be going toward subsidies on the high seas.

Researchers found that subsidies for DWF bases were higher than expected, and three times higher than the estimate for fuel subsidies to the DWF industry.

The analysis also shows that indirect subsidies such as tax exemptions and preferential loans need to be accounted for. Virtually all of the indirect subsidies supported DWF, and indirect subsidies contributed a higher share of DWF support than direct subsidies.

Finally, even though this study just focuses on China, clearer reporting is needed for all countries. Developing a standardized reporting system for all countries would be helpful to increase transparency and understanding of how much money is being provided to the fishing industry in the form of subsidies.

## Supplementary Materials

**Table 5: Chinese Central Government Expenditures on Fisheries and Aquaculture in 2014**

Year: 2014		Source: 2015 China Fisheries Yearbook	
Expenditure	Totals	Unit: RMB	
Central Government Expenditures (中央政府 对渔业的财政投入)			
Basic Infrastructure (基本建设项目)	2,036,640,000	Breakdown	
aquatic breeding farms (其中包括水产原 (良) 种场建设) <sup>184</sup>		100,000,000	
epidemiology stations (县级水生动物防疫站)			
fisheries administration (including fisheries enforcement vessels) (渔政工程) <sup>185</sup>		400,000,000	
fishing harbors (渔港) <sup>186</sup>		400,000,000	
protected areas/reserves (水生动物保护区) <sup>187</sup>		36,620,000	
administrative capacity building (加强直属单位自身能力)		81,020,000	
comprehensive agriculture development (农业综 合开发项目) <sup>188</sup>		45,200,000	
fishing vessel renovation (海洋渔船更新改造)		473,800,000	
converting boats to homes (以船为家渔民上岸安居工程) <sup>189</sup>		500,000,000	
Specialized financing programs (财政项目)	988,490,000	Breakdown	

<sup>184</sup> For the construction of 44 breeding farms and 4 genetic breeding centers.

<sup>185</sup> For the creation of 737 fisheries enforcement vessels, 7 fisheries resource survey vessels, and 2 fisheries enforcement wharfs.

<sup>186</sup> For the new construction of one central harbor and three top-tier harbors, and the continued construction of six central harbors and four top-tier harbors.

<sup>187</sup> For the establishment of 11 new projects.

<sup>188</sup> For the creation of 35 new programs.

<sup>189</sup> For nine provinces to build 23,836 homes and renovate 3102 homes.

<b>Ministry of Agriculture (农业部)</b>		388,490,000	<b>Breakdown</b>
ecological protection (such as fishing reduction) (渔业资源保护)			2,860,000
statistics (渔业统计)			19,040,000
international communication and cooperation (国际交流与合作)			1,800,000
wildlife species protection expenses (水生野生动物资源保护费)			4,000,000
disease monitoring and defense expenses (动物 疫情监测与防治经费)			5,000,000
quality control systems (农产品质量安全监管)			32,500,000
fisheries administrative management (渔政管理)			98,890,000
fisheries production loss assistance (渔业生产损失救助)			43,000,000
pilot projects on fisheries insurance (渔业政策性保险试点)			10,000,000
fisheries assessment and exploratory catch (海洋 渔业资源调查与深扑捕)			72,100,000
fisheries breeding quality protection (渔业种质资源保护)			99,300,000
<b>Central Government Budget Transfers (中央财政转移地方专项资金)</b>		600,000,000	<b>Breakdown</b>
seeding (渔业资源增殖放流)			309,000,000
building ranching areas (海洋牧场建设)			91,000,000
standardization of healthy aquaculture production (渔业标准化健康养殖)			200,000,000
<b>Subtotal Central</b>	3,025,130,000		
<b>Fuel Subsidies (渔船柴油涨价补贴)<sup>190</sup></b>	24,200,000,000		
<b>Total Central</b>	<b>27,225,130,000</b>		

<sup>190</sup> This figure was not included in the yearbook, but came from 财政部 [Ministry of Finance] 财政部、农业部联合部署渔业油价补贴政策调整工作 [Ministry of Finance and Ministry of Agriculture Jointly Carry Out Fisheries Fuel Subsidy Adjustment Work], 9 July 2015, [http://www.mof.gov.cn/zhengwuxinxi/caizhengxinwen/201507/t20150709\\_1273697.html](http://www.mof.gov.cn/zhengwuxinxi/caizhengxinwen/201507/t20150709_1273697.html).

**Table 6: Chinese Central Government Expenditures on Fisheries and Aquaculture in 2016**

Year: 2016		Source: 2017 China Fisheries Yearbook	
Expenditure	Totals	Unit: RMB	
Central Government Expenditures (中央政府对渔业的财政投入)			
Basic Infrastructure (基本建设项目)	1,650,000,000	Breakdown	
aquatic breeding farms (其中包括水产原 (良) 种场建设)			
epidemiology stations (县级水生动物防疫站)			
fisheries administration (including fisheries enforcement vessels) (渔政工程)			
fishing harbors (渔港)			
protected areas/reserves (水生动物保护区)			
administrative capacity building (加强直属单位自身能力)			
comprehensive agriculture development (农业综合开发项目)			
fishing vessel renovation (海洋渔船更新改造)			
converting boats to homes (以船为家渔民上岸安居工程)			
rice fish integrated cultivation project (稻渔综合种养工程)			48,000,000
Specialized financing programs (财政项目)	1,107,000,000	Breakdown	
Ministry of Agriculture (农业部)			Breakdown
ecological protection (such as fishing reduction) (渔业资源保护)			
statistics (渔业统计)			

international communication and cooperation (国际交流与合作)			
wildlife species protection expenses (水生野生动物资源保护费)			
disease monitoring and defense expenses (动物 疫情监测与防治经费)			
quality control systems (农产品质量安全监管)			
fisheries administrative management (渔政管理)			
fisheries production loss assistance (渔业生产损失救助)			
pilot projects on fisheries insurance (渔业政策性保险试点)			850,000,000
fisheries assessment and exploratory catch (海洋 渔业资源调查与深扑捕)			
fisheries breeding quality protection (渔业种质资源保护)			
<b>Central Government Budget Transfers (中央财政转移地方专项资金)</b>			<b>Breakdown</b>
seeding (渔业资源增殖放流)			400,000,000
building ranching areas (海洋牧场建设)			
standardization of healthy aquaculture production (渔业标准化健康养殖)			
<b>Subtotal Central</b>	<b>2,757,000,000</b>		
<b>Fuel Subsidies (渔船柴油涨价补贴)</b>	<b>7,998,000,000</b>		
<b>Total Central</b>	<b>10,755,000,000</b>		