

## HIGHLIGHT

*Vietnam's fisheries sector faces complex challenges, requiring a multifaceted approach for resolution. Fishing capacity in coastal, inland, and offshore fisheries should be reduced to rebuild fish stocks. Additionally, measures are needed to address the vulnerabilities of workers, such as income instability and health risks due to climate impacts and regulations. This necessitates coordinated efforts across various government levels and ministries. Social assistance, social insurance, and active labor market programs can enable and incentivize households to engage in more sustainable practices and more resilient livelihoods. Leveraging digitalization can improve data sharing and registration processes, thereby facilitating the extension of social protection to informal workers who present majority among fishery households. Furthermore, this integration of databases can enhance fisheries management through better-informed decision-making which is vital for sustainable development in Vietnam's fisheries industry.*

## *Blue Social Protection Series: Protecting People, Fish and Food*

# Connecting social protection, labor market interventions and fisheries management in Viet Nam

Nga Thi Nguyen, Gianluigi Nico, Thanh Hai Nguyen, Annabelle Bladon, and Anna Ducros<sup>1</sup>

<sup>1</sup> The authors gratefully acknowledge valuable comments, insights, and contributions from Mizushi Satoh, Yuko Okamura, Gunilla Tegelskaer, Federica Ricaldi, Diji Chandrasekharan Behr, and Aldo Morri.

## 1. Introduction

### **Capture fisheries and aquaculture play a crucial role in sustaining Viet Nam’s economy, livelihoods, and food security.**

Viet Nam is one of the top producing countries and the third largest exporter of aquatic products globally (FAO 2022). While both capture fisheries and aquaculture production have grown in recent decades, 57 percent of total production and 75 percent of total revenues now come from aquaculture (World Bank, 2021). Viet Nam’s capture fisheries—particularly marine fisheries, which account for 95 percent of total catch from total inland and marine capture fisheries—are also an important source of employment and food (FAO 2022). It has been estimated that over 7 million people depend, in some way, on livelihoods generated by the capture fisheries sector. This includes both those directly employed along fisheries value chains or engaged in subsistence fishing (direct dependents), as well as their household dependents (indirect dependents). The majority of them depend on marine small-scale fisheries and their value chains (Viridin et al. 2023).

**However, Viet Nam’s fish stocks are in decline, threatening the livelihoods of communities who depend on them.** Fish stock decline is primarily due to limited implementation of both small-scale inshore, as well as large-scale offshore, fishery management, leading to substantial increase in fishing (World Bank, forthcoming; FAO 2019). Viet Nam’s fisheries

also face high risk from climate change (Eckstein et al., 2019). Warming waters and increasingly frequent and extreme weather events are damaging fisheries infrastructure and the productivity and distribution of fish stocks, with impacts on profits and income (Tran et al. 2022; Nguyen 2022; Huynh et al 2021). As a key player in the global market, Viet Nam has been in the spotlight because of issues related to illegal, unreported, and unregulated (IUU) fishing and food safety. These issues must be addressed for Viet Nam to boost its competitiveness and maintain the sustainability of its fisheries sector.

**The aim of this case study is to explore how to leverage and adapt social protection and labor market policies and programs (SPL) to support more sustainable fisheries in Viet Nam, while also reducing vulnerability and building climate resilience.** Part of the World Bank’s Social Protection and Jobs (SPJ) and Environmental Global Practice (ENR) group work, with inputs provided by country team, this brief draws on a quantitative analysis of nationally representative data from two official government surveys to build a socioeconomic and demographic profile of Viet Nam’s fisheries sector and assess the relative social and economic vulnerability of households and workers involved in the fisheries sector. This analysis provides the basis for recommendations on how to strengthen SPL to better meet the needs of people who depend on fisheries, and to support effective fisheries management in Viet Nam.

**The structure of the brief is as follows:** the remainder of this introduction provides context on Viet Nam's fisheries sector and its SPL system, policies and programs. Section 3 describes the data and methods used for this study. Section 4 presents main findings. Section 5 identifies the main opportunities for SPL to support a more sustainable and resilient fisheries sector. Finally, Section 6 outlines key takeaways and lessons learned from the case study, and offers suggested next steps based on this research.

## 2. Country context

### 2.1. Viet Nam's economy

**Viet Nam's economic growth has benefited from commodity exports, relying on its natural assets (land, fish, forests, and water) and optimizing use of its physical assets.** The country has transitioned relatively fast from a low to a lower middle-income economy. For Viet Nam, average GDP growth is forecasted to decline from 5.4 percent between 2010 to 2018 to about 4 percent from 2030 to 2040 without efficiency gains. Going forward, however, a change in strategy will likely be needed for Viet Nam to catch up with more advanced economies through greater accumulation and efficient utilization of all forms of capital, including natural capital.

**Viet Nam's marine economy is a crucial driver of economic growth and livelihoods, contributing significantly to national GDP.** Marine and coastal economic activities contribute for about 30 percent of the national GDP (World Bank, 2019). Key sectors encompass aquaculture and capture fisheries, accounting for 3.4 percent of the national GDP. Coastal tourism, particularly, has contributed 7 percent to national GDP as of 2017. Furthermore, maritime logistics plays a critical role in trade and socio-economic development, with 25 percent of exports and 86 percent of imports transported by sea (Anil & Hanh Duong, forthcoming).

### 2.2. Viet Nam's capture fisheries and aquaculture sector

**Viet Nam's Directorate of Fisheries (D-Fish), under the Ministry of Agriculture and Rural Development (MARD), is the main government body responsible for fisheries and aquaculture management and development, with decentralization at provincial, district and communal levels.** While MARD is responsible for managing fisheries in Viet Nam's offshore waters, Provincial People's Committees are responsible for managing inshore<sup>2</sup> and inland water in their respective provinces, in accordance with national regulations.<sup>3</sup> At lower

---

2 Decree No. 33/2010/ND-CP dated March 31, 2010 on the management of fishing activities in sea areas by Vietnamese organizations and individuals.

3 Inshore or near shore waters are within 6 nautical miles of Viet Nam's coastline (Article 42, Decree 26 issued on March 8, 2019 guiding the implementation of the Fisheries Law 2019).

levels, district and commune governments collaborate with local Fisheries Associations and co-management organizations to manage resources. Industry associations such as the Viet Nam Fisheries Society (VINAFIS) and the Viet Nam Association of Seafood Exporters and Producers (VASEP) also contribute by providing sectoral finance, training, knowledge, and supporting fishers and fish workers to engage with government.

**Until recently, Viet Nam’s fisheries’ policies were largely focused on increasing production, exports, and national economic development, which has led to the increase in fishing capacity.** Insufficient regulation of open access inshore fisheries allowed fishing pressure to rise well beyond sustainable levels (Pomeroy et al. 2009), while subsidies and other policies aiming to shift effort away from inshore waters and expand the offshore fleet drove further overcapacity (Duy et al. 2015; Harper & Sumaila 2019). Limited monitoring, control, and surveillance have also fueled Viet Nam’s struggles with illegal, unreported, and unregulated (IUU) fishing, exacerbating the challenge of managing fisheries for sustainability and putting export markets at risk (World Bank 2021).

**Viet Nam’s current legal and policy framework provides for a transition to more sustainable fisheries, including by limiting fishing pressure.** The Law on Fisheries No. 18/2017/QH14, revised in 2019, includes measures such as requirements for commercial fishing licenses and quotas that set Total Allowable Catch limits on some stocks,<sup>4</sup> closed seasons in spawning and breeding grounds, co-management, and strengthened monitoring and surveillance. Under Viet Nam’s new strategy and vision for the growth of the sector,<sup>5</sup> a new policy has been adopted for 2023-2030 to restructure the capture fisheries sector, reorienting unsustainable fishing operations towards other more sustainable activities (Box 2.1). However, effective implementation and enforcement of regulations—including measures to reduce overcapacity—have so far been limited by inadequate consideration of the socioeconomic situations of fishing communities (Hanh 2021). To effectively implement the restructuring requires sufficient support for fisheries workers and their households to maintain their income and food security.

4 In practice, quotas are implemented only for tuna and anchovies, because other species are lacking the data required (Source: <https://www.rimf.org.vn/bantin/chitiet/cap-han-ngach-khai-thac-trong-quan-ly-nghe-ca-ben-vung-tai-viet-nam>)

5 Strategy for the Growth of Viet Nam’s Fisheries to 2030, with a Vision to 2045, Decision No. 339/QD-TTg dated March 11, 2021

### BOX 2.1: THE SCHEME FOR ‘TRANSFORMING SOME FISHERIES AFFECTING RESOURCES AND ECOLOGICAL ENVIRONMENT’<sup>6</sup>

This program, approved in March 2023, requires the decommissioning of about 2,000 inshore fishing vessels and 1,000 offshore fishing vessels by 2025. Affected workers will be supported to convert their livelihoods to aquaculture, aquaculture services, recreational fisheries, ecotourism, and conservation. Furthermore, approximately 1,000 offshore fishing vessels known to harm resources, the environment, or ecosystems—specifically, those using drag nets and gillnets for tuna—will be reoriented toward more sustainable fisheries activities, such as traps, nets, hooks, and post-harvest services. Additional vessels will be converted between 2026 and 2030. The program aims to ensure that all fishers who change jobs have stable employment and a guaranteed income, providing vocational training to a total of 120,000 fishers whose vessels are converted.

## 2.3. Viet Nam’s social protection and labor policies and programs

**Since the 1990s, Viet Nam’s SPL system has evolved and expanded, helping to substantially reduce poverty, but programs are fragmented and coverage remains insufficient.**

Three-quarters of households in the bottom quintile of the income distribution do not receive any SPL benefits and social insurance coverage remains very limited, contributing to a large “missing middle” (World Bank 2019). Although improvements are underway (Box 2.2), Viet Nam’s social protection (SP) delivery system is weak and fragmented compared to those of other middle-income countries, making it difficult for programs to adapt in response to shocks (World Bank 2019).

**Viet Nam’s social assistance<sup>7</sup> has broadened and provided more protection in the last 15 years, but spending and benefits are low relative to global income peer countries<sup>8</sup>**

(World Bank 2019). In 2021, the Government of Viet Nam (GoV) spent around 0.86 percent of GDP on social assistance programs, excluding health insurance subsidies, which covered 3.5 percent of the population (MOLISA 2022). Expansion has been *ad hoc*, driven largely by a broadening of coverage of monthly social allowances for the elderly, people with disabilities, and orphaned children in poor or near-poor households. Limited emergency social assistance—including cash transfers, food, and support for job creation—is also provided to all people facing extreme circumstances due to natural disasters, epidemics, fires, and accidents.

6 Decision 208/QĐ-TTg of 2023. <https://tongcucthuysan.gov.vn/en-us/News/-Tin-v%E1%BA%AFn/doc-tin/019450/2023-08-02/chuyen-doi-mot-so-nghe-khai-thac-hai-san-anh-huong-den-nguon-loi-va-moi-truong>

7 Decree 20/2021/ND-CP

8 The standard social assistance level applied from July 1, 2021 is VND 360,000/month.

**Furthermore, social assistance is poorly integrated with active labor market programs (ALMPs) and broader economic inclusion efforts.** There are several long-term National Target Programs (NTPs) for poverty reduction and rural development that work in parallel with the social assistance system. These programs are typically area-based and provide a range of types of support, including cash and in-kind transfers and livelihood support including credit, vocational, and education training (VET), and job search assistance. The majority of NTP funds are spent on local infrastructure construction in rural areas, with only 9 percent going to livelihood interventions and 1 percent to VET during 2016-2020 (World Bank, 2021). Creation of jobs for youth, part of the livelihood support components of NTPs, is often implemented by the Youth Association. However, results stemming from these programs remains limited due to lack of incentives to attract youth participation.

**Viet Nam's social insurance system includes a compulsory and voluntary social insurance scheme, but coverage remains low.** The compulsory contributory social insurance scheme, implemented by Viet Nam Social Security (VSS), is a defined benefit scheme provided for those with an employment contract of at least one month's duration.<sup>9</sup> But given the prevalence of informal

work in Viet Nam, contribution coverage in VSS is less than 40 percent of the labor force in 2022; MOLISA, 2023). The Voluntary Social Insurance Fund (VSIF), introduced in 2008 for informal workers, is not affordable or attractive enough to incentivize participation. Despite the introduction of a modest subsidized contribution policy in 2018,<sup>10</sup> participation has not exceeded 3 percent of the labor force (MOLISA, 2023). In contrast, health insurance coverage has increased steadily to reach more than 90 percent of the population by 2021. This was achieved by subsidizing premiums in whole (for the poor) or in part (for the near-poor) from the government budget.

**The unemployment insurance scheme covers only formal workers.** The existing system of labor regulation and protection primarily serves formal contracted workers, supplying them with unemployment insurance and priority access to employment services when they are unemployed. However, since the majority of Viet Nam's labor force, particularly fishery workers, is informal, most workers are excluded from these programs. Lack of protection makes them more vulnerable to shocks.

**Apart from livelihood support under the NTPs, the GoV has introduced several SPL programs for fisheries and capture fisheries to increase productive capacity and efficiency,**

9 This offers benefits for retirement, survivors, sickness and maternity, labor accident or occupational disease, and unemployment.

10 The current assistance rates are equivalent to 30% of monthly social insurance premiums for the poor, 25% for the near poor, and 10% to others (Article 14, Decree 134/2015/ND-CP), which is small compared to global peers.

**while helping Vietnamese harmed by natural disasters.** Under the fisheries development policy,<sup>11</sup> the GoV offers loans to upgrade vessels and construct new ones, improve other equipment for offshore fisheries, train crew, pay for insurance premiums. The policy also offers a range of tax exemptions. This policy is not encouraged as it may contribute to the decline of fish stocks. Fisheries households hit with natural disasters are eligible for one-time support (cash or in kind), depending on production scale and affected areas.<sup>12</sup> However, the implementation of this policy remains limited due to challenges in providing initial registration on concentrated livestock farming and quarantine certification. As part of the new scheme to transform unsustainable fishing, MARD is mandated to work with the Ministry of Labor, War Invalids and Social Affairs, and other

government bodies to develop VET programs for fishers, prioritizing those changing professions. Currently, lack of clarity persists around what form these programs will take (Box 2.1).

**The SP system suffers from fragmentation as each program reaches beneficiaries independently.** This is especially noticeable with the system's delivery network, which must be able to distribute both SP and ALMPs. Currently, each pillar has its own processes for delivering benefits. This fragmentation is exacerbated by remaining manual delivery systems, relying on weak digital systems specific to given ministries or programs. This leaves the system cumbersome and inconvenient to clients who need to receive services, and inefficient for the ministries overseeing these processes.

#### BOX 2.2: TOWARDS AN INTEGRATED SOCIAL PROTECTION INFORMATION SYSTEM

The recent digital transformation agenda in Viet Nam has enabled development of an integrated SP information system, which is expected to improve targeting and validation of eligibility. The national population database had achieved near universal coverage with around 90 percent of Vietnamese eligible for a national ID card. The Ministry of Labor, War Invalids and Social Affairs is in the process of digitalizing its databases, starting with the social assistance database, and gradually linking it to the national population database for verification. Once these databases are clean and up to date, they will link to databases under other ministries, such as the social insurance, health database, and fisheries databases for validating eligibility.

11 Decree 67/2014/ND-CP

12 Decree 02/2017/ND-CP

**The GoV has recently considered introducing agriculture insurance to protect farmers against crop losses due to natural disasters.**

Agricultural Index Insurance<sup>13</sup> has been piloted through public-private partnerships (PPP) for rice, livestock, and aquaculture smallholders. Under this pilot, the government provides premium subsidies between 20 percent and 90 percent depending on level of poverty (GIZ 2022). However, there is no equivalent type of livelihood insurance for capture fisheries workers.

### 3. Data and method

#### 3.1. Data sources

**Findings presented in this analysis draw upon data obtained from two sources from 2020: the Viet Nam Household Living Standard Survey (VHLSS) survey and the Viet Nam**

**Labor Force Survey (LFS).** Both are official government surveys designed to collect nationally representative data based on a sample of randomly selected households. For this brief, the VHLSS serves as a primary source of data for assessing the living standards of households engaged in either fisheries or aquaculture (see definitions section 3.2). The LFS serves as a complementary source, enabling us to profile labor market vulnerability of workers within the fisheries and aquaculture sectors. The VHLSS is a multitopic household survey designed to evaluate and monitor living standards, whereas the LFS is primarily designed to gather individual-level data to provide a broad understanding of key labor market outcomes. Together, indicators from these surveys provide a comprehensive profile of socioeconomic vulnerability within Viet Nam’s fisheries sector relative to the agriculture sector and other sectors. Table 3.1 displays the distribution of households and people across the three main economic sectors.

**TABLE 3.1. DISTRIBUTION OF HOUSEHOLDS AND PEOPLE ACROSS THE THREE MAIN ECONOMIC SECTORS**

VHLSS 2020			LFS 2020		
Sector	Number of households	% over total	Sector	Number of people	% over total
Fishing and aquaculture	713,550	2.67%	Fisheries and aquaculture	1,765,797	3.3%
Agriculture	5,085,325	19.05%	Agriculture	15,938,919	29.9%
Others	20,900,000	78.28%	Others	35,621,208	66.8%
Total	26,698,875	100%	Total	53,325,924	100%

Source: Viet Nam household living standard survey and labor force survey, GSO

13 Index-based insurance provides pre-specified payouts related to an index of indicators that are closely correlated to production losses, such as drought and flood.



### 3.2. Defining fisheries and aquaculture households and employment

**According to VHLSS 2020 data, fishing and aquaculture households are those with at least one member engaged in marine or inland capture fishing or farming aquaculture activities within the past 12 months, and where the majority of total household income, whether wages or profit, is derived from these two sectors.** Due to limitations in the collected data, this definition excludes households engaged in other activities related to fishing and aquaculture, such as fish processing, sale (post-harvest activities), and other fishery services.

**Based on LFS 2020 data, individuals employed in fisheries and aquaculture sectors are those who worked for at least one hour mainly for pay or profit in market-oriented activities within the marine or inland fisheries or aquaculture sectors.**

The LFS categorizes workers in fisheries and aquaculture according to the International Standard Classification of Economic Activities (ISIC), enabling the classification of employed individuals based on their specific economic activities. Fisheries and aquaculture workers are

those employed in: (i) marine capture fishing (ISIC code 0311), (ii) inland capture fishing (ISIC code 0312), (iii) marine aquaculture (ISIC code 0321), (iv) inland aquaculture (ISIC code 0322), and (v) fish processing. The ISIC classification comprises codes for food trading activities (codes 4632, 4722, 4781), but it lacks the distinction between trading in fish and non-fish food. To precisely pinpoint activities exclusively related to fish trading, we perform cross-tabulations with the codes that capture fish-related occupations (that is, the tasks performed by individuals within fisheries and aquaculture), as outlined in the International Standard Classification of Occupations<sup>14</sup> (codes 6221, 6222, 6223, and 9206). Employment in fish trading is likely to be underestimated for at least two reasons. First, the LFS does not allow accurate capture of all indirect jobs created in the trade segment of fisheries, such as those in transportation, merchants, and providers of associated services. Secondly, considering Vietnam is the third-largest exporter of aquatic products globally (FAO 2022), the number of jobs created from the export of aquatic products is likely to be much larger than that estimated from the LFS (see Table 3.2). Table 3.2 represents the number and the shares of households and people employed in fisheries and aquaculture using the VHLSS 2020 and LFS 2020.

14 <https://www.ilo.org/public/english/bureau/stat/isco/>

TABLE 3.2: NUMBER AND SHARE OF HOUSEHOLDS IN FISHING AND AQUACULTURE, AND NUMBER AND SHARE OF WORKERS ACROSS FISHERIES AND AQUACULTURE SECTORS.

VHLSS 2020			LFS 2020		
Households in fishing and aquaculture			People employed in fisheries and aquaculture		
Sector	Number of households	% over total households	Sector	Number of people	% over total employment
Fishing Aquaculture	713,550	2.67%	Marine capture fishing	417,606	0.8%
			Inland capture fishing	199,466	0.4%
			Marine aquaculture	85,747.30	0.2%
			Inland aquaculture	718,845	1.3%
			Fish processing	298,240	0.6%
			Building of ships and floating structures	44,040.30	0.1%
			Fish trading	1,852.75	0.0%

Source: Viet Nam household living standard survey and labor force survey, GSO

## 4. Main findings

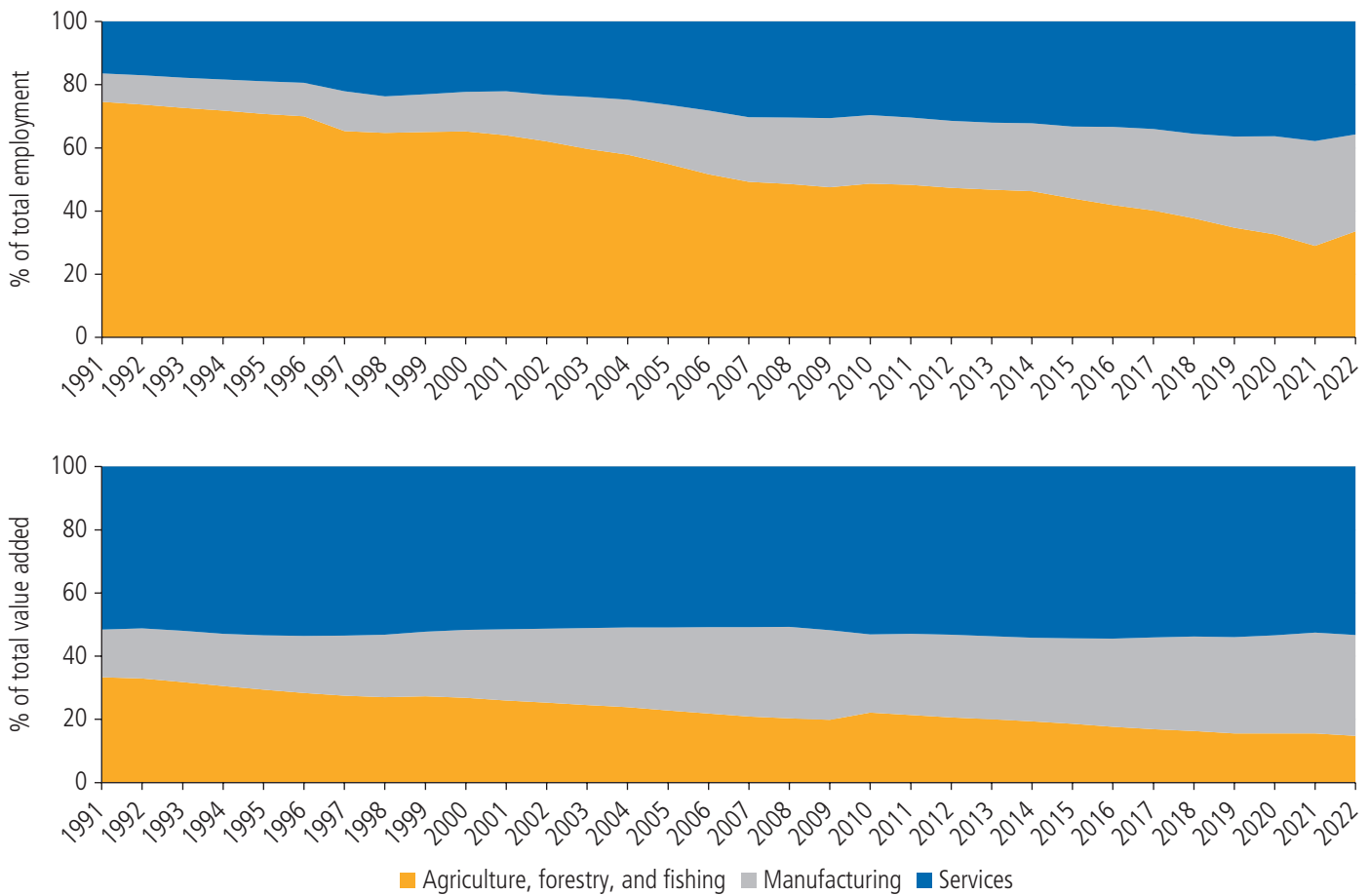
### 4.1. Demographic profile of fishing and aquaculture households

**Over the last three decades, the Vietnamese labor market has transformed.** The share of employment in agriculture, including fishing and forestry has decreased by approximately 41 percentage points from 75 percent in 1991 to 34 percent in 2022 (the latest available ILO data).<sup>15</sup> This shift in employment sectors aligns

with a relative decline in the share of value-added in agriculture, forestry, and fishing, dropping from 29.3 percent in 1991 to 13 percent in 2022 (the latest available year from World Bank World Development Indicators). Nevertheless, the absolute value of value-added from the sector has increased significantly, rising from constant US\$14,287 million in 1991 to US\$42.698 million in 2022. Despite this transformation, agriculture, forestry, and fisheries continue to be significant employment providers, with one-third of the total workforce employed in the sector.

<sup>15</sup> <https://ilostat.ilo.org/data/>

FIGURE 4.1: **SECTORAL DISTRIBUTION OF EMPLOYMENT AND VALUE ADDED**



Source: ILOSTAT on sectoral distribution of employment and value added, World Bank WDI for sectoral distribution of GDP

**About 2.7 percent of households surveyed in Viet Nam engage in fishing and aquaculture.**

The total portion of households engaged in the fisheries sector is likely higher, however, given that other value chain activities also provide employment (see Section 4.2). The majority of fishing and aquaculture households live in the Mekong Delta (50%) and the North Central and Central Coast (35%), where access to services, infrastructure and employment opportunities is low and climate risk is high. These regions have warmed more than other parts of Viet Nam in the

last two decades, and are increasingly susceptible to climate change threats, such as sea-level rise, extreme weather events, floods, and droughts (Tran et al. 2022; World Bank 2023).

**While in some ways more vulnerable, Viet Nam’s fishing and aquaculture households share some demographic characteristics with agriculture households.** Fishing and aquaculture households—like those in the agriculture sector—are more commonly headed by males (84 percent of fishing and aquaculture households and 80 percent

in agriculture households). The average age of fishing and aquaculture household heads (51) is similar to that of other households (50), and slightly lower than those in the agriculture sector (54). However, fishing and aquaculture households also tend to be slightly larger than other households (four people compared to 3.7), which may present challenges in meeting basic needs for a larger number of individuals—such as access to clean water, sanitation and healthcare—and may affect household expenditure patterns. The majority (95%) of Viet Nam’s fishing and aquaculture household heads are of Kinh ethnicity, whereas agriculture household heads are much more likely to be of minority ethnicity (68% are Kinh). This is likely due to the concentration of Kinh population around coastal regions.

**Fishing and aquaculture household heads also tend to have lower education than those in other sectors, making it harder for them to diversify their livelihoods.** Approximately 30 percent of fishing and aquaculture household heads have no formal education, compared to about 20 percent in agriculture, and 12 percent in the other sectors. The share of fishing and aquaculture household heads with vocational qualifications is lowest (less than 3%), while this figure for agriculture is 7 percent, and other sectors 15 percent. This reflects the fact that skills and knowledge related to fishing and aquaculture tend to be shared within communities and passed down through generations. However, these low education levels also limit their capacity to adapt and diversify livelihoods, and participate in decision-making.

## 4.2. Labor market profile of the fisheries and aquaculture sector

**According to the 2020 LFS, the fisheries and aquaculture sectors in Viet Nam employ more than 1.76 million workers throughout the value chain.** When we take into account those who hold secondary jobs within the fisheries and aquaculture sector, the total employment figure increases to nearly 2 million people. Nevertheless, the share of employment in fisheries and aquaculture (3.3%) in total employment is notably lower than that in crop, livestock, forestry, and other agriculture support activities, which provide employment to almost one-third of the total employed population—about 15.9 million people or 29.9 percent.

**Within the fisheries and aquaculture sector, inland aquaculture stands out as the primary source of employment.** Inland aquaculture accounts for 1.3 percent of the country’s workforce, followed by marine capture fishing at 0.8 percent of the workforce, and fish processing at 0.6 percent. Inland capture fishing and marine aquaculture contribute only a small fraction to the country’s total employment at 0.4 percent and 0.2 percent, respectively.

**Women and youth are frequently underrepresented in overall fisheries and aquaculture, but the representation of women increases significantly for specific subsectors.** Women make up less than one-third (29.6%) of the total workforce in fisheries and

aquaculture, but their representation varies across subsectors: they are notably underrepresented in marine capture fishing at just 11 percent, but their participation rises to 24 percent in inland capture fishing and marine aquaculture, reaching as high as 28 percent in inland aquaculture. On the other hand, women are highly represented in the fish processing sub-sector where they account for 68 percent of the total workforce. Similarly, young people are also underrepresented in fisheries and aquaculture, but their participation in the sector is higher than in agriculture; they represent 19.9 percent of total employment in fisheries and aquaculture, in contrast to 17.4 percent in agriculture.

**More than half, 53.9 percent, of the total fisheries and aquaculture workforce performs low-skilled jobs, but this share/figure is much higher in agriculture where 78.6 percent of the total workforce is unskilled.** The prevalence of low-skilled workers within fisheries and aquaculture is primarily due to high concentration of low-skilled workers in marine and inland aquaculture (65.3% and 63.6%). In contrast, low-skilled workers are less concentrated in the marine capture fishing sectors (48.9%), with the lowest concentration in fish processing (38.2%).

**Fisheries and aquaculture also serve as critical safety nets for some agricultural workers.**

Of the 3.8 million agricultural workers holding a second job outside of agriculture, approximately 2.8 percent (or 108,000 workers) hold a second

job in fisheries or aquaculture to supplement their livelihoods. Inland aquaculture attracts the majority of agricultural workers with secondary jobs (1.8 percent). Although the number of agricultural workers holding a second job in fisheries or aquaculture is relatively low, the contribution of fisheries and aquaculture to poverty prevention is evident as they provide additional income for agricultural households, offering a potential pathway out of poverty. According to LFS data, agricultural workers with a secondary job in fisheries or aquaculture earn an hourly income about 33 percent higher than counterparts without a second job in fisheries or aquaculture.

**Nearly two-thirds (62.7%) of all workers in the fisheries and aquaculture sector hold a self-employment job.** This includes employers (2.9%), own-account workers (43.5%), and contributing family workers (16.2%). The remaining 37.3 percent hold a paid employment job in the sectors (employees). Notably, a significant portion of the fisheries and aquaculture workforces falls into the category of contributing family workers and own-account workers, which together account for 59.7 percent of the workforce in the sectors. These workers face elevated economic risk and wield less authority among all employment status groups (employers, and employees), rendering them particularly susceptible to work deficits. Nevertheless, it's important to highlight that the combined share of own-account and contributing family workers in the fisheries and aquaculture sector (59.7%) is lower compared to agriculture (90.3% in agriculture).

**Of the 1.1 million self-employed workers in fisheries and aquaculture, approximately 95 percent operate informally through unregistered small businesses.**<sup>16</sup> Although the percentage of informal, self-employed workers in fisheries and aquaculture is 4 percentage points lower than in agriculture (99%), it still exceeds the national average (89%) by 6 percentage points. The prevalence of self-employed workers in the informal sector varies across subsectors, with the highest proportion in inland aquaculture, followed by marine aquaculture, and inland capture fishing. Conversely, the lowest incidence of self-employed workers is in marine capture fishing (79%), and this percentage decreases further for downstream activities in the fisheries and aquaculture value chain.

**Nearly three-fourths (74.7%) of paid workers in the fisheries and aquaculture sector work informally, meaning they lack basic social security such as social insurance.** The share of

informal employees is lower than in agriculture, where nine of every ten employees hold informal jobs. Within the fisheries and aquaculture sector, the highest incidence of employees without social insurance is found in marine capture fishing (99%), while in the marine aquaculture sector, this figure is approximately 10 percentage points lower. In upstream and downstream fisheries and aquaculture, the share of informal employees decreases significantly.

**Social insurance covers primarily employees while nearly all self-employed workers are lacking social insurance coverage.** Only 0.3 percent of self-employed workers have social insurance, with 0.2 percent under compulsory social insurance and 0.1 percent under voluntary social insurance. In contrast, for all employees in fisheries and aquaculture, 21.5 percent have compulsory social insurance and an additional 3.8 percent are covered by voluntary social insurance (Table 5.1).

TABLE 5.1: COVERAGE OF SOCIAL INSURANCE IN THE FISHERIES, AGRICULTURE AND NON-AGRICULTURE SECTORS

	% of self-employed workers			% of employees		
	Without	With compulsory social ins.	With Voluntary social ins.	Without	With compulsory social ins.	With Voluntary social ins.
<b>Agriculture</b>	99.8%	0.0%	0.1%	89.9%	9.8%	0.3%
<b>Fisheries and aquaculture</b>	<b>99.7%</b>	<b>0.2%</b>	<b>0.1%</b>	<b>74.7%</b>	<b>21.5%</b>	<b>3.8%</b>
<b>Other activities</b>	97.8%	1.6%	0.6%	42.4%	55.6%	2.0%
<b>Total</b>	<b>99.0%</b>	<b>0.7%</b>	<b>0.3%</b>	<b>45.9%</b>	<b>52.2%</b>	<b>1.9%</b>

Source: authors' calculation based on the 2020 LFS

16 Informal self-employed workers definition according to ILO's informal sector definition. Employment in the informal sector is estimated by accounting for all self-employed workers who run an unregistered, small-scale enterprise.

### 4.3. Income, poverty, and vulnerability in the fisheries sector

**Monthly income tends to be higher for households in fishing and aquaculture than in agriculture, but lower than for households in other sectors.** According to VHLSS 2020, mean, per capita income per month for fishing and aquaculture households was US\$ 174, compared to US\$ 120 in agriculture and US\$ 200 in the rest of the economy.<sup>17</sup> This findings is in line with the 2020 LFS data: on average, workers in fisheries and aquaculture earn nearly 70 percent more per month than their counterparts in agriculture at US\$794 compared to US\$468. This higher monthly income in fisheries and aquaculture is driven by two main factors: higher remuneration per hour worked (39.7% higher than in agriculture) and longer weekly working hours (27% more than in agriculture). Fishing and aquaculture households' per capita incomes also tend to concentrate at a higher level than agriculture households and at a lower level than non-agriculture households (Figure A. 1). These patterns are likely related to the fact that 62 percent of household heads in fishing and aquaculture engage in relatively low-skilled jobs, compared to 75 percent in agriculture, 26 percent outside of agriculture.

**Within fisheries and aquaculture, marine aquaculture and marine capture fishing**

**stand out with the highest hourly incomes (US\$6 and US\$ 5.2, respectively).** This translates to monthly incomes of US\$896 and US\$881, respectively, 1.9 times higher than the average income in agriculture of US\$468. It is worth noting that in the marine fishing sector, the higher monthly income partly reflects longer weekly working hours compared to agriculture (Table A2).

**The marine capture fishing sector has the most pronounced gender income gap, with men earning 41 percent more per month than women.** This income disparity arises from a combination of factors: Firstly, men earn a 31 percent higher hourly income compared to women; secondly, they also work 27 percent more hours per week compared to women. The fish processing sector exhibits the smallest gender income gap, with women earning 17 percent less than men per month. This difference in income is solely due to the hourly wage gap, as both women and men in the sector work the same number of hours per week (Table A2).

**Data from the 2018 and 2020 LFS indicates that average employment income has declined in both the aquaculture and capture fishing sectors over the past two years.** The decrease, which appears more pronounced in the aquaculture sector (-7.2%) compared to the capture fishing sector (-4.9%), is likely attributable to the outbreak

17 VND 4 mln ≈ int USD 530.43, VND 2.8mln ≈ int USD 371.3, VND 4.8 mln ≈int USD 636.52

of the COVID-19 pandemic: in March 2020, the GoV banned the entry of foreign tourists into the country, and the July 2020 large-scale lockdown in Danang likely reduced demand for fish products and related incomes.

**Out of the 623,000 wage employees in fisheries and aquaculture, over 145,000, or 23.3%, are earning low wages.** Employees with low earning are defined as those whose hourly earnings from fisheries and aquaculture is less than two-thirds of the median national hourly earnings. Notably, the share of employees with low wages in fisheries and aquaculture (23.3%) is lower than that in agriculture (39.6%).

**However, the share of employees with low wages varies considerably within the fisheries and aquaculture sub-sectors.** Inland capture fishing and inland aquaculture shows the highest share of employees with low wages, respectively 35.9% and 33.1%, compared to marine capture fishing and marine aquaculture, which have relatively lower shares of employees with low wages (Table in Annex 3).

**Out of the over 784,000 individuals holding self-employed jobs in fisheries and aquaculture (including employers**

**and own-account workers but excluding contributing family workers), around 13.2 percent (over 103,000) earn a low income in the form of profit,** defined as income falling below two-thirds of the median national income. Notably, the share of self-employed workers with low income in fisheries and aquaculture (13.2%) is considerably lower than in agriculture (43.9%) (Table in Annex 3).

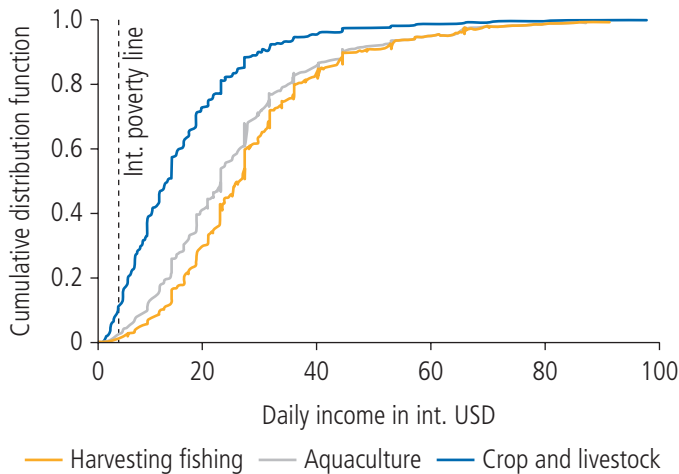
**In summary, fishing and aquaculture exhibit higher income and lower working poverty rates compared to agriculture.** Sector-specific cumulative distribution functions (CDFs<sup>18</sup>) of daily employment incomes reveal that both capture fishing and aquaculture (orange and gray lines in Figure 4.2) consistently have income distributions to the right of those for agricultural workers (the blue line). This first-order stochastic dominance<sup>19</sup> indicates that the share of fishing and aquaculture workers earning less than a specific income level is consistently lower than that of agricultural workers. For example, considering a poverty line of US\$3.65—aligned with the international poverty line for lower-middle-income countries like Viet Nam—only 1.3 percent and 2.6 percent of capture fishing and aquaculture workers fall below this threshold, respectively, compared to 11.1 percent of agricultural workers.

18 The cumulative distribution functions of income shows the proportion of people in their respective sectors who earn less than or equal to a certain income level.

19 This first-order stochastic dominance indicates that the proportion of fishing and aquaculture workers earning less than any specific chosen income level is consistently lower than that of agricultural workers. In simpler terms, regardless of the income level chosen for comparison, fishing and aquaculture consistently offer always higher incomes than agriculture.



FIGURE 4.2: **CUMULATIVE DISTRIBUTION FUNCTION OF DAILY EMPLOYMENT INCOME IN CAPTURE FISHING, AQUACULTURE AND AGRICULTURE**



Source: author's calculation based on the 2020 LFS

**Poverty rate among fishing and aquaculture sectors remains low, but their high income-dependence indicates low adaptive capacity.** Poverty rates have been decreasing across all sectors since 2016, and by 2020, 3.3 percent of fishing and aquaculture households were living in poverty, compared to 11.0 percent of agriculture households and 2.5 percent of non-agriculture households. The majority (60%) of total income from fishing and aquaculture households comes from fishing and aquaculture activities, indicating a high reliance on these sectors to generate income, and therefore limited capacity to adapt to economic shocks and stresses (Figure Annex 2).

**Problems related to low incomes, health, and natural disasters represent the most common reasons fishing and aquaculture households report for stagnation or decline in living standards.** Half of fishing and aquaculture households reported that low income decreases their standard of living. They highlighted the seasonal and unpredictable nature of income, particularly from fishing, which can result in periods of economic hardship. More than 20 percent of household reported sickness or death of household members as a problem. This can be linked to limited access to social protection mechanisms, such as health insurance or life insurance. Another 10 percent reported natural disasters such as droughts, floods, and pests to be problems. Natural disasters can have devastating effects on fishing and aquaculture livelihoods through events such as harvest loss, damage to fishing equipment, and disruption to fishing activities.

#### 4.4. Access to assets and services

**Fishing and aquaculture households, like agriculture households, are less likely to have savings at a bank than those in other sectors.** Only 8 percent of fishing and aquaculture households, and 9 percent of agriculture households, had savings in 2020, compared to 18 percent of other households. This difficulty to save could be related to several factors, such as

lack of financial literacy or limited access to formal financial institutions, as well variability in flows of incomes among fishing households. As expected, poor households in any sector have low savings, but saving for fishing and aquaculture households are particularly low, further limiting their coping options in times of shock.

**Fishing and aquaculture households—again, like agriculture households—are also more likely to use loans for production than those in other sectors.**

About 60 percent of fishing and aquaculture households took loans for production, compared to 40 percent of non-agriculture households (Figure Annex 4). Fishing, aquaculture, and agriculture activities often require upfront investment in equipment, seeds or other inputs. Access to loans can provide these households with working capital to fund operations until they generate income from their activities. In addition, fishing, aquaculture, and agriculture are often subject to seasonal variations, market fluctuations, and environmental conditions, compelling households in these sectors to seek loans to rebuild and sustain their production. Fishing and aquaculture households and agriculture households are more likely to rely on formal loans as the most important loan source than non-agriculture households. High reliance on formal loans indicates availability of different credit programs. Apart from NTP-provided loans, fishery households are entitled to borrow from the fishery-targeted

assistance policy.<sup>20</sup> However, around 10 percent of the total loan amount fishing and aquaculture households take comes from informal sources, such as family members, friends, or local moneylenders, demonstrating that barriers still exist to their financial inclusion.

**Fishing and aquaculture households have lower ownership of most durable assets than non-agriculture households, but higher ownership than agriculture households.**

The 2020 VHLSS releases that 97 percent of fishing and aquaculture households owned mobile phones, which were the most common durable assets owned by all household groups. Owning a mobile phone empowers fishing and aquaculture households by increasing access to markets, providing weather and fishing information, and supporting safety through emergency communication. While households engaged in fishing and aquaculture exhibit the highest ownership rates of vessels, these rates remain limited, with just 10.7 percent possessing motorized vessels and 4.4 percent owning non-motorized ones. For fishing households in particular, this is likely to limit access to resources and reduce income-generating opportunities, making them more reliant on those who do own a vessel.

**Fishing and aquaculture households appear to have lower access to good housing and basic services than households in non-agriculture sectors, decreasing their health and wellbeing.**

<sup>20</sup> Decree 67/2014 on several policies on fishery development

For example, fishing and aquaculture households—like agriculture households—typically live in temporary or semi-permanent houses built with less durable materials. Non-agriculture families typically have better quality housing. Fishing and aquaculture households are also less likely than non-agriculture households to have access to clean water and good hygiene toilets, although more likely than agricultural households; about 30 percent of fishing and aquaculture households have access to tap water and 86 percent have access to flush toilets, compared to 57 percent and 94 percent of non-agricultural households, respectively. These differences in living conditions are in line with differences in income, but they leave fishing and aquaculture households vulnerable to environmental hazards and health risks (see Figure Annex 3). One in five fishing and aquaculture households reported health-related problems of family members worsen their living conditions. Fishing and aquaculture households also were more likely to visit medical establishments for treatment (80 percent) than agriculture (76 percent) and non-agriculture households (72 percent).

**Fishing and aquaculture households, like those in agriculture, are more likely to receive SP benefits than non-agriculture households.**

About 34 percent of fishing and aquaculture and agriculture households receive at least one kind of benefit, compared to 15 percent of non-agriculture households (Figure Annex 5). The most common benefit fishing and aquaculture households receive

is support for buying health insurance cards (34 percent of fishing and aquaculture households receive this). About 0.5 percent of fishing and aquaculture households receive fuel subsidies for fishing vessels (Figure Annex 6), as part of a government initiative to support fishers, since fuel represents a significant operational expense. While nearly all poor households across sectors receive at least one type of SP, the contribution of these benefits to total income is lower in poor fisheries and aquaculture households (9%) than in poor agriculture households (16%) and other sectors (11% or more). While fishery households are more vulnerable compared to other sectors, this may indicate SP program design and/or implementation is not tailored to the specific needs of the fishing and aquaculture sector.

**Fishing and aquaculture households have a similar coverage of health insurance as other households, but very few make use of it.** About 83 percent of heads of fishing and aquaculture households have some kind of health insurance—only slightly below the national average. This includes targeted health insurance for the poor, non-poor, and other beneficiaries; compulsory health insurance; and voluntary health insurance (Table Annex 4).<sup>21</sup> Yet only 8.6 percent use their cards during inpatient examinations and treatments, possibly due to a lack of understanding of the benefits and coverage provided by their health insurance card. It is difficult

21 Types of health insurance includes that for the poor and near-poor, free healthcare booklet/card/certificate, health insurance card for policy beneficiaries, and other compulsory state and non-state health insurance card.

for fishers—particularly those spending extended periods of time offshore—to take advantage of health insurance while at sea.

**Fishing and aquaculture households rarely participate in life and non-life insurance programs, despite reporting—particularly the poor—“sickness and death of household members” as a main driver of decline in living conditions (Figure Annex 3).** About 5 percent of fishing and aquaculture households participate in life insurance, lower than the participation of non-agriculture households (7%) but higher than that of agriculture households (3%). No reportedly poor fishing and aquaculture households participate in life insurance. Less than 2 percent of fishing and aquaculture households participate in non-life insurance—lower than in other sectors— and only non-poor households participate. Low insurance uptake could be due to the complexity of terms and conditions, a lack of awareness of the availability and benefits, limited disposable income, or perceived low returns from the insurance program compared to the premiums.

## 5. Opportunities to connect SPL interventions with fisheries management

**Section 5 illustrate that while Vietnamese involved in the fisheries sector are not the poorest, the informality of their work, income dependence on the sector, and**

**limited assets makes them highly vulnerable to shocks, including those related to climate, health, and income.** New regulations to improve fisheries-management tend to cause short-term, and possibly longer-term, disruptions to income from fishing and pre and post-harvest activities. The limited household savings, skills, and employment opportunities in these sectors make it difficult for fishery households to comply with regulations. However, Viet Nam’s SPL system presents a range of opportunities for the GoV to strengthen fisheries management—including the new scheme to reduce inshore and offshore fishing— by: (i) improving fishers’ and fish workers’ access to benefits through enhanced registration; (ii) enhancing SP programs’ coverage and effectiveness to meet the specific needs of the fisheries sector, as well as the objectives of fisheries management; and (iii) strengthening ALMPs to encourage livelihood diversification and reduce reliance on capture fisheries.

### 5.1. Registering and assessing fishers and fish workers

**The GoV can improve SPL coverage and targeting by promoting registration of informal fishers and fish workers in SPL and/or fisheries-information systems, while collecting data to inform more effective fisheries management.** Ministries could work together to encourage and support informal self-employed fishers and fish workers—as well

as enterprises that informally employ others—to register their activities and employees with local authorities and obtain required commercial licenses. Registration can link workers to various social services and facilities, including SPL programs, leading to a mutually reinforcing cycle of benefits for communities and fisheries (Bladon et al. 2022). For example, registration could be incentivized by improving water, sanitation and hygiene (WASH) infrastructure<sup>22</sup>—which can add value to catch by reducing post-harvest losses and improving food safety—and conditioning access to this infrastructure based on registration. Strong monitoring and enforcement of fisheries regulations would have to accompany this approach (see Box 5.1). In context of fishing pressure, registration will allow monitor the reduction of numbers of vessels in the high seas. Government agencies can also work with fisheries associations and other local organizations to raise awareness of benefits to encourage registration in fisheries and SPL information systems.

**Achieving interoperability between SPL and fisheries databases can also capture information on informal fishers and fish workers to inform fisheries management and SPL policy design and implementation.**

The recent data governance reforms pave the way for this interoperability. Getting more fishers and fish workers into an integrated information system can support rigorous assessments

of their needs, enabling the design of more attractive and more effectively policies to reduce vulnerability. The system is more relevant to designing SP programs to promote sustainable fishing practices.

## 5.2. Enhancing the coverage and effectiveness of SP programs in the capture fisheries sector

**Fishers and fish workers should have access to SPL and complementary programs during shocks, including short-term decline in income they must endure from fisheries management and SPL regulations.** Current policies to support individuals and households harmed by shocks are limited. Expanding or adapting social assistance programs to provide cash transfers to fisheries households suffering income losses in the event of all possible shocks—not just extreme circumstances such as natural disasters, but also from fisheries regulations such as closed seasons. Since unsustainable fishing practices are linked to vulnerability, since they are used as a coping mechanism in times of shock, improved access to emergency cash transfer could help reduce such behavior. Public work programs, which can provide alternative job opportunities during closed seasons, can be linked to environment protection-related activities, such as waste collection from the ocean.

---

22 This could include the provision of safe water supply, improved sanitation facilities, improved drying processes, improved storage and transportation, and training on sanitation and hygiene (World Bank 2022).

**Increasing government subsidy for participation in the voluntary social insurance schemes should improve social insurance coverage among fisheries workers.** Improving social insurance coverage among fisheries workers is essential to reducing vulnerability and ensuring old-age income security. One reason for low social insurance coverage is the low government subsidy for the poor, near-poor, and informal workers; the contribution subsidy under current regulations only accounts for an average 24 percent of the total contribution amount, much lower compared to countries that have expanded voluntary schemes.<sup>23</sup> Raising subsidy rates to 50 percent of monthly social insurance premiums, more in line with other countries, would increase uptake among informal workers, including fisheries workers.

**Given the vulnerability of capture fisheries to natural disasters, workers would benefit from climate-resiliency insurance designed specifically for the sector.** The Ministry of Finance already subsidizes agricultural insurance, which could be extended this to the capture fisheries sector, where households have limited savings and are at least as vulnerable as agricultural households. The product should draw on lessons from agricultural index-based insurance in Viet Nam, as well as global experience of parametric fisheries insurance.<sup>24</sup> For anticipatory risk response, an early

warning system (EWS) should be implemented for all fishers and fish workers to access, which would require proper and regular registration. For both types of insurance, reaching fishers and fish workers will require campaigns to raise awareness about the benefits of insurance and the available options. Workshops, community meetings, and information materials for this purpose should target youth for maximum benefit.

### 5.3. Strengthening ALMPs to encourage livelihood diversification in the capture fisheries sector

**Promoting livelihood diversification among Viet Nam's fishers and fish workers could help build their risk resilience, while supporting long-term reduction in fishing.** Fisheries households have limited capacity to adapt to shocks and stresses due to their heavy reliance on the sector. Livelihood diversification support can empower households to build economic resilience, thereby reducing the risk of non-compliance with regulations and unsustainable fishing activities, particularly linked to times of shock. Fisheries households, especially those engaged in fishing, often lack job skills, a problem that can be addressed through VET programs. Options

23 The World Bank. Assessment of VSS's voluntary scheme. 2019

24 Parametric insurance is a non-traditional insurance product that offers pre-specified pay-outs based upon a trigger event. The first product to be developed for fisheries is the Caribbean's COAST product, which enables rapid pay-outs for fishers and fish workers after extreme weather events (CCRIF, 2019)

for increasing income streams within the sector include training in fish processing, packaging, and branding for accessing higher-value markets (although value addition must be approached with caution, see Box 5.1). For workers changing occupations as part of the transformation policy, support should also include job-search assistance, access to low-interest loans, and startup capital for new ventures, as well as VET.<sup>25</sup> To maximize ecological benefits, support should ideally be conditioned on the beneficiary giving up their vessel or other productive equipment (Box 5.1). It is also critical that sectors to which fishers and fish workers move can absorb the extra labor, and that environmental harm is not shifted elsewhere. For those remaining in the fisheries sector, VET programs can encourage more sustainable practices by building awareness of environmental issues and fisheries regulations.

**These programs should be designed with the different situations and needs of different fisheries groups in mind, including men, women and youth.** Women are mostly informally employed in pre and post-harvest activities, and often earn much less than men with fewer

protection. They will be threatened by measures to reduce inshore and offshore fishing pressure, and should be included in programs to incentivize regulatory measures. Tailoring VET programs according to women's needs and aspirations is likely to benefit their households and wider fishing communities, and therefore support men to comply—who are mostly involved in capture fishing—with fishing regulations.

**Redirecting support, currently based on fishing costs, can improve fishery management.** Sector support provided under decree 67, includes support for the upgrade of vessels and construction of new vessels and other equipment for offshore fisheries, crew training, insurance premiums, fuel costs for vessels operating offshore, and a range of tax exemptions. These support areas are most likely to increase fishing effort that leads to stock depletion. Removal of these direct support to fishery activities could create fiscal space to implement the SP and ALMP measures discussed. This approach could deliver benefits to all participants and the most vulnerable in the fishing sector.

---

25 The Peru government has provided training programmes and advisory support for fishers who exit the sector to restore the health of the stocks due to overfishing (Bladon et al. 2022).

### BOX 5.1: POTENTIAL RISKS AND CHALLENGES IN LINKING SOCIAL PROTECTION AND LABOR WITH FISHERIES MANAGEMENT

- Care must be taken that support to the fisheries sector does not have unintended consequences, such as an increase in fishing effort. Any program that increases profits—for example, through value addition— must be complemented by strong fisheries regulations, including controls on access, to avoid incentivizing more fishing. Similarly, the provision of loans and grants should be conditioned on use outside the fisheries sector, to encourage livelihood diversification as opposed to investment in fishing capacity—unless for post-harvest activities clearly linked to fisheries under improved management.
- Designing social assistance and insurance programs to support fisheries regulations should also have an element of conditionality on compliance with those regulations. Otherwise assistance is less likely to change behavior. Although monitoring and enforcement is a challenge, fisheries associations and other organizations with local knowledge and trust of fishing communities can assist.
- Global experience indicates that willingness to exit the fisheries sector varies widely, but small-scale fishers are often strongly attached to their livelihood. Rigorous research on community needs and aspirations is required for policies to reduce coastal and inland fishing to succeed. Without clear understanding and well-implemented programs, failed policies may push fishing households into poverty in the case that they are forced out of the fisheries sector and not want to engage in alternatives offered.

## 6. Key conclusions, lessons learned, and next steps

**Viet Nam’s capture fisheries sector faces multiple interacting challenges that cannot be tackled through any one solution.** To rebuild and maintain fish stocks, the GoV should reduce fishing capacity in coastal, inland, and offshore fisheries. In parallel, it must address vulnerabilities people who work in the sector face in terms of threats to income and health as a result of climate shocks and regulations that force them to reduce work. This will require a coordinated and integrated approach to SPL and fisheries policy, involving stronger inter-ministerial collaboration

and coordination between central, provincial, district, and commune governments.

**Social assistance, social insurance, ALMPs, and NTPs can each play a role in supporting different groups in the fisheries sector with different needs.** For effective implementation of the transformation scheme, support for fishers and fish workers to find employment outside of the fisheries sector will be critical. Building on the GoV’s current digital transformation agenda, achieving interoperability between social protection databases, fisheries databases, and early warning systems should help increase registration of fishers and fish workers, which can support expansion of



SP and other benefits to informal, self-employed workers. These efforts can also lead to provision of new data to inform more effective fisheries management.

**This case study relied on two large, rich datasets, allowing socioeconomic profiling of the fisheries sector, enabling comparison between different groups within and outside the sector.** However, some caveats should be acknowledged. The VLHSS dataset was limited in that it did not disaggregate fishing and aquaculture households, thus obscuring differences between them, and it did identify households involved in other value chain activities. Although the LFS dataset provided more detailed information on individual workers—with disaggregation between fishing, aquaculture, and post-harvest—neither the VLHSS nor the LFS datasets allowed identification or comparison of households or individuals employed in small-scale, coastal fisheries versus those employed in the large-scale, offshore fleet. It is likely that disaggregating and comparing these groups would have uncovered differences in socioeconomic profiles, including access to, and need for, social protection. Such analysis could lead to more comprehensive recommendations to support these different workers under Viet Nam’s transformation scheme.

**This study was also limited by the surveys’ sampling frameworks.** They were not stratified by sector of employment, which meant that the sample sizes of the fisheries population and its

various subsectors were not as large as they could have been, limiting the use of statistical analysis.

**Finally, this case study gave no insights into the perspectives or aspirations of the coastal and inland fishing communities who must participate for any transformation policy to succeed.** The brief focuses on generating robust quantitative information on the socioeconomic conditions and vulnerability of the fisheries sector. More in-depth quantitative and qualitative research is required to inform policy and ensure that ALMPs and other benefits support fishers’ transition to sectors in which they want to engage.

**We propose carrying out in-depth, qualitative data collection with a module on fisheries in the Mekong Delta.** The World Bank team has submitted a proposal to conduct a follow-up survey in the Mekong Delta region, a large contributor to the fishery sector, accounting for about 65 percent of Viet Nam’s fishery production. The region is also one of the most severely exposed to climate change risks due to its flat topography and subsiding plains. The survey aims to explore challenges capture fisheries workers face, including economic opportunities and their employment aspirations in the short, medium, and long-term. Findings from the survey will inform policy recommendations to link SP program with fisheries sectors, and provide baseline inputs for joint World Bank-GoV Sustainable Fishery Development and Mekong Delta Climate Resilience and Integrated Transformation Projects under preparation.

## References

- Anil Markandya and Hanh Duong. "Viet Nam's Marine Economy: A Framework for Evaluating its Contributions to Sustainable Green Growth". (forthcoming)
- Eckstein, D., Künzel, V., Schäfer, L., & Wings, M. (2019). Global Climate Risk Index 2020. Who Suffers Most from Extreme Weather Events? Weather-Related Loss Events in 2018 and 1999 to 2018. Germanwatch e.V: Berlin.
- Duy, Nguyen Ngoc, and Ola Flaaten. "Government support and profitability effects—Viet Namese offshore fisheries." *Marine policy* 61 (2015): 77-86.
- FAO. 2019. *Fishery and Aquaculture Country Profiles: The Socialist Republic of Viet Nam*. Food and Agriculture Organization of the United Nations: Rome.
- FAO. 2022 *The State of World Fisheries and Aquaculture 2022. Towards Blue Transformation*. Rome.
- FAO. 2023. FishStat - Fisheries and Aquaculture (fao.org)
- GIZ. 2022. Agricultural insurance in the ASEAN region: VIET NAM (asean-agrifood.org)
- ILO. 2023. World Social Protection Database
- MOLISA.2022. Report on the implementation of Resolution 15 on key social policies 2022.
- MOLISA.2023. Assessment report on the impact of the social insurance law revision.
- Nguyen TVH (2022) Welfare impact of climate change on capture fisheries in Viet Nam. *PLoS ONE* 17(4): e0264997. <https://doi.org/10.1371/journal.pone.0264997>
- Puong T.A. Huynh, Ngoan D. Le, Sen T. H. Le & Hong X. Nguyen (2021) Vulnerability of Fishery-Based Livelihoods to Climate Change in Coastal Communities in Central Viet Nam, *Coastal Management*, 49:3, 275-292, DOI: 10.1080/08920753.2021.1899927
- Pomeroy, R., Nguyen, K.A.T. and Thong, H.X., 2009. Small-scale marine fisheries policy in Viet Nam. *Marine Policy*, 33(2), pp.419-428.
- Virdin et al 2023 Fishing for subsistence constitutes a livelihood safety net for populations dependent on aquatic foods around the world | *Nature Food*
- Tran N, Chan CY, Aung YM, Bailey C, Akester M, Cao QL, Trinh TQ, Hoang CV, Sulser TB and Wiebe K (2022) Foresighting future climate change impacts on fisheries and aquaculture in Viet Nam. *Front. Sustain. Food Syst.* 6:829157. doi: 10.3389/fsufs.2022.829157
- Sarah Harper, U Rashid Sumaila (2019) Distributional impacts of fisheries subsidies and their reform: case studies of Senegal and Viet Nam. IIED Working Paper. IIED, London.
- World Bank. 2019. <https://documents1.worldbank.org/curated/en/457311600401962011/pdf/A-Vision-for-the-2030-Social-Protection-System-in-Viet-Nam.pdf>
- World Bank. 2019. Situation Assessment of Integrated Coastal Zone Management (ICZM) in Vietnam.
- World Bank. 2021. *A Trade-Based Analysis of the Economic Impact of Non-Compliance with Illegal, Unreported and Unregulated Fishing: The Case of Viet Nam*. The World Bank: Washington, DC.
- World Bank. 2022. *Water, Sanitation and Hygiene (WASH) in Fisheries and Aquaculture: Guidance Note*. The World Bank: Washington, DC.
- World Bank. 2023. *Roadmap towards an integrated social protection information system in Viet Nam*. The World Bank: Washington, DC.
- World Bank. 2023. World Bank Group Climate Change Knowledge Portal
- World Bank (forthcoming). A snapshot of Viet Nam 2020 stock assessment report.

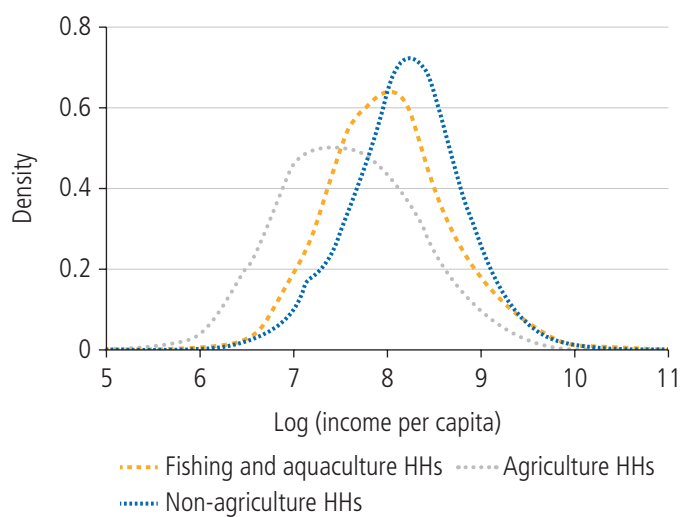
## Annex A

TABLE A. 1. THE EMPLOYMENT TYPE OF HOUSEHOLD HEADS.

	Fishing and aquaculture	Agriculture	Non-agriculture
Formal wage (with contract)	0.3	0.1	2.6
Formal wage (with social insurance)	0.7	0.5	19.1
Informal wage	21.3	4.1	14.7
Self-employed	67.3	85.9	45.4
Non-working	10.4	9.4	18.2
Total	100	100	100

Source: authors' calculation based on the 2020 VHLSS

FIGURE A. 1. PER CAPITA INCOME DISTRIBUTION.



Source: authors' calculation based on the 2020 VHLSS

TABLE A. 2. **AVERAGE MONTHLY INCOME OF WORKERS BY ECONOMIC SECTOR AND GENDER.**

	Economic sector	Indicator	Women	Men	Total
Agriculture	Crop	Monthly income (int. USD)	362.0	575.5	484.8
		Hourly income (int. USD)	3.0	4.3	3.8
		Weekly hours worked at the main job	30.9	34.2	32.5
	Livestock	Monthly income (int. USD)	326.0	470.1	393.2
		Hourly income (int. USD)	3.2	3.9	3.6
		Weekly hours worked at the main job	24.5	28.6	26.3
	Support activities for livestock and crop	Monthly income (int. USD)	461.5	583.7	542.9
		Hourly income (int. USD)	3.0	3.9	3.6
		Weekly hours worked at the main job	36.3	38.7	37.9
	Forestry	Monthly income (int. USD)	368.2	489.1	453.5
		Hourly income (int. USD)	2.6	3.5	3.3
		Weekly hours worked at the main job	34.0	35.9	35.3
Fisheries and aquaculture	Marine capture fishing	Monthly income (int. USD)	535.4	910.7	888.1
		Hourly income (int. USD)	3.7	5.3	5.2
		Weekly hours worked at the main job	35.1	48.0	46.5
	Inland capture fishing	Monthly income (int. USD)	454.8	708.5	673.9
		Hourly income (int. USD)	3.5	4.6	4.5
		Weekly hours worked at the main job	33.3	39.0	37.7
	Marine aquaculture	Monthly income (int. USD)	731.5	923.2	896.3
		Hourly income (int. USD)	4.6	6.2	6.0
		Weekly hours worked at the main job	31.5	40.8	38.6
	Inland aquaculture	Monthly income (int. USD)	521.2	777.6	733.5
		Hourly income (int. USD)	5.0	5.8	5.6
		Weekly hours worked at the main job	25.7	36.3	33.3
	Fish processing	Monthly income (int. USD)	697.2	844.5	745.3
		Hourly income (int. USD)	3.9	4.7	4.2
		Weekly hours worked at the main job	45.6	46.0	45.7
	Building of ships and floating structures	Monthly income (int. USD)	749.5	1013.8	990.1
		Hourly income (int. USD)	4.1	5.3	5.2
		Weekly hours worked at the main job	42.1	46.7	46.3
	Fish trading	Monthly income (int. USD)	353.5	995.6	635.0
		Hourly income (int. USD)	1.9	6.7	4.0
		Weekly hours worked at the main job	46.1	44.2	45.3
Others	Other service activities	Monthly income (int. USD)	842.9	986.2	921.1
		Hourly income (int. USD)	4.9	5.6	5.3
		Weekly hours worked at the main job	44.4	45.6	45.1
	Total	Monthly income (int. USD)	721.8	873.1	806.0
		Hourly income (int. USD)	4.4	5.3	4.9
		Weekly hours worked at the main job	39.4	42.0	40.8

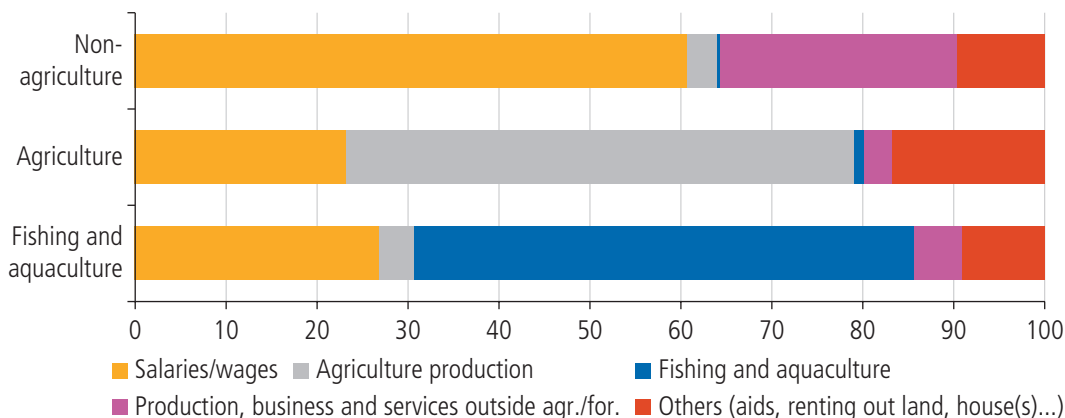
Source: authors' calculation based on the 2020 LFS

TABLE A. 3. SHARE OF EMPLOYEES AND SELF-EMPLOYED WORKERS WITH AN HOURLY INCOME (WAGE AND PROFIT) BELOW 2/3 OF THE MEDIAN NATIONAL INCOME.

	Number of employees with hourly income:			
	>=2/3 national median wage	<2/3 national median wage	Total	% in low pay rate
Crop	510,309	311,451	821760	37.9%
Livestock	32,605	14,466	47071	30.7%
Support activities for livestock and crop	178,669	115,784	294453	39.3%
Forestry	114,464	105,842	220306	48.0%
<b>Total agriculture</b>	<b>836,047</b>	<b>547,543</b>	<b>1,383,590</b>	<b>39.6%</b>
Marine capture fishing	154,020	46,067	200087	23.0%
Inland capture fishing	16,561	9,271	25832	35.9%
Marine aquaculture	13,304	4,390	17694	24.8%
Inland aquaculture	42,567	21,036	63603	33.1%
Fish processing	215,376	60,509	275885	21.9%
Building of ships and floating structures	35,524	3,246	38770	8.4%
Fish trading	400	876	1276	68.7%
<b>Total fisheries and aquaculture</b>	<b>477,752</b>	<b>145,395</b>	<b>623,147</b>	<b>23.3%</b>
<b>Other service activities</b>	<b>19,866,865</b>	<b>3,137,548</b>	<b>23004413</b>	<b>13.6%</b>
<b>Total</b>	<b>21,180,664</b>	<b>3,830,486</b>	<b>25,011,150</b>	<b>15.3%</b>
	Number of self-employed workers (employers and own-account) with hourly income:			
	>=2/3 national median income	<2/3 national median income	Total	% in low-income rate
Crop	3,999,295	3,144,282	7143577	44.0%
Livestock	1,260,061	979,241	2239302	43.7%
Support activities for livestock and crop	40,021	12,625	52646	24.0%
Forestry	138,144	118,192	256336	46.1%
<b>Total agriculture</b>	<b>5,437,521</b>	<b>4,254,340</b>	<b>9,691,861</b>	<b>43.9%</b>
Marine capture fishing	128,157	12,021	140178	8.6%
Inland capture fishing	100,763	25,170	125933	20.0%
Marine aquaculture	39,136	4,790	43926	10.9%
Inland aquaculture	398,969	60,083	459052	13.1%
Fish processing	10,938	696	11634	6.0%
Building of ships and floating structures	2,476	566	3042	18.6%
Fish trading	356	220	576	38.2%
<b>Total fisheries and aquaculture</b>	<b>680,795</b>	<b>103,546</b>	<b>784,341</b>	<b>13.2%</b>
<b>Other service activities</b>	<b>8,119,785</b>	<b>1,421,692</b>	<b>9541477</b>	<b>14.9%</b>
<b>Total</b>	<b>14,238,101</b>	<b>5,779,578</b>	<b>20,017,679</b>	<b>28.9%</b>

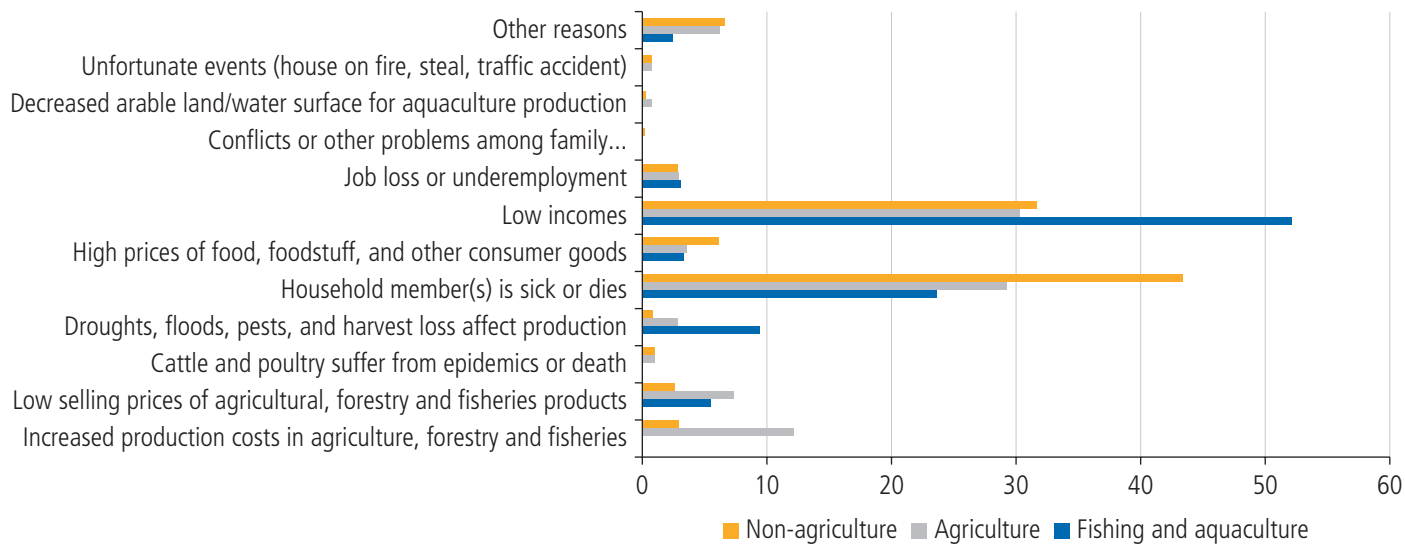
Source: authors' calculation based on the 2020 LFS

FIGURE A. 2. **HOUSEHOLD INCOME SOURCES (% OF TOTAL INCOME GENERATED BY HOUSEHOLDS IN DIFFERENT SECTORS).**



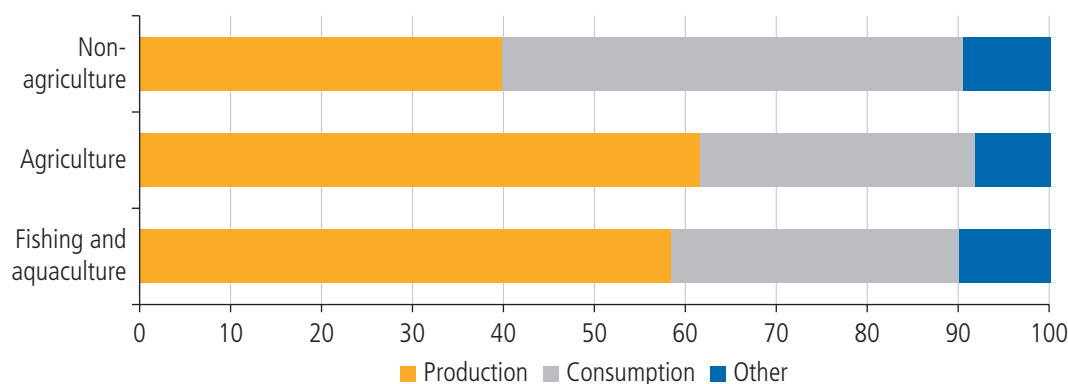
Source: authors' calculation based on the 2020 VHLSS

FIGURE A. 3. **THE MOST IMPORTANT REASON OF WORSENING LIVING CONDITIONS (%).**



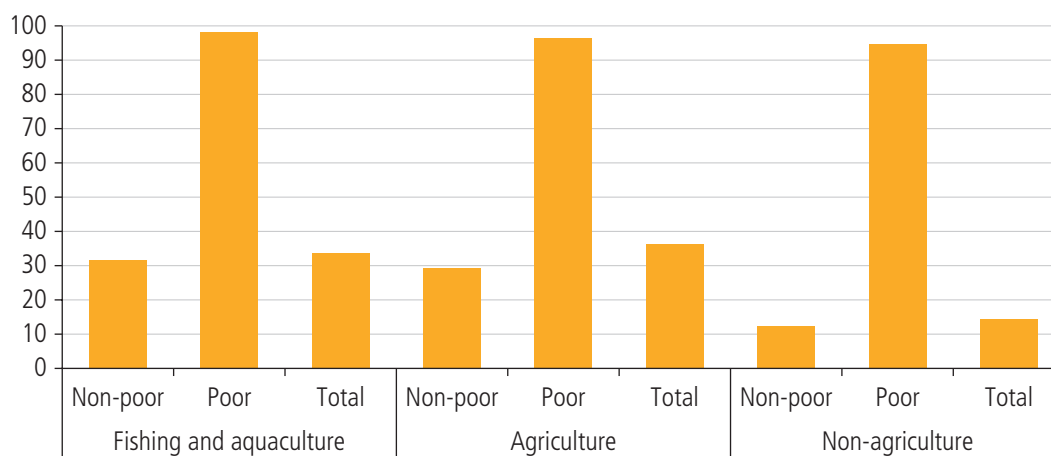
Source: authors' calculation based on the 2020 VHLSS

FIGURE A. 4. **PURPOSES OF AVAILING LOANS (% OF HOUSEHOLDS TAKING LOANS FOR EACH PURPOSE IN DIFFERENT SECTORS).**



Source: authors' calculation based on the 2020 VHLSS

FIGURE A. 5. **SHARE OF HOUSEHOLDS RECEIVING BENEFITS FROM POLICIES/PROGRAMS (%).**



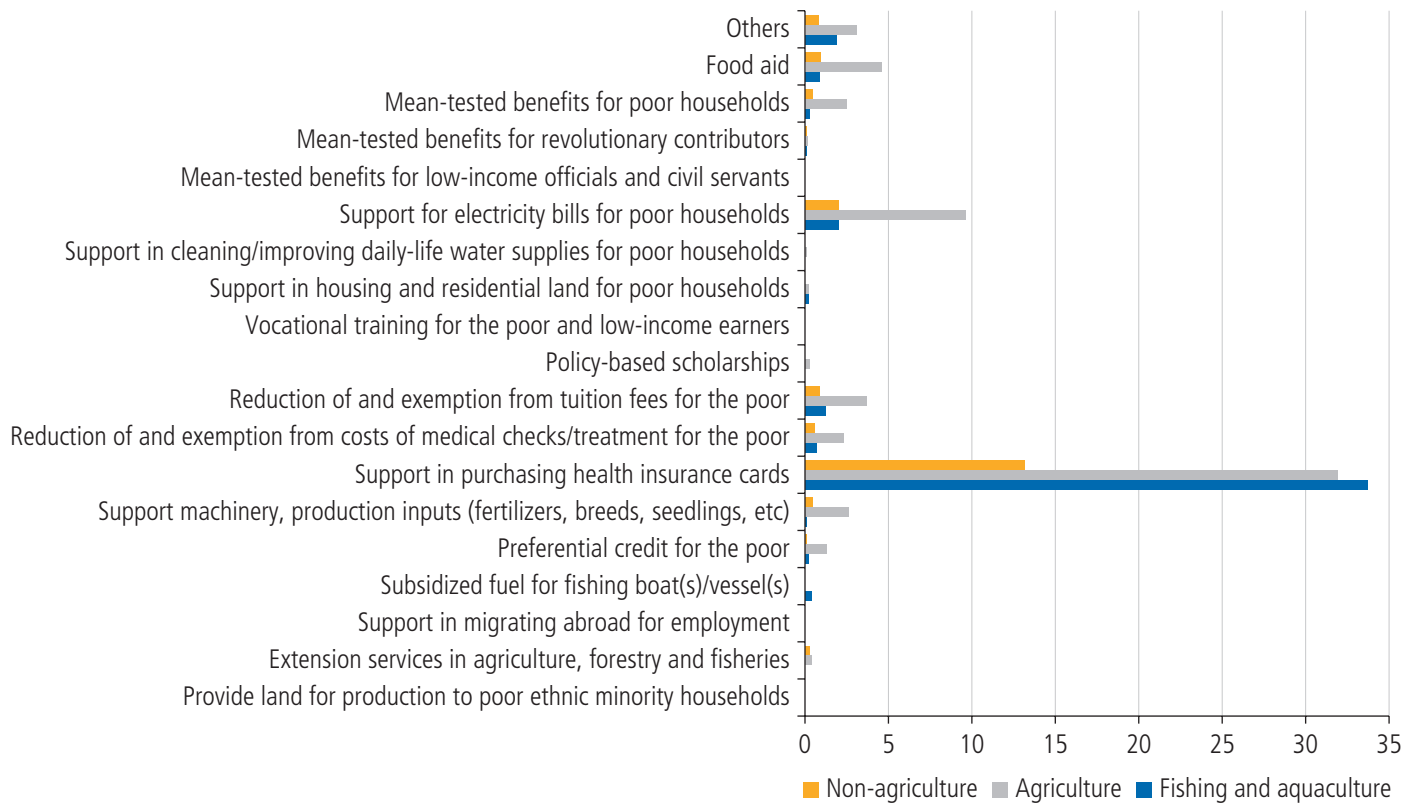
Source: authors' calculation based on the 2020 VHLSS

TABLE A. 4. **ACCESS OF HOUSEHOLDS TO HEALTH INSURANCE CARDS AND THEIR OUT- AND IN-SERVICE USAGE (% OF HOUSEHOLDS).**

	Fishing and aquaculture	Agriculture	Non-agriculture
Having a health insurance card or a free healthcare card	83.0	88.8	86.4
Using health insurance cards in outpatient examinations and treatments	32.7	34.5	32.1
Using health insurance cards in inpatient examinations and treatments	8.6	11.8	8.2

Source: authors' calculation based on the 2020 VHLSS

FIGURE A. 6. TYPES OF BENEFITS FROM POLICIES/PROGRAMS (% OF HOUSEHOLDS RECEIVING EACH TYPE OF BENEFIT FROM POLICIES/PROGRAMS).



Source: authors' calculation based on the 2020 VHLSS





## Blue Social Protection Series: Protecting People, Fish and Food

### Integrating Social Protection and Jobs with Fisheries Management

- **Conceptual Framework** (May 2022)

#### Country Case Studies (June 2024)

- **Overview** of Country Case Studies
- **Costa Rica:** Exploring alternatives for the economic inclusion of low-income, artisanal fisher communities
- **Kenya:** Supporting sustainability in Kenya's fisheries through social protection and labor market interventions
- **Solomon Islands:** Opportunities for linking fisheries management and social protection
- **Sri Lanka:** Integrating social protection and economic inclusion with management of Sri Lanka's coastal fisheries
- **Viet Nam:** Connecting social protection, labor market interventions and fisheries management



© 2024 International Bank for Reconstruction and Development / The World Bank  
1818 H Street NW  
Washington DC 20433  
Telephone: +1 (202) 473 1000  
Internet: [www.worldbank.org](http://www.worldbank.org)

This work is a product of the staff of The World Bank with external contributions. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of The World Bank, its Board of Executive Directors, or the governments they represent.

The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

#### RIGHTS AND PERMISSIONS

The material in this work is subject to copyright. Because The World Bank encourages dissemination of its knowledge, this work may be reproduced, in whole or in part, for noncommercial purposes as long as full attribution to this work is given.

Any queries on rights and licenses, including subsidiary rights, should be addressed to World Bank Publications:

The World Bank Group  
1818 H Street NW  
Washington, DC 20433, USA  
fax: +1 (202) 522 2625  
e-mail: [pubrights@worldbank.org](mailto:pubrights@worldbank.org).