

HIGHLIGHT

This note provides insights into socio-economic conditions and economic inclusion opportunities for two low-income, artisanal fishing and mollusk-gathering communities in Costa Rica, and explores the role of social protection (SP) programs in the fisheries and aquaculture sector. It shows how, despite Costa Rica's strong SP system, a portion of poor and vulnerable fisheries workers have challenges accessing SP programs. The note also explores the nature of the economic activities in the studied fisheries' communities, their labor demands, and the challenges faced by the population to access the labor market and income-generating activities. Recognizing the institutional dynamics of the social and fisheries sectors, this Note provides recommendations for promoting synergies between fisheries management and SP. It highlights the need for a multidimensional, multi-stakeholder approach that enables long-term social and economic inclusion of poor and vulnerable fisheries communities. Improving targeting and profiling mechanisms, identifying selected groups that may have a higher likelihood to engage in economic inclusion programs, and tailoring existing programs to poor and vulnerable and fishers, are critical paths to sustainable social and economic inclusion.

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

Exploring alternatives for the economic inclusion of low-income, artisanal fisher communities in Costa Rica: Case study of artisanal fishing and mollusk gathering communities in Puerto Cortés and Golfo Dulce

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1. Introduction¹

Costa Rica is an upper middle-income country that has experienced sustained economic growth over the past decade; but this has not reduced poverty and inequality. The country's per capita GDP between 2010 and 2021 showed a notable increase of 27.1 percent. Despite overall economic growth, economic benefits have not been evenly distributed across the population, with the increase in income disproportionately favoring the highest percentile of the income distribution.²

Low-income, vulnerable artisanal fishing communities have seen their livelihoods threatened and need support, especially when they do not qualify for current social assistance. According to data from Costa Rica's 2019 labor force survey (ECE)³, the country's marine and inland fishing population is mainly at the lower end of the income distribution. The data suggest that more than two-thirds (65.7%) of those working in inland and marine capture fisheries belong to the bottom 30 percent of

the income distribution in Costa Rica. Moreover, Costa Rica's fishing communities face climate change threats and the short-term negative repercussions stemming from government restrictions to protect the marine ecosystem and make fishing activities sustainable.

The objective of this case study is to better understand socio-economic conditions and livelihoods of low-income and vulnerable artisanal fishing communities and to identify alternatives for their social and economic inclusion. It also focuses on exploring the role of SP and active labor market programs (ALMPs) in fisheries management and for fishing communities. In this context, the case study looks at two selected low-income, artisanal fisheries communities in Costa Rica and explores how the SP system can address key socioeconomic constraints this population faces. The case study aims also to identify the main gaps that low-income fisheries workers face to achieve decent and sustainable income and actions that could be implemented to reduce their vulnerability.

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2 Data for this analysis are available at: <https://datacatalog.worldbank.org/int/search/dataset/0063646/-poverty-and-inequality-platform--pip---percentiles>.

3 Costa Rica Encuesta Continua de Empleo 2019.

The communities of Puerto Cortés and Golfo Dulce were selected by the Costa Rican Institute of Fisheries and Aquaculture (INCOPECA), the leading agency of the fishing sector. The choice was based on the institute’s interest in learning more about the living conditions of communities in the South Pacific, including those dedicated to the extraction of mollusks.⁴ The case study informed INCOPECA, as part of component three of the World Bank Sustainable Fisheries Development Program (SFDP) project (P168475)⁵, “Strengthening Mechanisms for Social and Environmental Sustainability”. The project aims to ensure that the transition to sustainable fisheries management considers socio-economic repercussions on low-income populations who derive their livelihoods from fisheries activities.

This Note builds on previous work. This includes a pilot study for the socioeconomic studies commissioned by the World Bank and conducted by the Central American Institute of Public Administration (ICAP), a consulting firm. It is also informed by the World Bank diagnostics on Costa Rica, including a Poverty Assessment (2022), the Systematic Country Diagnostic (SCD) (2023), and others.⁶ The pilot study took into account the findings of

a previous report commissioned by INCOPECA to the University of Costa Rica (UCR) in 2020 to build a socio-economic profile of the fishing communities in the Gulf of Nicoya.

This Note is organized as follows: Section 1 provides a brief country context for Costa Rica. Section 2 describes the scope and methodology of the pilot carried out in selected geographies. Section 3 presents the main findings of the pilot. Section 4 presents concludes and key lessons. Section 5 presents considerations on next steps.

1.1. Country Context

Costa Rica stands out from other Latin American countries for its continued economic growth. Its outward-oriented growth strategy, based on openness to foreign investment, trade liberalization, and diversified exports, has led to sustained growth for more than 25 years (World Bank, 2023). In addition, the robust economy and fast recovery from the COVID-19 pandemic allowed Costa Rica to join the Organization for Economic Cooperation and Development (OECD) in 2021. According to data from the Central Bank of Costa Rica, the share

4 INCOPECA is responsible for managing Costa Rica’s fisheries and aquaculture sector. It is an autonomous agency that does not have the status of a Ministry. It is under the Ministry of Agriculture and Livestock (MAG) for budget allocation purposes. MAG is the lead government agency responsible for defining fisheries policy objectives.

5 In April 2024, the Government disclosed via a press release that the Project’s loan would be cancelled.

6 The Central American Institute of Public Administration (ICAP) was the consulting firm in charge of conducting the study in Puerto Cortés and Golfo Dulce as a pilot for upcoming socioeconomic studies to be implemented by INCOPECA in fishing communities in Costa Rica. The study was funded by the World Bank-managed multi-donor umbrella trust fund PROBLUE.

of the agricultural sector in 2019 was about 5 percent of GDP. Of this 5 percent, an estimated 1.4 percent derives from fishing and aquaculture activities (Banco Central de Costa Rica, 2023 and Gobierno de España, 2021).

In recent years, Costa Rica has introduced ambitious environmental stewardship policies. Costa Rica's forest coverage efforts have reduced its net greenhouse emissions and boosted the tourism sector (World Bank, 2022). The fisheries sector is part of this effort, with actions focusing on responsible use of fisheries resources that maximizes economic benefits in balance with the protection of the environment and human health and the conservation of biodiversity (*Plan Nacional de Desarrollo de la Pesca y de Acuicultura de Costa Rica*, 2013). However, there is tension between environmental protection measures and income-generation for vulnerable populations. This tension is mainly about finding a balance between environmental-protection measures and potentially significant harm to the livelihoods of low-income and vulnerable fisheries workers.

Costa Rica has committed to preserving life below water, within the Sustainable Development Goal (SDG) 14.4, prioritizing reform of the fisheries sector while improving fishing-dependent livelihoods. If properly managed, a restructured, sustainable fisheries sector can bring substantial benefits, promote investment and job creation in coastal areas in

the medium term, and increase public revenues. But value-generating opportunities cannot be realized if weak governance, overexploitation, underinvestment, and subsequent decreasing profitability in fisheries prevail. Enable the fisheries sector to contribute to sustainable growth requires improving sector governance and institutional capacity and creating an enabling business environment for private-sector participation. A number of initiatives to improve fisheries management have been launched, including as part of the Costa Rica's OECD accession in 2021, most notably measures to decrease overfishing, unreported fishing, and destructive fishing practices.

Several fisheries management strategies in Costa Rica include "top-down" regulations, such as:

- (i) spatial (no-take zones such as Marine Protected Areas (MPAs)) and temporal closures,
- (ii) zoning,
- (iii) gear restrictions,
- (iv) minimum catch sizes, and
- (v) access restrictions (fisheries closed to new fishers; that is, no new licenses issued).

However, the effectiveness of most measures has been limited, either due to fishers' non-compliance or lack of enforcement capacity.

Community-based management measures, such as Responsible Fishing Marine Areas (AMPR) have been identified as potentially effective management strategies. They

empower marginalized small-scale fishing communities and involve them in management processes. However, most AMPR are relatively small, and their management plans essentially facilitate conservation near the communities involved (or their fishing grounds), rather than being part of a coherent plan to conserve or rebuild a stock or resource.

Although Costa Rica has a considerable marine area, production has been declining over the years. The country's marine area is ten

times larger than its land area, but Costa Rica is a net importer of marine products. Between 2007 and 2017, exports increased 42 percent, while imports increased 338 percent (OECD, 2021). In 2018, total aquatic food production was worth about US\$115 million, of which only 14 percent came from wild capture (including small-scale and industrial fishing), and the rest from aquaculture. According to INCOPECSA, in 2022, the commercial waste class (species with very low commercial value, either because of meat taste or size of specimen) contributed the most (15.5%) to total volume of production, with the mahi-mahi⁷ species contributing most. In economic terms, the white shrimp⁸ species contributed most, with 12.8 percent of total production value. In aquaculture,

tilapia accounted for 83.1 percent of total production (INCOPECSA, 2022 and SEPSA, 2023).

Employment generation (direct and indirect) in the sector has also remained constant. The

sector employed less than 10,000 people in 2018, including capture, aquaculture, and processing, an increase of 3 percent compared to 2008 (OECD, 2021). The United Nations Food and Agriculture Organization of (FAO) estimates that, in 2018, about 92 percent of fisheries workers were engaged in small-scale fisheries operations, with 56 percent working on harvesting (45 percent of them were women). Employment derived from small-scale fisheries operations accounted for 5 percent of employment in the primary sector, and 1 percent of total employment⁸ (FAO, Duke University, and WorldFish, 2023).

1.1.1. Poverty and Inequality

Costa Rica has low monetary and multidimensional poverty rates. Although the

income poverty rate rose from 24 (2019) to 30 percent in 2020, it declined to 26 percent in 2022. Similarly, extreme poverty decreased in 2022 to 7.6 percent compared to 8.7 percent in 2020). (World Bank, 2023). Costa Rica's poverty indicators are close to the median of other countries in the region.

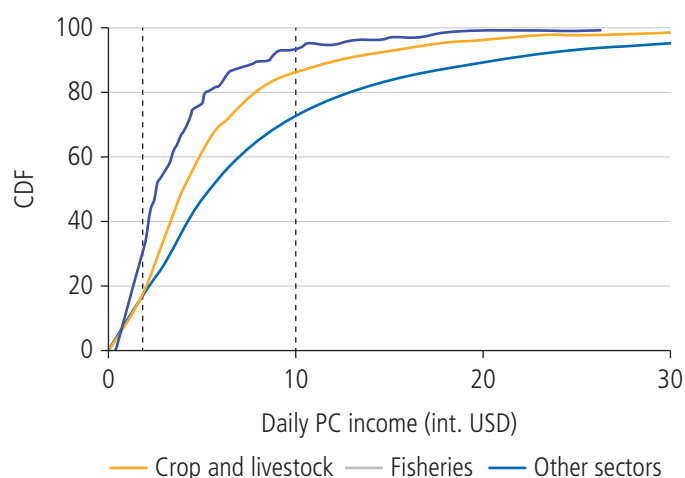
Although official poverty incidence estimates in fisheries are not available,

7 *Coryphaena hippurus*.

8 *Penaeus occidentalis*, *P. stylirostris* y *P. vannamei*.

data from the Costa Rica's labor force survey (ECE) suggest fisheries workers are more likely to be poor compared to other sectors. Comparison of the cumulative distribution function of per capita daily income from inland and marine capture fisheries (blue line in Figure 1) to that of agriculture (green line) and other sectors (red line) highlights that workers in harvesting fisheries earn less than workers in agriculture and other sectors.

FIGURE 1: CUMULATIVE DISTRIBUTION FUNCTION OF DAILY PER-CAPITA INCOME IN HARVESTING MARINE AND INLAND FISHERIES, AGRICULTURE, AND OTHER SECTORS



Source: Author's estimations based on Costa Rica ECE 2019.

In contrast to income poverty, multidimensional poverty decreased rapidly before the

COVID-19 crisis. In 2010, the percentage of people who were multidimensionally poor was 31%, compared to 21% in 2019.

Economic growth gains have not reduced inequality. Costa Rica showed continuous growth in the years before the COVID-19 crisis, but average income of the lowest quintiles remained static. Poverty rates did not decrease significantly, and inequality increased. While the poorest experienced no change in average income from 2010 to 2021, the population at the top of the income distribution increased their average income (World Bank, 2022). Income for households at the bottom of the distribution suffered a greater income fall during COVID-19, while recovery was easier for households at the top of the income distribution. Inequality slightly increased, with the Gini index reaching 0.524 in 2021⁹.

1.1.2. Social Protection and Labor

The poorest appear to be more dependent on public transfers compared to a decade ago. The composition of household 2021 income for the two poorest quintiles shows that government transfers and pensions were higher than in 2010, while the contribution of labor income declined, especially for less educated adult men and single mothers (World Bank, 2022). This situation was

⁹ Inequality is commonly measured by the Gini index. A Gini index of 0 represents perfect equality, while an index of 100 represents perfect inequality.

similar in 2019 before introduction of pandemic-related economic transfers.¹⁰

Costa Rica’s Social Protection (SP) system has prevented an increase in poverty rate but has not eradicated extreme poverty. The Social Development and Family Allowances Fund¹¹ (FODESAF) and the Mixed Institute of Social Assistance (IMAS) make up the cornerstones of Costa Rica’s SP system. FODESAF funds 35 percent of IMAS’ budget, and it is also the main funder of the largest social assistance program: the non-contributory pension, currently implemented by the *Caja Costarricense de Seguridad Social* (CCSS). The non-contributory pension has been successful in reaching low-income seniors with a benefit that represents a large share of their income. IMAS also oversees two conditional cash transfer (CCT) programs: *Avancemos*—which targets poor households with school-aged children to promote their participation in formal education—and *Atención a Familias*, a family assistance program helping poor households meet basic needs. In 2019, social assistance programs covered 54.2 percent of the total population and 86.7 percent of those in the poorest income quintile (World Bank, 2023). Expenditure allocated to

social assistance programs in 2023 represents 1.2 percent of GDP (IMF, 2023).

SP has proved valuable for low-income populations. Cash transfers promote educational attainment and compensate for income loss. Additionally, public health insurance is available for the poor, although fishers and fish workers might need a special health insurance scheme to guarantee access during fishing closures.

Labor market programs in Costa Rica are also an important pillar of the SP system. Employment services and active labor market programs (ALMPs)—such as technical and vocational education and training (TVET), business development services, and public works—are especially important. Apart from TVET, however, these programs hardly respond to the needs of the target population of this case study.

Social Protection Targeted to Fisheries and Aquaculture

Although some SP programs may cover some of the low-income fishing population, only one is specifically designed for fishing and aquaculture. The temporary cash transfer

10 Public transfers and pensions contribution to household income increased in 2019 compared to 2010, especially for the lowest quintiles (World Bank, 2022).

11 Fund established in 1974 to assist public institutions in providing social services to low-income households (World Bank, 2022).

“*subsidio de veda*”¹² consists of a three-month cash transfer paid once a year to eligible fisheries workers during fishing closures.¹³ The *veda* subsidy is jointly managed by IMAS and INCOPECA.

Fishers and fish workers are eligible for this subsidy if they are registered with INCOPECA and have a valid fishing license and evidence of contributions to CCSS health insurance. They must also comply

with community work-required to access the benefit-, monitored by INCOPECA. INCOPECA verifies the requirements and sends the list of eligible beneficiaries to IMAS. IMAS may deny the subsidy if potential beneficiaries are found to have other income or if classified as “non-poor”.

Table 1 summarizes the main SP programs and *veda* subsidy beneficiaries.

TABLE 1: NUMBER OF BENEFICIARIES OF MAIN SOCIAL PROTECTION PROGRAMS, 2023

Program	Beneficiaries	Benefit* (USD)	Budget*	
			Amount (USD)	% of total expenditure
CCT Avancemos (All sectors)	274,000 people	30 to 75 Monthly**	145,517,430	11.9%
Noncontributor y pension	144,633 people	265 Monthly	285,378,359	23.3%
Family assistance program (All sectors)	73,500 households	Varies according to lines.	86,829,483	7.1%
Veda subsidy	1,431 people	270 Three months per year	1,056,774	0.1%

Source: Author’s calculations based on IMF (International Monetary Fund) - Costa Rica Social Spending. Ordinary Budget 2023.

*Approximate values, Exchange rate December 9, 2022.

** Depends on the school grade.

12 The *veda* subsidy is a cash transfer that aims at complementing fishers and fish workers’ income at the time of fishing closures. It seeks to cover basic needs (food, health, housing, and basic services, of licensed fisher and their assistants for a period of three months per year). The program is activated annually by the Board of Directors of INCOPECA. In 2022, the benefit reached 1.310 fishers and fish workers.

13 The main objective of the closure is to protect the reproductive period of the species in the Gulf of Nicoya during the year.

BOX 1: COSTA RICA: KEY ACTORS OF THE FISHERIES SECTOR

MINISTRY OF AGRICULTURE AND LIVESTOCK. Lead government agency responsible for defining fisheries policy objectives.

INCOPESCA. Leader of initiatives for the sector. It is working on the first fisheries register and showed willingness to continue the studies to show the links between social protection and fisheries. INCOPESCA has a smooth relationship with other key institutions such as INA, MAG, and the National Institute for Rural Development (INDER) but lacks communication with other strategic allies.

IMAS and SINIRUBE. The *Instituto Mixto de Ayuda Social*, IMAS, is the agency responsible for providing social assistance to the poor and vulnerable populations in Costa Rica. IMAS implements a variety of social programs, the non-contributory cash transfer programs being the ones with the largest coverage. SINIRUBE, the national integrated social registry, is an independent institution responsible for assessing the socio-economic conditions of all Costa Ricans. Its coverage is nearly 100% of the country's population. Both IMAS and SINIRUBE can play a key role in targeting poor and vulnerable fishers and to provide them with relevant benefits. IMAS is a direct partner of INCOPESCA in the implementation of the *veda* subsidy. For a successful and comprehensive provision of social protection benefits IMAS and INCOPESCA could improve their coordination to better respond to the needs of low-income and vulnerable fishers.

INA. Leader of the TVET programs and direct partner of INCOPESCA in the delivery of courses, some of which are mandatory, to the target population. It was recognized by INCOPESCA and the communities that the programmatic offer, although broad, is not suitable for communities that are in remote towns or that have no access/literacy in ICT, among other limitations.

Ministry of Labor and Social Security (MTSS), National Agency for Employment (ANE), and Bank for Development System (SBD). The ANE is the country's main employment agency and a key player in linking people to relevant training programs. The SBD is a system of several financial institutions that support productive projects on preferential terms. Both ANE and SBD have a weak rural and vulnerable/poor approach in their programs. In addition, neither has had significant cooperation with INCOPESCA. MTSS provides seed capital, business development services, and community-based strengthening programs. However, like ANE and SBD, its rural focus is not strong, and it is not a reference among the target population.

The Costa Rican Social Security Fund (CCSS). The CCSS is the main actor in health care and social security. The CCSS has experience in designing special programs for specific populations and seasonal occupations¹⁴. Currently, there are some collective insurance initiatives for fishers, but as the case study shows, there are still gaps in coverage that require a different approach.

The National Institute of Women (INAMU). Independently, INCOPESCA and INAMU have approached and developed projects with the fishing communities. It would be necessary

Continued

¹⁴ Through partnerships with actors from the sector, the CCSS special insurance provides coverage to the coffee harvesting population.

BOX 1. COSTA RICA: KEY ACTORS OF THE FISHERIES SECTOR (CONTINUED)

to strengthen this relationship and create a strategic plan that is transversal to the actions of INCOPESCA in the territories.

Subnational governments, the private sector, and workers' organizations are catalysts for local initiatives. The public sector can be considered as a potential employer by engaging the population, for example, in green jobs or infrastructure works. Subnational governments can be great allies in implementing an economic inclusion strategy. The private sector can also promote inclusive business and apprenticeship programs. Finally, the participation of producer organizations/cooperatives and the target population, in general, is key to the success of initiatives. It is essential to have channels of communication that allow for first-hand knowledge of the needs of the population and feedback on implementation.

Source: Author's formulation.

Main challenges**The SP system faces challenges to reach specific pockets of low-income populations.**

Social protection coverage has been decreasing; between 2020 and 2021, the number of beneficiaries decreased for both non-contributory pensions and *Avancemos* (IMF, 2023). Moreover, for 2023, the projected number of beneficiaries for the *veda* subsidy and *Avancemos* is lower than in 2021. In addition, regarding the size of the benefit, the *veda* subsidy is nearly 40 percent of the minimum wage, which may be considered low given the high dependence of fisher households on income derived from fishing activities. The size of the *veda* subsidy has not changed since 2018.

Regarding targeting, the government of Costa Rica has been making efforts to expand the coverage and improve its social registry. Founded in 2013, The *Sistema Nacional de Información y Registro Único de Beneficiarios*

del Estado (SINIRUBE), Costa Rica's social registry, covers nearly 100 percent of the population. It is gradually becoming interoperable with national and subnational institutions. However, despite these efforts, interoperability with the fisheries registry has not been achieved. Better coordination between these two databases would facilitate the targeting of fishers and fish workers for existing social protection programs (based on the characteristics and composition of their households), identify coverage gaps, and monitor vulnerable fisheries workers' access to social protection benefits and services. Recent innovations (adjustments in the algorithm) have reduced leakage and exclusion errors below 15 percent (SINIRUBE, 2023).

Despite improvements, SP program targeting faces challenges. Priority is given to poor populations with the vulnerable (those in danger of falling into poverty) tending to be left out. SP

generally do not adopt deliberate efforts to cover vulnerable groups. This is mainly because IMAS was created to eradicate poverty and, by law, its competences are concentrated in serving the poor. This reduces interventions for vulnerable populations, such as fishers, who do not necessarily classify as poor since they often own land or a boat. Comprehensive strategies for economic inclusion of vulnerable, working-age populations in the fishing and aquaculture sectors are also lacking.

In addition, Costa Rica's SP system faces high fragmentation. Various agencies provide benefits to the poor and vulnerable, and the pro-cyclical financing structure of social protection expenditure does not ensure adequate coverage during economic recessions, often associated with increases in poverty and vulnerability.¹⁵

2. Scope and Methodology of the case study

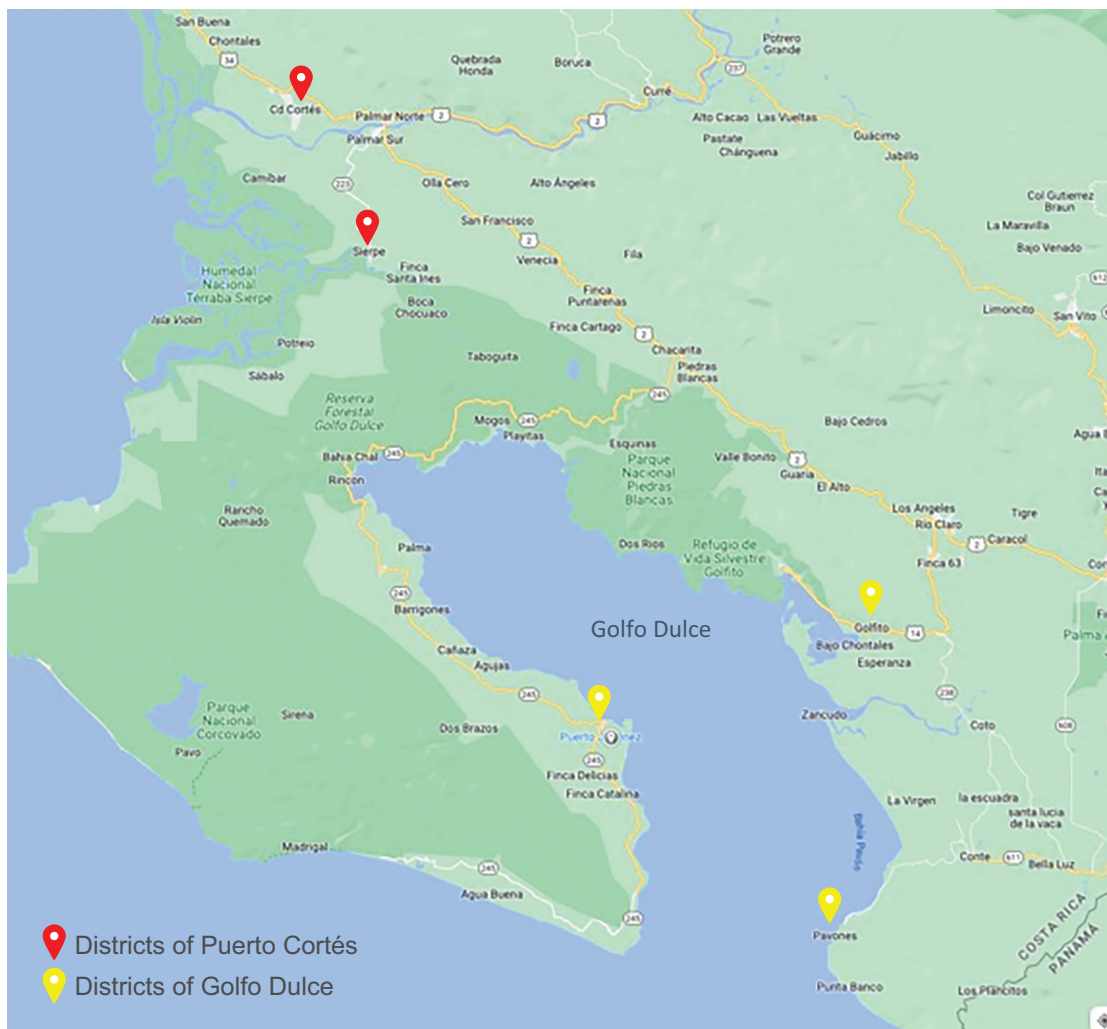
2.1. Scope

The case study provided a socioeconomic profile of five districts in two geographic areas in the South Pacific region: Puerto Cortés and Golfo Dulce (Figure 2).¹⁶ The objective was to refine the profile of labor supply and demand and analyze existing gaps and opportunities to promote economic inclusion for low-income fishing communities. The case study combined quantitative and qualitative techniques and is not representative for Costa Rica or its regions. There are several fishing communities throughout the country and the study refers only to the results of the pilot applied to a sample of two of those communities. It is, however, a proxy for the problems faced by the artisanal fishing population.

15 This means, that social protection expenditure contracts on critical times and expands when the economy is growing. This is somehow counter intuitive since it will be more beneficial to protect (expand social expenditure) at the times of crisis and contract when employment and income and growing.

16 For practical reasons, the document refers to the five districts located in two zones.

FIGURE 2: MAP OF GOLFO DULCE AND PUERTO CORTÉS



Source: Google Maps.

The study explored three distinct modules:

1. **Social and productive characteristics of people dependent on fishing and mollusk gathering and their households;** to understand their main needs, shortcomings, skills, as well as the potential to engage in alternative productive activities within or outside fishing and aquaculture.
2. **Productive profile of the selected territories;** more specifically, exploration of current and future labor demand that could include low-income fisheries workers; main occupations demanded by businesses; and skills required for these.
3. **Labor demand and supply gaps assessment;** the identification of existing job-training (or other relevant) services, and potential adaptations that to better reach the target population. This third module aimed to serve as a baseline for identifying policy options and enable productive inclusion of the target population.

Methodology



Photo: World Bank. Golfo Dulce, Costa Rica, 2022.

A mixed-methods research approach was used to inform the three modules. To build the socio-economic and productive profile of the target population, the team designed and conducted a survey of fishers and mollusk gatherers. Semi-structured interviews with businesses assessed labor demand in the selected geographies. The communities' labor profile, private sector needs, and productive profiles of the territories provided inputs to analyze alternatives to address identified gaps.

2.2.1. Socio-economic and productive profile of small-scale fishing and mollusk-gathering communities

The pilot study of Puerto Cortes and Golfo Dulce builds on INCOPECA research

exploring the socio-economic conditions of fishers and fish workers in the Gulf of Nicoya. In 2020, INCOPECA commissioned a pilot survey to improve understanding of the social and productive profile of communities in the Gulf of Nicoya.¹⁷ By mid-2022, the World Bank team working with INCOPECA became part of a larger Bank-funded activity to explore the role of SP and labor market programs for fisheries management and communities. Thus, the scope of the work was widened by expanding the initial 2020 exercise to other territories and to include the additional modules (productive profile of the territories and labor gaps assessment). The ultimate objective remained to explore the role of SP and labor market programs in fisheries management and for fishing communities.

Questionnaire, sample, and fieldwork

To ensure continuity of the Gulf of Nicoya work, the 2020 questionnaire provided a starting point. A new version of the questionnaire allowed consistency of questions and response categories used by Costa Rica's household survey (EHAHO) and the SINIRUBE's survey (*Registro de Información Social*, RIS). The questionnaire also considered questions designed by the World Bank's PROBLUE team. The final version of the questionnaire consisted of 189 questions.

17 "Fishing and Aquaculture Registry for the artisanal fishing communities of Chira Island and Manzanillo" (Universidad de Costa Rica, 2020).

Key improvements to the questionnaire were included. Questions were added on the composition of household income and expenditure and on access to financial services (applied to the entire sample population, rather than just the boat-owning population, as in 2020). More focus on economic inclusion was also added, with the new questionnaire including an additional section to identify the population’s job skills—knowledge, experience, and self-perceptions—regarding a selection of skills considered important for employability or entrepreneurship.

To construct the sample, INCOPECSA provided the consulting firm with a list of 471 low-income artisanal fishers and mollusk collectors in the selected districts: 92 in Puerto Cortés and 379 in Golfo Dulce. 30 percent of the population on INCOPECSA’s list was interviewed. Additional fishers not registered with INCOPECSA were included in the survey through “snowball” sampling.¹⁸ In total 160 fishers and fish workers were interviewed, 49 from Puerto Cortés and 111 from Golfo Dulce, keeping the proportions from the original registry.¹⁹ Fieldwork included pilots of four and six days²⁰ to collect information. The team of

enumerators consisted of 16 students from the National University²¹ plus four supervisors that were staff of the consulting firm.

2.2.2. Diagnostic of the productive profile of selected territories

The introduction of this module was an innovation for the sector. It was the first time that INCOPECSA had access to information about workforce demand for low-income fishers, fish workers and their household members in territories with a large presence of fishing activity. The aim was to establish a methodology to allow INCOPECSA to better understand the productive profile of the territories in which the selected fishing communities were located.

As part of the productive profile, a literature review on regional development prospects and a semi-structured survey to explore current and future job demand in the area were conducted. The semi-structured survey was inspired by a United Nations Development Programme (UNDP) methodology to identify regional productive and occupational profiles

18 Snowball (or chain-referral) sampling is a sampling method that relies on referrals from people in the sample to get more subjects with similar characteristics into the sample. It is useful when working with populations that are difficult to identify.

19 Although the TORs (Terms of Reference) prepared for the pilot study requested that workers were interviewed in their homes and using mobile devices (tablets), the firm faced challenges in obtaining the exact geospatial location of fishers and fish workers’ households that were not available in INCOPECSA’s registry, as well as low connectivity to conduct the surveys electronically.

20 From December 5 to 10, 2022.

21 From Careers in Trade and International Relations

required by businesses/productive units.²² The in-depth semi-structured interview was designed to be applied to a sample of existing businesses/productive units in the selected municipalities. Contact information for the businesses was obtained through municipal chambers of commerce.

A total of 58 interviews were conducted to understand existing and future labor demand and explore potential opportunities for low-income fisheries workers. Interview questions included the current composition of the business' workforce, type of existing contracts, average salaries, characteristics of recruiting processes, and information about main skills, knowledge, and other criteria for existing and future (next 12 months) jobs.

2.2.3. Gaps Assessment

Through a prospective scenario, some concrete actions for the progressive economic inclusion of low-income fishing communities were identified. An assessment of gaps for economic inclusion of workers through employment or entrepreneurship took into account the main findings of the socio-economic and productive profile of the communities and the diagnostic of the productive profile of the territories. This process led to the identification of three sets of gaps—socio-economic, labor market,

and institutional—which will be discussed in more detail in the next section.

3. Main findings



Photo: World Bank. Purruja mangrove, Golfito, Costa Rica, 2022.

3.1. Socio-economic and productive profile of small-scale fishing and mollusk-gathering communities

More than half of the population surveyed are fishers/fish workers and live near the Gulf.

The mollusk gathering communities are outside the Gulf, with easier access to the mangroves than the coast. Although Golfo Dulce is more touristic than Puerto Cortés, the pilot study found no significant differences in the socio-economic characteristics of the two areas. Something similar was found in the analysis of the two productive activities: fisheries and mollusk harvesting. The socio-economic profile of both groups is similar

²² This methodology was previously applied by UNDP in selected regions of Colombia https://issuu.com/pnudcol/docs/productivos_30mayo_b

in terms of educational attainment, income, the composition of household spending, and access to SP programs. However, some relevant differences were found.

Fishers/fish workers are typically older than mollusk gatherers and have deeper roots in the activity. Fishers average fewer years of education compared to mollusk gatherers, and the male versus female ratio is higher for them (80 percent of fishers are male while 48 percent of mollusk gatherers are male). The volatility of their income, which is less than the minimum wage for most, and the fact that most are uninsured makes them highly vulnerable.

Adult men dominate fishing activities, with a high proportion over age 50. Women lead the activity of mollusk gathering, with most of them being heads of households. For all of them, fishing is more than a productive activity—it is a life choice. In both groups, the heads of households represent around 75 percent. Typically, fishing has been a family tradition for several generations and more than 80 percent of the surveyed population has been fishing for more than 10 years.

Mollusk harvesting is a strenuous physical activity that provides an alternative to fishing for some populations, especially women. Women have found this to be a suitable alternative

to complement household income because it does not require access to equipment or special technical skills. However, this activity generates even less income than fishing, partly due to daily catch limits set by INCOPECA.²³ More than 95 percent of mollusk gatherers and more than 86 percent of the fishing population earn less than the minimum wage.

Youth work mostly in mollusk gathering and start at a young age, especially girls, frequently combining the activity with school attendance. Over half (56%) of the population is under age 40. Although youth work in both productive activities, their labor participation rate is higher in mollusk collection. Mollusk gathering begins in childhood and reaches a 20 percent participation rate for people between ages 19 and 25, compared to less than 5 percent in fishing for the same age cohort.

Mollusk harvesters have more average years of education than fishers. While most fishers (men and women) have completed primary school, mollusk harvesters have a relative advantage in secondary educational attainment, especially for women: 46 percent of women gatherers have some level of secondary education versus 33 percent for women fishers.

Access to health insurance leaves a noteworthy portion of the target population and their

23 At the time of the pilot study, the established limit is 250 units per person; however, the amount varies according to the canton in which the activity is carried out.

families behind. The number of uninsured fishers (25%) is almost twice that of uninsured mollusk gatherers (13%). Government health insurance is prevalent in both groups: mollusk gatherers (75%) and fishers (35%). However, only 11.9 percent of mollusk harvesters have access to the pension system, while for fishers the percentage goes up to 19.5 percent.

The target population has tangentially benefited from SP programs. Only 9 percent of fishers in the sample reported having benefited from the *veda* subsidy²⁴ compared to 12 percent for mollusk gatherers, and about 18 percent of households benefit from the Conditional Cash Transfer (CCTs) program *Avancemos*. TVETs are the programs with the highest coverage, reach 38 percent of the population in the sample. However, the population expressed dissatisfaction with the available programs due to coverage and difficulty in accessing them, as well as relevance of content. The population perceives that the programs have limited potential to contribute to income.

Many fishers and mollusk collectors are not technically classified as “poor” but rather as “vulnerable”. In both productive activities, more than 80 percent of the population earn less than the minimum wage and must

complement their income with alternative activities. Half of household expenditures go to food, housing, and repayment of loans, leaving no room for savings or investments. To generate additional income, the population engages in various temporary activities including house repairs, construction, housekeeping, gardening, and participation in small businesses led by associations (selling prepared food, handicrafts, and others); 83 percent of fishers and 60 percent of mollusk gatherers participate in at least one association.

The gender gap is present in multiple dimensions. Not only is there a clear division of labor between the fishing and mollusk gathering (with fishing remaining traditionally male) but there is also a gender income gap. Women not only average less earnings but also carry a heavier burden of unpaid work (although this is not unique to fishing). Women are more involved in food sales, clothing repair, and domestic work. And when the same activities were evaluated for both genders (for example, gardening), pay was lower for women.

Despite this unbalance situation, women have gained status as key workers in the fishing production chain. This is particularly important for mollusk harvesting and post-harvest

24 The *veda* subsidy mainly covers fisheries workers in the Gulf of Nicoya. The coverage figures presented here could respond to a less representative population affected by the restrictions, in the sample for Golfo Dulce and Ciudad Cortés. As reported by INCOPECA, more than 90% of fisheries workers who applied for the benefit in the Gulf of Nicoya received it. However, it is important to consider that due to the requirements to access the *veda* subsidy, there is a portion of the population that has no interest to apply or does not qualify for the benefit.

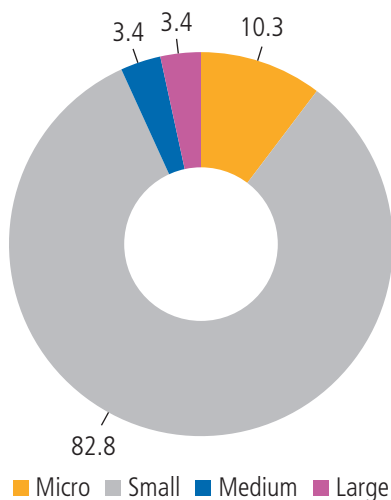
fisheries activities. They are also better represented than men in the management of associative projects with value-added components.

3.2. Productive profile of selected territories

This study included a set of interviews to explore their demand for labor. A total of 58 businesses were interviewed, 31 of them from the Canton municipality of Osa and 27 from Golfito.

About 83% of the participating units are small businesses (Figure 3). Due to time constraints, the consulting firm launched a small-scale campaign to socialize the pilot study and reach relevant informants. Public and primary sectors (agriculture) were underrepresented in the pilot study, while the tertiary sector was predominant. Retail, hotels, and restaurants are the most representative economic activities. Unfortunately, some tourism-related activities were not highly present in the sample, despite the region's touristic profile. (Figure 4).

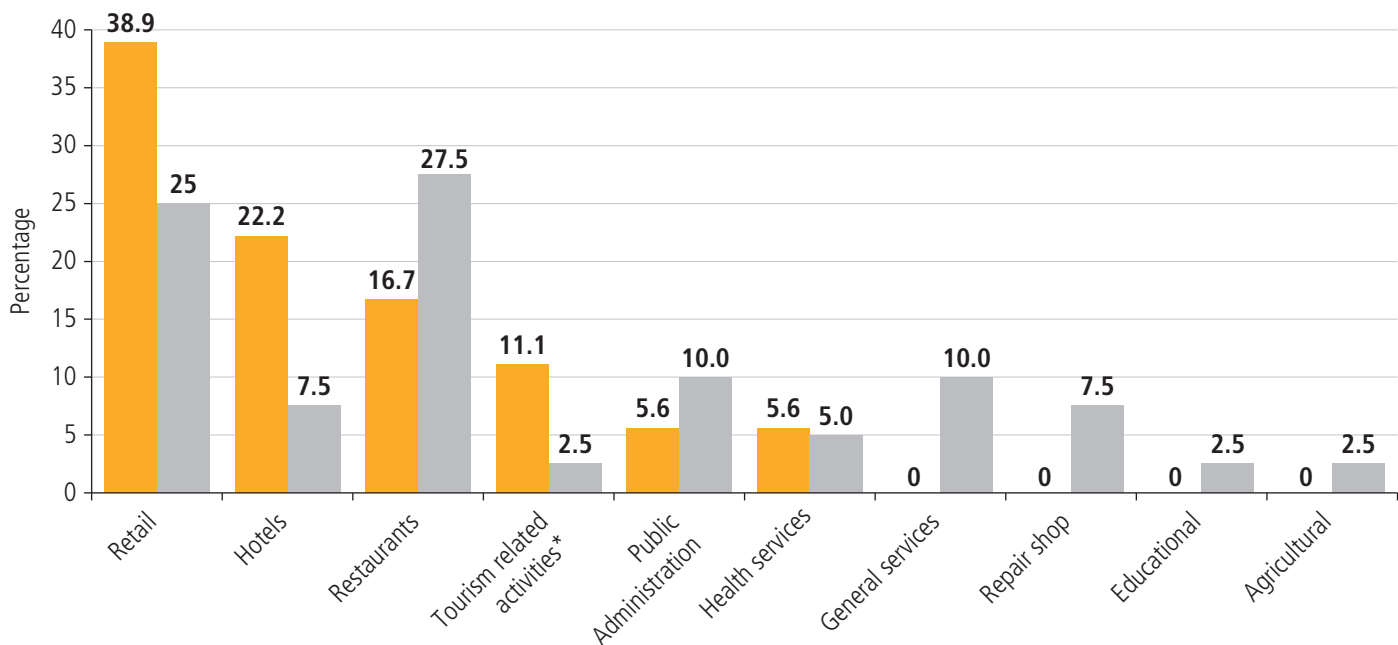
FIGURE 3: **DISTRIBUTION OF BUSINESSES IN THE SAMPLE BY SIZE (PERCENTAGE)**²⁵



Source: ICAP, 2023.

²⁵ Micro firms are those with fewer than five employees, small firms have more than five but less than 70 employees, medium firms have more than 70 but less than 100, and large firms have more than 100 employees.

FIGURE 4: DISTRIBUTION OF ECONOMIC ACTIVITIES IN THE SAMPLE BY THE MUNICIPALITY (PERCENTAGE)



Source: ICAP, 2023.

*Passenger transportation by air and sea, tourist car rental, travel agencies and other reservation services, preservation of historical and cultural sites, other sports and recreational activities.

Current workers in the existing businesses are mostly men (63%) and considered permanent (90%). Most of them have secondary education and work mostly in occupations such as sales, cashiering, cleaning, kitchen, repair, and tour guides.

Despite having higher education than men, women face restrictions to participate in the labor market. On average, women have a higher tertiary education rate than men but lower employment rates. The pilot study found that many companies reported lower participation of women in the labor market due to competing care and domestic responsibilities that prevent them from working full-time or in jobs that are far from where they live.

The analysis of job profiles showed that employers are looking for people with at least a secondary education and some training in soft skills. For administrative positions, some level of tertiary education is required, as well as basic English language. Skills reported as highly valued include customer service, adaptability to change, and a willingness to learn.

New jobs are limited, but there is some potential for alternative work. People willing to move to activities different from fishing or willing to complement their income have some options. The businesses that participated in the pilot study reported about 123 job vacancies to be filled in the next 12 months (Table 2). The jobs vary in terms

of type of contract and business area, but most of them are seasonal and operational.

TABLE 2: **DEMANDED OCCUPATIONAL PROFILES BY TYPE OF CONTRACT, NEXT 12 MONTHS**

Occupation	Temporal	Permanent
Gas station worker		23
Housekeeper	6	5
Cook	31	3
Supermarket clerk	2	2
Baker		2
Receptionist	8	1
Fermentation worker*		1
Manager		1
Accountant		1
Insurance agent		1
Cashier	5	
Concierge	1	
Teacher	4	
Assistant	6	
Salesperson	16	
Maintenance worker	2	
Security guard	2	
Total	83	40

Source: Author’s calculations based on ICAP, 2023.

*Refers to workers with knowledge of fermentation and drying techniques

3.3. Gaps assessment

The team assessed gaps in three interlinked dimensions: **socio-economic, labor market, and institutional** (Figure 5). The pilot study

confirmed the hypothesis regarding social, productive, and structural gaps, in the selected territories.

FIGURE 5: **GAPS ASSESSMENT**

Socio-economic dimension	<ul style="list-style-type: none"> • Gender segregation in the labor market • Low levels of secondary education • Low level of training • Lack of instruction in soft skills • Lack of English and ICT proficiency • Lack of access to financial services and business development services • Low levels of access to health insurance and pensions • Lack of ICT at home although space for raising connectivity via mobile phones
Labor Market dimension	<ul style="list-style-type: none"> • Formal jobs require higher levels of qualifications and skills and are concentrated in services sector. • Business opportunities mainly linked to tourism (potential for green jobs) • Business ecosystem composed of small units (low productivity units) • Low access to value chains and to value added production • Lack of "collecting centers" (<i>centros de acopio</i>)
Institutional dimension	<ul style="list-style-type: none"> • Challenges in the coordination among rural, fisheries, and social sectors • Potential mismatch between training and market demands • Lack of incentives for low-income fishers to engage in alternative economic activities • Existing benefits do not respond to the current needs of the population (insurance, licenses, social assistance)

Source: Author’s formulation.

3.3.1. Socio-economic dimension

The **socio-economic dimension is influenced by gender and activity gaps**. As mentioned, the gender gap is present among the communities, with sharp disadvantages for women regarding

participation in the labor market, remuneration, and time devoted to unpaid work. Similarly, noticeable differences between people engaged in mollusk gathering compared to fishing. On average, the mollusk gatherers are younger, have more education, and earn less income, but have more access to public insurance than fishers. Nevertheless, they share many challenges to economic and social inclusion.

School attendance in Costa Rica is trending in favor of girls and adolescents. Although school attendance is universal for children between the ages of six and 12, female adolescents between the ages of 17 and 23 began to show better attendance than male adolescents. This difference has widened compared to the previous decade, from 5 percentage points in 2010 to more than 10 percentage points in 2021 (World Bank, 2022). These results are also in line with the study finding of greater continuity for women in the educational system, especially for mollusk gatherers. Low-income fishers continue to show low educational attainment, perhaps related to the need for additional income and the strong traditional perception of fishing and fishing-related activities as natural activities.

Training that could provide the study population with tools to engage in alternative or complementary economic activities is often not available. There is a low level of hard and soft skills instruction for the target population.

Training they receive is mostly geared to fishing and aquaculture but is limited to mandatory courses needed to obtain a license (for example, navigation and emergencies) and not skills such as customer service, information, and communication technologies (ICT) literacy, or English language.

Business development programs and financial services also are not available for the target population. Communities do not recognize or benefit from these types of programs. When asked about access to these, the population reported no knowledge of, or access to, these programs. Most programs have an urban profile or are designed for businesses with a certain level of development. Some of programs require a good credit score or the business having been in operation for at least six months, representing barriers for some.

The population struggles in accessing the health and pension system through contributory schemes. The high rate of uninsured people is partly due to lack of continuous contributory capacity. Their income is highly volatile, but most, especially fishers, do not meet the requirements for coverage by non-contributory insurance. INCOPECA is working in partnership with the CCSS to facilitate insurance for vulnerable fishers.

The digital divide is reflected not only in the lack of computer literacy among the population but also in the lack of connectivity

in households. Although most respondents reported having a mobile phone, they have limited access to the internet at home; 33 percent have a conventional Internet connection and 4 percent have an optical fiber connection. Connectivity can help expand access to education, but it can also enable access markets, financial resources, and business opportunities. In contrast with home internet, 52 percent of the population reported having a mobile phone contract that includes an Internet connection.

3.3.2. Labor market dimension

The labor market in the territories has limited capacity to employ new people.

Substantial transitions will be needed for the target population to access formal jobs. Even if companies do not require highly qualified employees, there is still an education and training gap.

The target population also faces restrictions within the fisheries sector.

Reduction in the number of licenses, temporary closures, and restrictions on fish catches make the market environment highly volatile and increase people's vulnerability. These restrictions, designed to support fishing sustainability, must be accompanied by multi-sectoral interventions to prevent vulnerable communities from falling into poverty and gradually overcome vulnerability.

Communities have little access to value chains and value-added production.

The target population needs more and better collection points where they can trade fairly. The fact that the only option for most workers is to sell their products through intermediaries not only limits their ability to establish better trading relationships but also limits their income. Systematic World Bank analysis of the Fishing Management Plans in 2021 found that the fishing community faces unfavorable market conditions for its products. Most artisanal fishers have reported feeling disadvantaged when selling their products to intermediaries and fishmongers. Worker's lack of agency and the market regulations are particularly detrimental to small-scale fishers, who make very volatile verbal agreements on the price of their products (Sánchez, 2021).

3.3.3. Institutional dimension

Most agencies serving low-income fisheries workers work in silos.

Fisheries, rural, and social protection and labor agencies must better coordinate in the design and implementation of policies and programs targeted to low-income fishers. They need to better understand the needs of workers and households from a multidimensional perspective. Programs that benefit this population are currently designed from a sectoral (productive) perspective, rather than considering the overall needs of fisher and fish

worker individuals, households, and communities. Similarly, programs should consider rurality and intersecting components—such as age, migration status, ethnicity, gender, literacy, and poverty status—of the population they seek to serve.

4. Opportunities to improve economic inclusion and support fisheries management

The productive-inclusion approach

Costa Rica must ensure an effective, efficient, and equitable transition towards a sustainable fisheries management regime. At the same time, it must address short-term socio-economic costs and optimize the environmental (including climate) benefits associated with that transition. The transition path to a sustainable fisheries management model needs to consider the multifaceted social, cultural, ecological, and economic context, particularly in cases involving

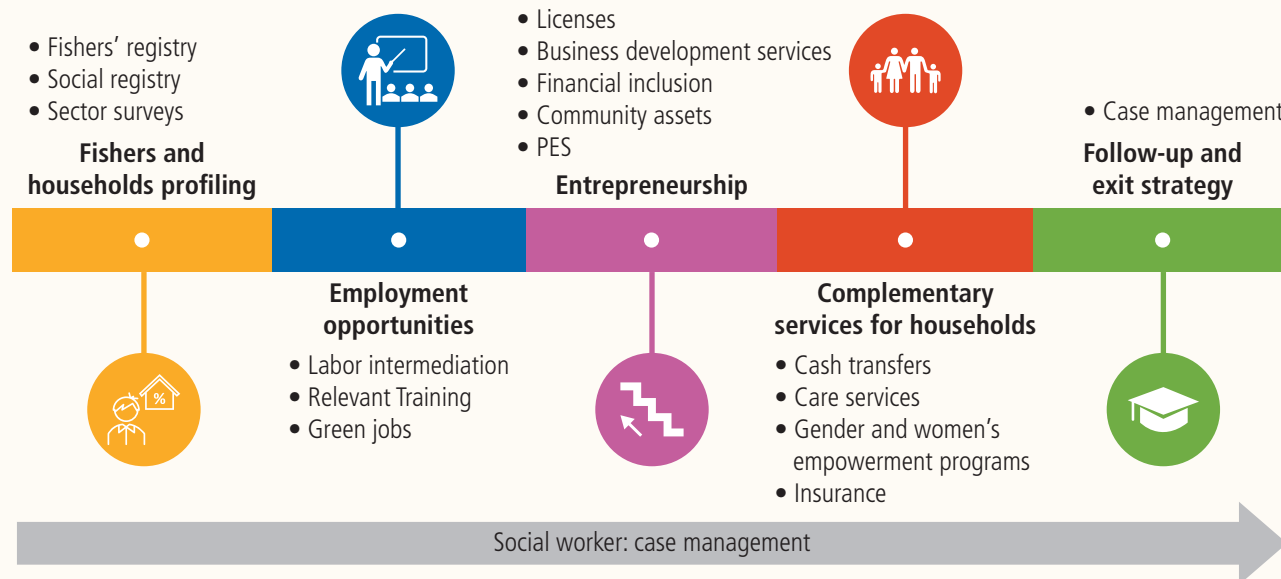
multi-species fisheries.

Implementing fisheries management plans must ensure that the burden does not fall unevenly on different segments of the fishing community. For the adjustment process to occur smoothly, fisheries management must provide those who obtain their livelihood from fishing with a coherent set of incentives and support systems while avoiding fostering a culture of dependency within those same communities.

It is critical to develop mechanisms to protect people from falling into poverty and extreme poverty. Evidence shows that a siloed and narrow focus on production is insufficient to protect the livelihoods of low-income fishing communities. This calls for an integrated, multidimensional approach to promote the long-term economic inclusion of these communities. Table 3 provides some examples of concrete activities that can be promoted through a multidimensional and multisectoral approach.

BOX 2: A SINGLE ACTOR CANNOT RESPOND TO A MULTI-DIMENSIONAL CHALLENGE.

Ensuring the economic inclusion of low-income fisheries workers requires a multi stakeholder approach



Source: Author's formulation.

*Payment for Environmental Services.

Interventions should consider people's life cycle and their willingness to participate in different initiatives, whether inside or outside the fisheries sector. As mentioned, more than a livelihood, fishing has been a way of life for generations, but also the most plausible activity in the local economy.

Local governments can be active agents in the economic inclusion of communities, especially if the private sector does not have

strong presence. Although the pilot study was not able to interview a significant sample of local public sector representatives, they must play a role in economic inclusion. Local governments are key actors in both the design and delivery of productive inclusion interventions and can have a great impact.²⁶ Short-time frame programs like Community Works²⁷ or payment for environmental services programs, also represent a viable alternative for communities under a multisectoral intervention.

26 For example, if they work within an associative model like mancomunidades-corporations or entites legally created by a grouping of municipalities or provinces-).

27 The Community Works Program is part of the MTSS National Employment Program. It consists of a temporary cash transfer to unemployed or underemployed who participate in a project of community interest through social organizations.

TABLE 3: **POTENTIAL HIGH-IMPACT ACTIONS TO BE INCLUDED IN A MULTISECTORAL ACTION PLAN**

Activity	Responsible institution	Timeline
Guarantee access to health insurance for low-income fisheries workers.	CCSS – INCOPECA (in development)	Short
Identify priority groups/regions to be intervened (for example, youth, women, mollusk gatherers).	INCOPECA	Short
Identify actions to improve socio-economic profiling of low-income fisheries workers (Cross-referencing of data).	INCOPECA, SINIRUBE, INEC	Short
Encourage fisheries workers to register and get their licenses .	INCOPECA	Medium
Address the access constraints (information, communication, targeting, and eligibility) to the main social assistance programs specifically reaching the fisheries and aquaculture subsectors.	INCOPECA, SINIRUBE, IMAS.	Medium
Create a multisectoral round table to set up a strategy and customize interventions for low-income fishing communities. Since INCOPECA is updating the management plans for MPAs, the multisectoral table or representatives could be part of the participatory process of constructing the plans.	INCOPECA, INDER, IMAS, INA, MTSS, Subnational governments, Private sector	Medium
Design potential pilot multisectoral intervention - Ex.1 Vulnerable youth : Cash Transfers (CT) + job intermediation+ training (English, soft skills + On-the-job training -OTJ-) + financial inclusion. - Ex.2 Women mollusk gatherers : CT + Business development services + seed capital + financial inclusion.	Ex.1. INCOPECA, IMAS, INA, Private sector, Sub-national governments. Ex.2. INCOPECA, IMAS, Banking sector, Sub-national governments, UNAMU, INDER.	Long

Source: Author's formulation.

Profiling and Targeting

A key first step is to implement mechanisms to better profile and target poor and vulnerable fisheries workers and their households. It is highly advisable to strengthen collaboration

between SINIRUBE and INCOPECA to make the fishers and social registries interoperate, to better profile fisheries workers, and to identify relevant programs that could be targeted to individuals and households who work in this field.

Education

Opportunities could expand through demographic lenses. The young population is more likely, for example, to take advantage of programs aimed at increasing education. Likewise, this population may be more interested in transitioning to other activities, which makes it a worthy population for pilot economic inclusion programs, for example under the apprenticeship model with the private sector. Young women will also benefit from education if they find initiatives that reduce their care burden.

Access to social insurance

It is critical to promote health and old age insurance access. This case study identified a critical mass of the population without access to health and pension insurance. Some initiatives exist to facilitate fisheries workers' access, through agreements between INCOPECA and the CCSS, but more effort is needed. Access of senior producers to social pensions also needs to be assessed and expanded.

Access to social assistance

It is crucial to review and develop mechanisms to prevent exclusion of vulnerable populations

from the *veda* benefit program. The *veda* subsidy, the main social assistance program for fisheries, responds to the needs of the population that meets *veda* access requirements; but too many vulnerable fishers are not receiving benefits. Addressing this problem includes revising poverty status, social security contributions, and licensing requirements. Also, it might help to explore the possibility of transitioning from a social assistance cash transfer to a more stable unemployment insurance benefit.

Gender-sensitive and transformative actions²⁸

Recognizing and supporting women will benefit the entire fishing community. For instance, one plausible action (and one that does not require creating new programs) is to strengthen dialogue between the Women's National Institute (INAMU) and INCOPECA to work with communities to empower women's organizations.²⁹ Initiatives to reduce women's burden of care and domestic work are needed to allow women to fully participate in economic activities. It is critical to identify the causes for low utilization of *RedCudi*,³⁰ the national childcare and development system, in fisheries communities. Women's organizations could provide insights and

28 Gender programs can have different scopes. Gender-blind programs do not consider gender issues and gaps. Gender neutral programs recognize those issues and gaps but do not take specific or targeted measures to address them. Gender sensitive programs, instead, directly address gender inequalities. Gender transformative programs are designed to tackle those inequalities by addressing the roots of the inequalities at individual, household, community and institutional levels (FAO, 2023).

29 For example, INCOPECA has recognized this potential and is planning training to raise men's awareness of their roles and responsibilities in the care economy.

30 *Red de Cuido* is a public childcare and development program in Costa Rica that provides different modalities of public and private childcare and early childhood development services.

work with IMAS to arrange locations and find caregiver personnel in remote geographies.

Active labor market programs (ALMPs)

Training

Training programs should be part of a strategic plan with follow-up support.

TVET programs come mainly from the National Institute of Learning (INA), which has a history of partnership with INCOPECA, but the programmatic offer needs to be adapted to community needs in terms of location, level of effort required, and fit with the local economy. This is important to restore confidence in the education and training system as a tool for social mobility. Concrete actions could include expand the skills and knowledge included in currently limited vocational training agenda. Training could add the content identified in the needs assessment, focusing on those of young fishers. Some of these programs may need to be delivered in the fishers' communities to increase participation. Additionally, businesses could propose apprenticeship programs and INA could tailor their offer accordingly.

INA could reevaluate how it serves this specific demographic segment. For example, programs to encourage companies to enter apprenticeship contracts create "win-win" situations for employers and potential employees. Although companies

cannot absorb the entire excess labor supply, these programs provide training and create dynamism in the labor market.

Financial and business development services

Some programs will require more tailored interventions.

This is the case for financial services, employment services, and health insurance. Despite the country's efforts to promote financial inclusion and employment, these programs do not reach vulnerable population in rural areas such as Puerto Cortés and Golfo Dulce. Their urban design and eligibility requirements have made it difficult for the target population to benefit. Another step would be partnering with the Ministry of Labor to bring a sectorial approach—including fisheries and aquaculture—to its business development and job placement services.

4.1. Risks and challenges in enhancing economic inclusion

Lack of proper incentives to collaborate:

One of the main risks is the lack of incentives for key actors to act collaboratively to implement multidimensional interventions. Similarly, key actors may not be aware of the potential benefits of partnerships. Once establishing a willingness among actors to cooperate, it is important to note that an innovative, cross-sectoral regulatory framework is needed to address the reforms or solutions created to launch a multidimensional intervention.

Budgetary constraints: Lack of budgetary resources relating to the fisheries and aquaculture subsectors, or other relevant institutions, may also affect some initiatives.

Fishers' inertia from traditional work activities: A significant risk stems from the interest or "inertia" of the population to remain in productive activities within the sector. This risk is greater for the elderly, who generally have no interest in changing activities, and for some women, who cannot engage in employment or entrepreneurship because of care responsibilities.

Lack of business dynamism and labor demand: In terms of employability and productive inclusion alternatives, there is a risk that the business sector will not have the capacity to absorb workers, regardless of their level of education and skills. Additionally, there is also a risk that On-the-job training (OJT) programs may not be easily adaptable to the nature of business in the communities.

Failure to update social registry for fisheries: As mentioned, attempts to encourage SINIRUBE and INCOPECA to collaborate and use the information contained in their registries have been unsuccessful. The new fishers' registry must be suitable for cross-referencing information with other relevant sources, such as the national census and the social registry.

5. Conclusions, lessons learned, and next steps

5.1. Conclusions and lessons learned

- ◇ Fishers' and mollusk gatherers' associations have potential to improve the situation for their members. Economies of scale in the capture and distribution of fish and mollusk, solutions for care responsibilities, *in-situ* training for communities, and empowerment in negotiations are some of the most relevant benefits reported by the population.
- ◇ In some geographies with a low private sector presence, it is necessary to consider the public sector as a potential employer for alternative activities.
- ◇ Not having direct access to markets affects income, the potential to generate added value, and to create productive linkages.
- ◇ The burden of unpaid work (domestic and care work) limits the contribution of the female workforce to households and local economies.
- ◇ The pilot study, designed to test the approach for future studies, had some limitations due to the short execution time and the end-of-the-year break. The consulting firm left out two important groups of interest: the public sector and key potential employers in the fisheries

sector. They could also have also included more economic activities in the sample.

- ◇ Analysis of some questionnaire sections was limited—for example, pensions and educational institutions—perhaps due to an excessive focus on the productive dimensions (for example, skills and experience) or due to a lack of expertise of the firm enumerators in this kind of analysis. Lack of experience working with vulnerable communities and with a complex sector like fisheries may also have influenced the relatively limited scope of the gaps assessment.

Annex A summarizes lessons learned from the pilot study for practitioners interested in conducting primary information research.

5.2. Next steps



Photo: World Bank, 2022.

It is critical to identify potential areas and concrete opportunities for collaboration that could be beneficial not only to the population they serve but also to the institutions. For example, it will be important to monitor efforts to create partnerships between INCOPESCA and CCSS for health and social insurance for vulnerable fishing populations, as well as efforts to promote interoperability between fishers and social registry.

Experiences from other countries may be relevant to Costa Rica. Other countries in the region provide examples of good practice in cooperation between fisheries and social sectors. Chile’s “Government Social Agenda for Fishermen” includes an economic inclusion package³¹ to meet the main production needs of workers and improve their activity. Also, Perú has implemented a strategy of social inclusion and intergenerational knowledge transfer for older adults. The program “*Saberes Productivos*”, promoted by local governments and the National Solidarity Pension Assistance Program, provides older adults with social protection while younger generations inherit ancestral knowledge. These are interesting examples of adapting social sector initiatives to contexts with a high degree of rurality and social marginalization, such as those artisanal fishing communities face.

31 The program includes cash transfers to fishers, infrastructure improvements for communities to promote tourism, safety and protective equipment for seaweed harvesting, seed capital and technical assistance for fish farmers, funds for market studies for productive projects, training in basic knowledge of the sector, funds to promote consumption of seafood products in communities and schools, and recognition of crew members as economic agents.

Based on the preliminary pilot study findings, INCOPECSA is preparing similar studies in other Costa Rican provinces. The aim is for INCOPECSA to use the studies' findings to implement policy actions to improve the lives of low-income fisheries workers.

The World Bank team has urged INCOPECSA/MAG to develop a road map on how to use the results of the case study, and future studies, to design a coherent, integrated model to work with low-income fishing communities. An immediate action to be taken is to improve data related to socio-economic conditions of coastal areas and the most vulnerable populations in these areas: youth, women, seniors, indigenous, and afro descendants. Another important task is to improve the studies' reach to different subsectors

according to the productive profile of the territories, for example tourism. To do this, INCOPECSA may need to partner and work collaboratively with other implementing agencies.

The World Bank will continue promoting dialogue between INCOPECSA/MAG and IMAS and the main social and productive institutions. The World Bank team presented this work to INCOPECSA in May 2023 and later in the year it was shared with MAG and the President's Office. The team is planning to expand dissemination with a larger audience, including other key actors—such as INA, IMAS, SINIRUBE, CCSS—to explore opportunities for improving the socioeconomic conditions of fisheries workers and their households.

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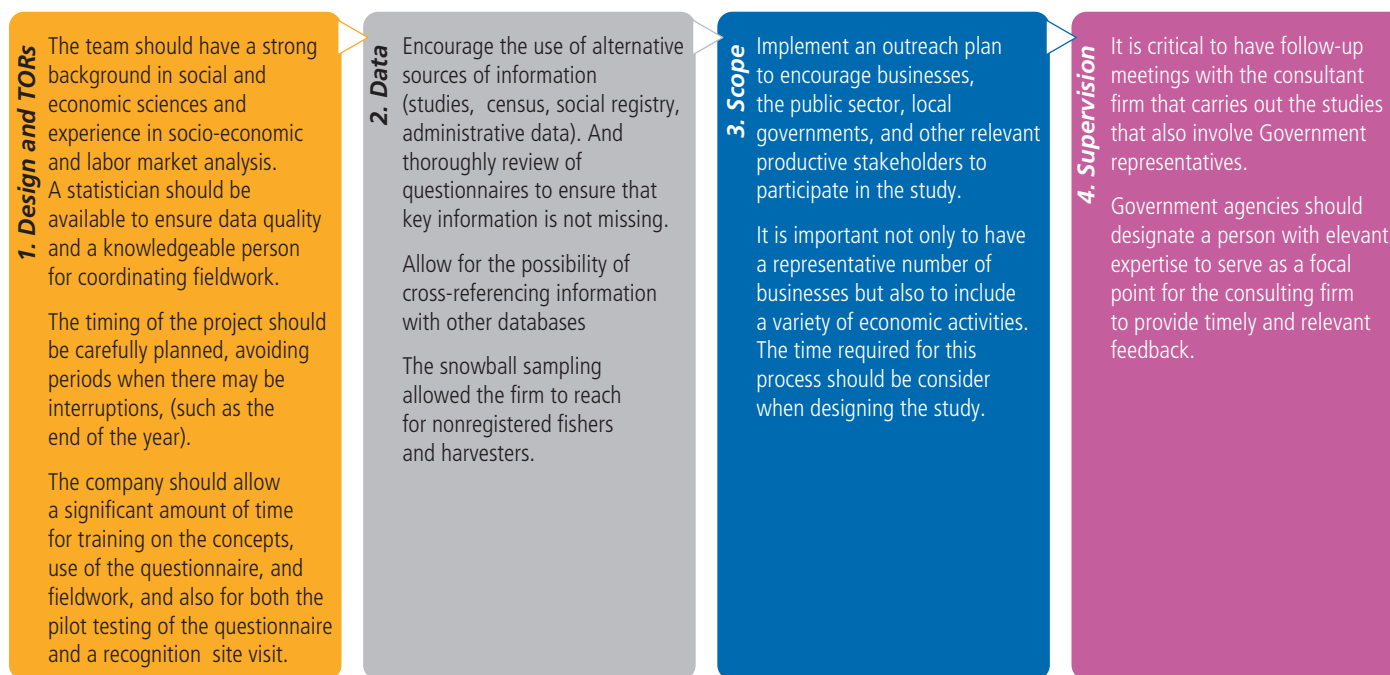
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Annex: Lessons learned during preparation of the case study: A synthesis for primary data collection

FIGURE A.1: LESSONS LEARNED DURING THE PREPARATION OF THE CASE STUDY



Source: Author's formulation.

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



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