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SOCIAL PROTECTION IN SMALL-SCALE FISHERIES AND AQUACULTURE IN LATIN AMERICA AND THE CARIBBEAN



SOCIAL PROTECTION **IN SMALL-SCALE FISHERIES** **AND AQUACULTURE** **IN LATIN AMERICA AND THE CARIBBEAN**

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ACRONYMS AND ABBREVIATIONS

SSA	Small-Scale Aquaculture
AUNAP	National Authority of Aquaculture and Fisheries, Colombia
CAN	National Agricultural Census, Paraguay
CENPAR	National Census of Small-Scale Fisheries, Peru
ECLAC	Economic Commission for Latin America and the Caribbean
DANE	National Department of Statistics, Colombia
FAO	Food and Agriculture Organisation of the United Nations
IESS	Institute of Social Security, Ecuador
MPI	Multidimensional Poverty Index
INSS	National Institute of Social Security, Brazil
SDGs	Sustainable Development Goals
ILO	International Labour Organization
WFP	World Food Program
CCT	Conditional Cash Transfer (program)
RPA	Small-Scale Fisheries Registry, Chile
SAS	Secretariat of Social Action, Paraguay
SISBEN	System for the Identification and Classification of Potential Beneficiaries for Social Programs, Colombia
SOPA	Obligatory Insurance for Artisanal Fisheries, Peru

INTRODUCTION

Given the risks faced by the rural population engaged in small-scale fishing and aquaculture activities in Latin America and the Caribbean, they have different and specific social protection needs. At a global level, small-scale fisheries represent half of the total production of the fishing sector, and this in turn employs 90% of the sector's workforce, of which half are women (FAO, 2015b). In general, international research shows a high vulnerability to poverty among workers engaged in fishing (Béné, Devereux & Roelen, 2015).

Taking into account the economic importance of this sector for small-scale producers, as well as its high degree of vulnerability, the aim of this report is to give an overview of the current state of social protection and challenges facing small-scale fishers and fish farmers in Latin America and the Caribbean. It analyses the social protection needs of this population segment, the main social protection programs in the region, and proposes a roadmap with public policy recommendations to promote adequate social protection.

Small-scale fisheries is characterized by the low use of capital inputs, labour-intensive activities, and relatively low productivity (Béné et al, 2015). The low level of productivity, mainly due to the economic and social barriers faced by households and rural productive units in this segment, reduces economic competitiveness and, therefore, reduces incomes derived from fishing.

For its part, small-scale aquaculture is defined as *“an activity that is practiced on the basis of self-employment, whether exclusively or in a complementary manner, under conditions lacking one or more resources that impede productive self-sustainability and coverage of the basic family basket in the region”* (Rodríguez and Flores, 2014). These deficiencies have to do with lack of access to natural resources, production inputs, markets, financial resources, knowledge about production techniques, and modern technologies to increase the productivity and competitiveness of aquaculture, among others.

Women and men working in small-scale fishing and aquaculture are more likely to be part of the informal economy and mainly engaged in subsistence activities.

The development of small-scale fisheries and aquaculture as a means of subsistence brings particular needs of social protection for the rural population due to risks inherent in this economic activity. Béné et al (2015) identify five dimensions of vulnerability affecting small-scale fisheries: (i) environment, (ii) income, (iii) health, (iv) working conditions, and (v) political marginalization. The environmental aspect is related to natural events such as floods, hurricanes and droughts that have a greater incidence on inhabitants of coastal areas. The income aspect is associated with the seasonality of fishing, price volatility and the risk of loss or theft of work equipment. The health aspect includes a high incidence of disease among small-scale fishers and personal injuries associated with the physical risks of fishing operations and aquaculture. Risks associated with working conditions include low quality employment on boats and processing factories, as well as child labour. And, finally, political marginalization includes the lack of access to spaces that allow fishers to influence decision-making and the process of formulating public policies (Béné et al, 2015). Additionally, there are occupational risks inherent to fishing that help to explain its high accident rate (FAO, 2016b). These inherent risks have to do with exposure to extreme weather conditions, the sinking of ships and attacks by animals, among others.

FAO defines social protection as *“the set of policies and programs that address the economic, environmental and social vulnerabilities of food insecurity and poverty through the protection and promotion of livelihoods”* (FAO,

2017a: 6), and promotes the development of comprehensive and inclusive social protection systems for the rural population through three main components: non-contributory social protection (or social assistance), contributory social protection (or social security) and market policies and labour regulations to guarantee decent employment (FAO, 2015a). Social assistance, also known as non-contributory social protection, refers to cash transfer programs, in-kind transfers, food or productive inputs. Social security, corresponding to contributory programs, is aimed at protecting the population against unforeseen events that affect welfare or income according to risks inherent to each stage of the life cycle and occupation. These programs include health insurance, pensions and unemployment insurance, among others, and are often implemented through subsidized or semi-contributory schemes. Finally, social protection policies focused on the labour market are aimed at strengthening standards of decent and secure employment through instruments such as the formalization of contracts, collective bargaining, occupational safety, minimum wages, and the elimination of child labour.

FAO's framework for social protection recognizes that, in addition to the function of *protection or provision*, social protection can play a role of *prevention, promotion and social transformation*. First, the *protection* function seeks to guarantee basic levels of consumption and well-being. The *prevention* function provides security in the face of risks, increasing the resilience of families against shocks and critical events, while preventing them from falling into poverty or more extreme poverty. For its part, the *promotion* function can strengthen the livelihoods of the population through the increase of human and productive capital. Finally, the *transformation* function of social protection seeks to promote autonomy and social mobility with a focus on those groups that have historically experienced discrimination in order to achieve full social and economic inclusion of all citizens (FAO, 2017a).

According to this framework, social protection can be a tool in policies and programs aimed at promoting each of these four functions separately or together. FAO's contribution to the development of social protection policies lies in the identification of risks and needs of rural populations, maximizing the synergies between social protection and productive sectors, food and nutritional security and the sustainable management of natural resources. In particular, with adequate social protection mechanisms, households engaged in small-scale fisheries and aquaculture can contribute to achieving higher levels of food security and nutrition at the local and national levels, increasing the resilience of the productive sector in the face of external shocks, improving the sustainable management of terrestrial and marine ecosystems, and promoting the inclusive economic development of coastal areas and wetlands (FAO, 2017a).

Within the framework of the 2030 Agenda for Sustainable Development, more and better social protection for small-scale fishers and aquaculture producers is essential in the coming years to achieve the Sustainable Development Goals (SDGs). The premise of "*leave no one behind*" imposes the need to generate specific development policies for different population groups, integrating social, economic and environmental development strategies.

TABLE 1. SUSTAINABLE DEVELOPMENT GOALS LINKED TO THE IMPLEMENTATION OF SOCIAL PROTECTION MECHANISMS FOR SMALL-SCALE FISHERMEN AND AQUACULTURE PRODUCERS

SDGs	Targets	Impact of more and better social protection for small-scale fisheries and aquaculture in the achievement of the SDGs
1. Ending Poverty	<p>1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than USD 1.25 a day.</p> <p>1.2 By 2030, reduce by at least half the proportion of men, women and children of all ages who live in poverty in all its dimensions according to national definitions.</p> <p>1.3 Implement appropriate social protection systems and indicators levels at the national level, including minimum levels, and, by 2030, achieve substantial coverage of the poor and the vulnerable.</p> <p>1.5 By 2030, strengthen the resilience of the poor and people in vulnerable situations and reduce their exposure to extreme events related to climate and other economic, social and environmental crises and disasters.</p>	<p>Expanded coverage in terms of social protection among the most vulnerable communities in the world by 2030. Extending protection to households and individuals engaged in small-scale fisheries and aquaculture requires differentiated strategies for the achievement of poverty reduction. The expansion of social protection in this sector can generate positive effects, not only in the reduction of monetary poverty, but also on multidimensional poverty by contributing in areas such as health and education.</p>
2. Zero Hunger	<p>2.3 By 2030, double agricultural productivity and incomes of small-scale food producers, particularly women, indigenous peoples, family farmers and fishermen, including through secure and equitable access to land, other production resources and inputs, knowledge, financial services, markets and opportunities for the generation of added value and non-agricultural jobs.</p>	<p>Small-scale fisheries and aquaculture are an important source of food security for vulnerable populations, while at the same time providing healthy food with high nutritional value. Among the impacts of the promotion of social protection in this sector is the increase of high-value food sources at the local and national levels, contributing to the objective of "Zero Hunger".</p>
3. Health and Well-Being	<p>3.7 By 2030, ensure universal access to sexual and reproductive health services, including family planning, information and education, and the integration of reproductive health into national strategies and programs.</p> <p>3.8 Achieve universal healthcare coverage, in particular protection against financial risks, access to quality essential health services and access to safe, effective, affordable and quality medicines and vaccines for all.</p>	<p>Identifying unmet demand and promoting and encouraging greater access to primary health care services, as well as developing health insurance schemes, are key functions of social protection systems. Timely access to health-care services and health insurance schemes will generate positive impacts on the health and well-being of the population engaged in artisanal fishing and small-scale aquaculture. Receiving adequate and timely treatment can be a major incentive for those who practice these occupations, which are considered the most dangerous in the world, transforming artisanal fisheries and aquaculture into more sustainable ways to escape poverty.</p>

<p>4. Quality Education</p>	<p>4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.</p>	<p>Social protection systems face the challenge of establishing integrated protection and promotion strategies related to the target linked to the training of technical and professional skills in young people and adults to strengthen access to employment, decent work and forms of entrepreneurship. In the case of small-scale fisheries and aquaculture, these strategies can help workers to acquire more knowledge about their work, and at the same time acquire new skills that allow them to have other sources of income, due to the variability of income from fisheries and aquaculture.</p>
<p>6. Clean Water and Sanitation</p>	<p>6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.</p>	<p>The sustainable use of water resources in all sectors implies the expansion of social protection systems to stabilize incomes, reduce liquidity restrictions and promote the sustainable use of natural resources. In addition, social protection systems can offer a platform for small-scale aquaculture producers to have preferential access to priority technical extension services, technology and financial inclusion, thereby improving access to water resources and their sustainable management.</p>
<p>8. Decent Work and Economic Growth</p>	<p>8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services.</p> <p>8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead.</p> <p>8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.</p> <p>8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.</p>	<p>Social protection is an important tool in mitigating the occupational risks inherent in fisheries activities and promotes the long-term sustainability of various survival and development strategies for the most vulnerable sectors. Therefore, expanded coverage of social protection in small-scale fisheries and aquaculture can contribute to the achievement of goals related to formalization, growth of small and medium-size enterprises, the decoupling of economic growth from environmental degradation through the stabilization of incomes and the prevention of overexploitation; and the protection and promotion of international standards of decent employment to reduce precarious employment.</p>

<p>10. Reduction of Inequalities</p>	<p>10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average.</p> <p>10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.</p> <p>10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality.</p>	<p>The expansion in social protection for small-scale fisheries and aquaculture can contribute to the achievement of the targets of the SDG "Reduction of inequalities", through an increase in the incomes of low-income segments, the inclusion in pre-existing policies of groups of the population that have been historically excluded, and the promotion of a specific framework with specific and affirmative actions for this sector.</p>
<p>11. Sustainable Cities and Communities</p>	<p>11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.</p>	<p>The expansion in social protection for small-scale fishers and fish farmers contributes to achieving the target linked to the reduction of deaths and people affected by disasters, the reduction of economic losses and the protection of people in situations of high vulnerability. This is because social protection can have a positive impact on the sustainable management of natural resources and risk management, increasing resilience and reducing the negative effects generated by disasters at the social and productive level.</p>
<p>12. Responsible Consumption and Production</p>	<p>12.2 By 2030, achieve the sustainable management and efficient use of natural resources.</p> <p>12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.</p>	<p>Social protection for small-scale fisheries can promote the sustainable use of natural resources through the protection of income during periods of closure and are linked to broader intersectoral poverty reduction strategies to provide productive, commercial and training designed to reduce losses in the supply chain.</p>
<p>13. Climate Action</p>	<p>13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.</p> <p>13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities.</p>	<p>An increase in the coverage of social protection contributes to achieving the target related to the increase of resilience and planning in the face of climate change, through income stabilization, diversification of livelihoods, income transfers accompanied by productive services and early rehabilitation, and the promotion of more sustainable productive practices in the territories that suffer from prolonged environmental crises.</p>

14. Marine Life	<p>14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.</p> <p>14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.</p> <p>14.7 By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism.</p>	Social protection for small-scale fishers and fish-farmers can play a fundamental role in guaranteeing basic levels of consumption, incentivising sustainable productive practices on land and sea, and connecting them with financial and non-financial services for their productive inclusion. It can also help to achieve the targets of the goals related to “marine life” and “life of terrestrial ecosystems.”
	14.b Provide access for small-scale artisanal fishers to marine resources and markets.	
15. Life of Terrestrial Ecosystems	15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.	

Source: Based on the United Nations Sustainable Development Goals (online), available at: <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

The SDGs and the need for comprehensive social protection systems (Cecchini and Martínez, 2011) are behind the expansion and strengthening of these systems for small-scale fisheries and aquaculture in Latin America.

Taking into account the current situation in the region, the following section analyses the vulnerabilities and specific needs of small-scale fishermen and aquaculture producers in the Latin American context. This is followed by a summary of the existing social protection policies and programs for this sector in the region and, finally, public policy recommendations and a roadmap to strengthen social protection for small-scale fisheries and aquaculture producers going forward.



Preparation of vessels for
artisanal fishing in
Buenaventura, Colombia.
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1. ANALYSIS OF THE VULNERABILITIES AND SPECIFIC SOCIAL PROTECTION NEEDS OF SMALL-SCALE FISHERMEN AND AQUACULTURE PRODUCERS

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Due to the informality that characterizes small-scale fisheries and aquaculture in Latin America, it is difficult to calculate exactly the total population engaged in this activity. In aggregate terms, it is estimated that fishing and aquaculture generate around 1.4 million direct jobs in the region (Rodríguez and Flores, 2014). This means that if we consider that the average household size in the poorest quintile of the region is 4.5 people (ECLAC, 2018a), it could be estimated that a total of 6.3 million people depend directly or indirectly on fisheries and aquaculture in the region.

In the particular case of small-scale aquaculture, it is estimated that at least 100 000 people work directly in this activity (Flores, 2013). This means that, if we consider the average number of family members per household in the poorest quintile of the region, around 450 000 people depend directly or indirectly on small-scale aquaculture as their main source of income and food. The average profile of the household head of these families “[...] is a small-scale farmer, with little formal education and a large family, working a small area of land in a remote location, usually without well-defined property rights.” (Rodríguez and Flores, 2014: 8). This description, as seen below, is similar to the profile of the typical small-scale fisherman.

This section covers five main areas related to the vulnerabilities and social protection needs of small-scale fishermen and aquaculture producers in the region. These areas are: gender, climate change, health and pension systems, variability in income, working conditions and crime. In each of these areas, examples from different countries in the region are given.

A. Gender gaps

According to global statistics, there are clearly defined gender roles in the fishing sector. Harvest is an activity carried out mainly by men, while the processing (preparation and cleaning) and sale of fish is mainly carried out by women, who are often wives, companions or widows of fishermen (Béné et al, 2015). These same trends are seen in most Latin American countries.

In the case of Chile, the vast majority of those registered in the Small-Scale Fisheries Registry (RPA in Spanish) are men, while only 23% are women. In the case of Colombia, only 13% of those registered in the database of the National Aquaculture and Fisheries Authority (AUNAP) are women. In Paraguay, data from the National Agricultural Census (CAN) shows that 35% of people engaged in fishing are women, as well as 10% of small-scale aquaculture producers. In the case of Peru, the proportion is much lower: according to the National Census of Small-Scale Fisheries (CENPAR), only 3.1% of those engaged in fishing are women (Godoy et al, 2016).

There is no clear data on the participation of women in the different stages of the fisheries production chain. In fact, studies from the region (Godoy et al, 2016) reveal there is a major challenge facing information systems to measure or estimate the real participation of women in the sector. The limited information available is mainly linked to capture and production activities, without considering the wide spectrum of

other activities included in the fisheries value chain in rural territories, or providing information on fish processing and marketing activities in which rural women tend to have a greater participation. This lack of information makes it difficult to quantify and fully understand the profile of fisherwomen in Latin America and the Caribbean and, therefore, their vulnerabilities and particular needs for social protection.

In the case of the countries mentioned above, it is known that the average age of women engaged in small-scale fisheries is over 40 years (Godoy et al., 2016). This, for example, could suggest a higher incidence of health risks compared to the average for women in other economic activities and a higher pension burden.

Regarding the degree of dependence of households on the income of women, there is great heterogeneity in regional information. According to survey data, in Chile, 91% of women engaged in small-scale fisheries are considered heads of households, while in Paraguay the figure is 53% and in Colombia 34% (Godoy et al., 2016). This trend is also seen in cases where fishing is the main economic activity. In Peru, of the total women engaged in marine small-scale fisheries, 98% indicate that it is their main economic activity, while only 60% of women engaged in freshwater fishing said the same. In Colombia, only 15% of women engaged in small-scale fisheries and fish-farming said that this is their main economic activity (Godoy et al., 2016). This low percentage could be due to the inclusion of aquaculture, which is usually combined with other agricultural activities. More research is needed to understand these differences between countries in the degree of dependence of households on the income of fisherwomen and female aquaculture producers.

In general, the level of access of fisherwomen and female aquaculture producers to social security in the region is very low. In Peru, the percentage of women working in fisheries activities covered by a life and pension insurance policy is barely 1%, and in the case of aquaculture 6.4%. In Paraguay, the level of access to social security is 15% in the case of fisheries and 22% in the case of aquaculture. In Colombia, the level of access is higher for the particular case of the public health service included in SISBEN (System for the Identification and Classification of Potential Beneficiaries for Social Programs), which covers 78% of fisherwomen (Godoy et al., 2016).

Sources consulted on the level of access of fisherwomen to social protection do not include information to compare these percentages with men. However, there is evidence that indicates a gender imbalance in access to social protection. In the case of Colombia, the national household survey indicates that 83% of the population dedicated to fishing and aquaculture is affiliated with the subsidized social protection regime (MARD-FAO, 2015). This figure contrasts with 78% coverage for women only, and suggests that, in the case of fisheries and aquaculture, women have a lower level of access to social security than men.

In general, more information is still needed to determine the socio-economic profile of women working in fisheries and aquaculture in Latin America and the Caribbean, in order to identify their particular social protection needs and include them in the design of policies with a gender equality approach.

B. Climate change and environmental vulnerability

Rural populations engaged in small-scale fishing and aquaculture are highly vulnerable to the effects and negative impacts of climate change:

- **The impacts on economic activity** linked to fisheries and aquaculture are reflected in problems such as greater variability of prices and inputs costs for the activity, less availability of fishing resources, damage to basic shipping infrastructure for capture fishing, aquaculture production and trade circuits.
- **The impacts on livelihoods** have to do with a decrease in the availability of fish for consumption, the high variation and vulnerability of family income, the loss or damage in equipment and supplies, and greater exposure to natural disasters due to the location of houses in proximity to water sources, especially in the case of fishers who live in coastal areas where a steady increase in ocean levels is expected in the medium term.
- **The main effects of climate change on capture fisheries and aquaculture production** have to do with variations in the mean sea level, increases in ocean temperatures, changes in marine currents, changes in the reproductive behaviour of fish and changes in body size. In continental zones, these effects are mainly comprised of droughts or floods that can negatively affect the fish population in rivers, as well as the quality of soils and water resources.

Regarding projected climate-related effects, it is estimated that, in the case of Colombia, the tuna population could suffer a 5.7% reduction in the coming decades. One possible explanation lies in the increase in the temperature of the oceans, which could displace this species towards colder regions (ECLAC, DNP and IDB, 2014). Changes in ocean temperature affect small-scale fishers due to the variation it causes in fishery resources and, therefore, in their income levels.

In the particular case of El Niño, the negative effects also have to do with the degradation of fishing infrastructure, specifically of wharves and small docks (Ministry of Production of Peru, 2016). The scientific evidence on the effects of climate change on the frequency or intensity of this phenomenon is still not clear (Cho, 2016); however, there is evidence of the effects of El Niño on incomes in the small-scale fishing sector. For example, Laguna de Los Patos, in southern Brazil, is known to represent a source of income for approximately 52 families engaged in fishing for shrimp. The increase in rainfall caused by El Niño causes the volume of water in the rivers to increase, which in turn raises the water level in the lagoon. This phenomenon has caused a significant reduction in shrimp population and, therefore, in the fishing resources available to families in the area (FAO, 2013a). In addition, El Niño causes excess rainfall in some areas of the region and drought in others. Droughts also have a negative effect by decreasing the fish population and hindering aquaculture production.

Another example of the effects of climatic variations on income has to do with the frequency of hurricanes. Again, the scientific evidence on the connection between hurricanes and climate change is still unclear; however, it is known that the increase in temperature and ocean levels tends to aggravate the intensity of these disasters (C2ES, online). For example, as a consequence of Hurricane Mitch that hit Central America in 1998, the disease known as the “white spot” spread, which considerably reduced shrimp farming in the region. Other crop species that suffered negative consequences after this hurricane were “[...] tilapia (*Oreochromis sp.*), freshwater shrimp (*Macrobrachium rosenbergii*), carp (*Cyprinus carpio*) and guapote (*Cichlasoma sp.*)” (FAO, 2013a: 43).

In the case of aquaculture, the negative effect of climatic variations has to do with the occurrence of frosts. This phenomenon also affects agriculture and, therefore, the food security of small-scale aquaculture producers engaged in this activity (Ministry of Production of Peru, 2016).

It is interesting to mention that climate change can also have ambiguous effects on the livelihoods of fishers. For example, there is evidence that the temperature variation in the Galapagos Islands, as a consequence of El Niño in 1997 and 1998, led to an expansion in the population of various marine species, such as lobsters and sea cucumbers (Defeo et al., 2013). These temperature variations also explain the migration of fish, which can have positive and negative effects on the availability of fish resources in different geographical areas. Although it is possible to identify positive effects of climate change on the availability of fish resources, these are marginal in comparison to the aggregate negative consequences for the livelihoods of small-scale fishers and aquaculture producers in the region.

In short, climate change affects a large number of variables for the development of small-scale fisheries and aquaculture (Field, 2014). There is a direct relationship between climate change and the occurrence of extreme natural events that have direct consequences on income and food security of rural populations, including those that depend on small-scale fisheries and aquaculture, which represents an important challenge for the expansion of social protection systems linked to early warning and response systems, civil defence organisations, early recovery measures, and the promotion of sustainable production practices.

C. Health risks

The social protection needs in terms of health for small-scale fisheries and aquaculture are related to occupational risks inherent in the activity and the low level of access to healthcare services. In the case of small-scale fisheries, international evidence indicates that this is one of the most dangerous work activities that exist due to its high accident rate (Béné et al., 2015). Some of the causes of accidents are falls, prolonged exposure to extreme temperatures, fires due to engine overheating, and handling of harpoons, knives and hooks (ACHS, online). Among the factors that explain the high accident rate in fisheries is that fishermen “[...] *work longer hours, ignore fatigue, work with small crews and do not comply with safety regulations [...]*” (FAO, online). The low level of compliance with safety regulations is compounded by the high degree of informality in small-scale fisheries, which hinders supervision by labour authorities and the access of fishermen to social security services. Also, according to information collected through interviews with fishers in El Salvador, a high prevalence of stomach, respiratory and dermatological diseases associated with precarious hygiene and sanitation conditions is observed (Quesada, 2017).

In the case of aquaculture, some risks inherent to this activity are poisoning by inhalation or contact with corrosive substances, burns, electric shocks due to poor installation of equipment, infections due to low hygiene standards and accidents related to falls into ponds or on to solid surfaces or damp soils (Oliveira et al., 2017).

Social protection programs for fishing and aquaculture communities with an integral focus on healthcare¹ are virtually non-existent in Latin America and the Caribbean. To this is added the informality of many

¹ Prevention and promotion, medical care and facilitation of access to more complex health services in coordination with the Ministries of Health.

small-scale fishers and aquaculture producers, which makes it even more difficult to reach them through contributory mechanisms. A recent survey conducted in Peru revealed that 70% of small-scale fishermen lack health insurance (Villanueva and Flores, 2016). This despite the existence of state social insurance available to fishermen, which has a monthly cost equivalent to USD 24. The informality and cost of medical insurance can explain the low level of coverage, as well as the geographical dispersion of these populations, which hinders their access to healthcare centres. Another limitation is the variability and difficulty in predicting income, which generates high levels of economic uncertainty and makes it difficult to assume regular monthly insurance payments.

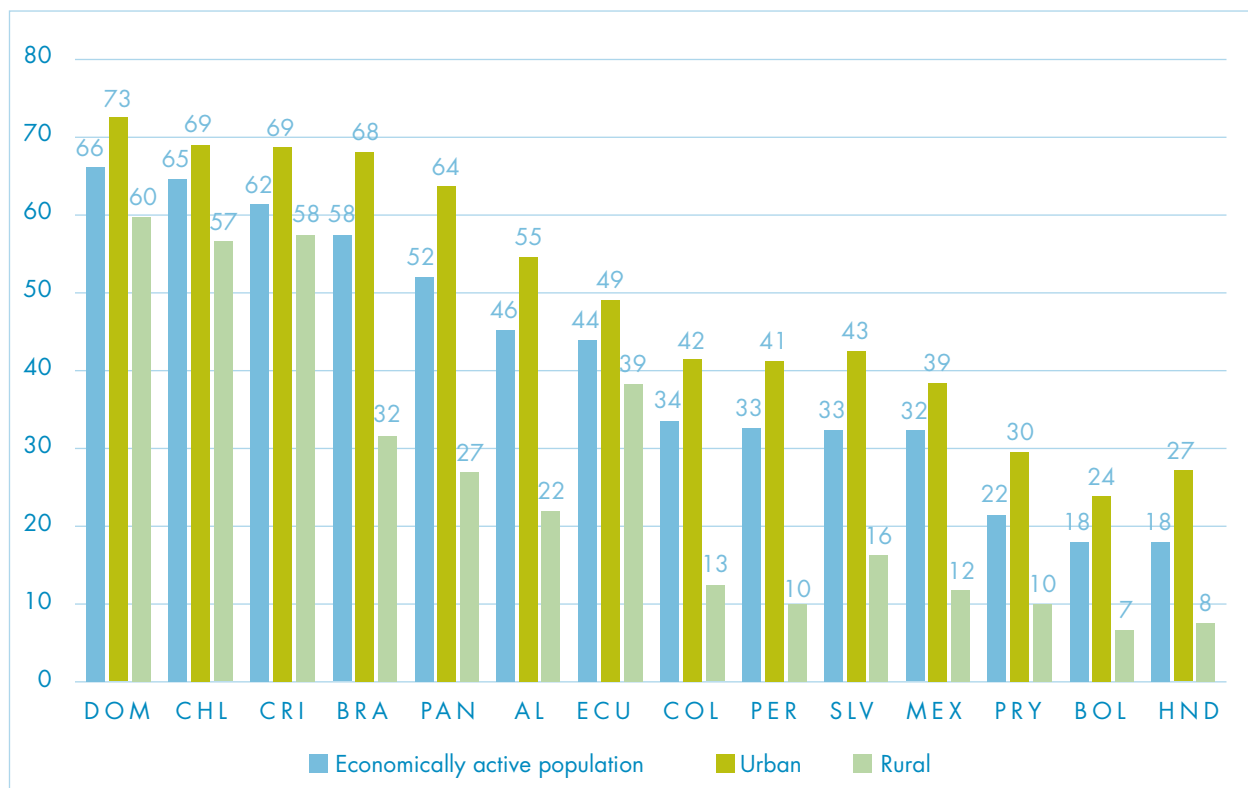
D. Pensions

In general, the region shows a large deficit in terms of contributory social security schemes. Coverage is determined by income, gender and geographic area, which means that the most vulnerable population segments have lower access to pensions. In the case of women, they are at a comparative disadvantage compared to men in the region, because although the percentage of employed workers affiliated with a pension system in 2015 was 50% for men and 51% for women, considering the average of 17 countries in the region (ECLAC, 2018b: 59), the amount of pensions received by women continues to be lower in the vast majority of cases. For example, for the eight countries in the region where pension information is available, considering both contributory and non-contributory pensions², pensions paid to men exceed, on average, 1.5 times the pensions paid to women (ECLAC, 2018b: 74).

There is also an important disparity in the urban/rural ratio of those affiliated with a pension scheme. According to data from ECLAC (2018b), of 13 countries in Latin America, the average rate of affiliation in urban areas of those over 15 years of age exceeds by 2.5 times the rate in rural areas. The countries with the greatest gaps in this respect are Peru (where the rate of pension scheme affiliation in urban areas exceeds by 4.3 times the rural rate), the Plurinational State of Bolivia and Honduras, where this difference is 3.5 times. On the other hand, the geographical gap in terms of pension scheme affiliation is smaller in the Dominican Republic, Chile and Costa Rica, where the rate of pension scheme affiliation in urban areas exceeds the rural rate by 1.2 times (see Graph 1). In the long term, this situation means that the elderly population living in rural areas is at a systematic disadvantage compared to the urban population as far as social protection is concerned due to the “lower penetration of formal employment, institutional structures, and social security contribution mechanisms in rural areas” (Rossel, 2012).

² Plurinational State of Bolivia, Chile, Costa Rica, Ecuador, Mexico, Panama, Paraguay and Peru.

FIGURE 1. LATIN AMERICA: PROPORTION OF EMPLOYEES AGED 15 AND OVER AFFILIATED WITH A PENSION SYSTEM, BY AREA OF RESIDENCE CIRCA 2015 (%)



Source: ECLAC (2018b).

In terms of small-scale fisheries and aquaculture, the logic turns out to be very similar, albeit with even wider geographical gaps. Although there are policies that focus their efforts on improving access to social security for the most vulnerable population, not all of these actions include workers in the small-scale fishing and aquaculture sector as beneficiaries. In Peru, for example, 94.3% of fishers are not affiliated with any pension scheme, while in the case of Colombia this rate is 97% (Villanueva and Flores, 2016). In Chile, only 8% of fishers registered in the Small-Scale Fisheries Registry are affiliated with a pension scheme (CONAPACH, 2015). In the case of El Salvador, it is estimated that 93% of people employed in fishing and aquaculture work in the informal sector and, therefore, do not have pensions (Quesada, 2017).

In the case of Brazil, there is a pension scheme for semi-contributory family farming known as *Previdência Rural*, which includes the small-scale fishing sector. Under this program, men and women over 60 and 55 years of age, respectively, are entitled to receive as a pension the equivalent of the monthly minimum wage, corresponding to USD 300. There are no precise statistics on the percentage of fishers who effectively benefit from this program, but it is estimated that, in 2012, 5.8 million informal workers in Brazil were enrolled in this program (FAO, online). In Ecuador, the *Seguro Social Campesino*, which provides social protection for agricultural workers and small-scale fishers, includes an old-age pension. This is granted only to the head of the family if they comply with the conditions of age and duration of contributions, with the corresponding amount equal to 75% of the reference basic salary, and cannot exceed USD 100 (Instituto de Seguridad Social, online).

The low coverage of pension systems for small-scale fishers and aquaculture producers in Latin America and the Caribbean is mainly due to structural factors such as the informality of work and the already low coverage of social protection programs in rural areas, as well as the absence or weakness of key labour institutions in rural areas for social protection, such as workplace inspections, the definition and enforcement of a minimum wage and the organization of workers and employers (ILO, online).

E. Variability and precariousness of income

There are no regional statistics for Latin America and the Caribbean on the income levels of small-scale fishers and aquaculture producers; nevertheless, it is known that these populations live mostly in a situation of poverty and/or high vulnerability due to their economic situation and limited access to public services. For example, the most recent national agricultural census in Colombia shows that, of the total number of rural families that reported being engaged in fishing activities, 68.8% live in poverty according to the country's Multidimensional Poverty Index (MPI)³. Additionally, the same census indicated that more than 85% of small-scale fishers and aquaculture producers in the country do not have access to sanitation or sewerage services (DANE, online).

One of the factors that make it difficult for households to overcome monetary poverty is the high variability in income, which makes it difficult to budget the allocation of resources to consumption and investment. The variability in income is related both to the high seasonality of fishing activity, as well as to the variability in prices of related products in the market, occupational risks and the low capacity of small-scale fishers to increase their productivity. These challenges negatively affect the supply of fish and the competitiveness of producers in the market. This seasonal variation in incomes may worsen as a consequence of climate change. In addition, in many fisheries dependent communities there may be economic and social barriers to saving, accompanied by a low level of access to formal credit.

In El Salvador, it is estimated that 82% of fishers who have access to financing have done so through informal channels (Quesada, 2017), which represents opportunities and risks: on the one hand, the sources of informal credit are usually friends and family who can provide greater facilities for the quick relief of liquidity constraints, but on the other, fishers often turn to informal lenders linked to organized crime, who charge very high interest rates and ensure the repayment of loans through the use of force (Béné et al, 2015). Among the reasons for resorting to informal credit is the lack of access to formal credit (due to the absence of collateral or financial guarantees) and the fear of formalization due to possible costs related to taxation, payments for paperwork related to obtaining permits, or appearing as "a self-employed fisher" in social databases used in processes of targeted social programs and productive inclusion (Quesada, 2017).

In the case of Costa Rica, there are financing lines for aquaculture, but there are no differentiated interest rates or specific payment periods for small-scale fish-farmers (Rodríguez and Flores, 2014). These models, which ignore the income variability of the fishing and aquaculture sectors, are in turn entry barriers for their formalization.

³ The MPI is calculated taking into account various types of indicators at the household level related to health, education and standard of living.

F. Labour conditions

ILO Work in Fishing Convention 188 establishes the minimum requirements that must be fulfilled by “*fishing vessels of 24 metres in length or more that usually remain more than three days at sea and, after consultation with other fishing vessels, taking into account the number of fishers on board, the area of operations and the duration of the trip*” (ILO, online). These requirements apply to the case of small-scale fishing carried out under these conditions and correspond to the need to promote minimum standards of “decent work” in marine capture fisheries. Some of the areas covered in this instrument are mandatory periods of rest, minimum age, access to medical services, remuneration and accommodation conditions.

However, in the case of small-scale fisheries, the main challenge for compliance with minimum labour standards is the prevalence of informality and working conditions in a situation of poverty. When it comes to small-scale fisheries relying on self-employment, it is not possible to guarantee minimum standards for fishers who also face a higher risk of accidents due to the extreme conditions in which they work.

The challenges in terms of decent work are also present in the case of aquaculture. For example, in Chile, there is a practice of diving in order to manually operate underwater aquaculture cages (FAO, 2017b). The risks arise when this practice is carried out without prior instruction or even without an oxygen tank, putting at risk the life of the worker. These same risks occur in the case of small-scale underwater fishing. In the case of Colombia, “[...] *there are only a few [artisanal] fishermen who practice scuba diving, while the young people who venture into this activity have chosen to do free diving.*” (FAO, 2017b: 19). This practice increases the risk of accidents at work or of long-term health problems.

It is difficult to gauge the magnitude of the risks associated with the lack of labour standards for small-scale fisheries and aquaculture in Latin America. This is because the practice of this activity is mainly informal. For example, according to the testimony of a small-scale fisher in Costa Rica:

“*Applying the concept of decent work in this activity is difficult in the context of our reality, since fishermen are usually always out at sea without adequate rest spaces. This is especially evident in traditional fleets characterized by conditions of informality that usually include relatively small vessels and crews*” (Solórzano-Chávez et al., 2016: 31)

With respect to small-scale aquaculture, which is an activity usually practiced with agriculture in family plots or community farms, the same deficits in decent employment seen in other agricultural sectors in the region are evident, including high levels of informality, absence of respect for the minimum wage, precarious unionization and collective bargaining, low access to social protection and weak and informal forms of hiring (FAO, ECLAC and ILO, 2012).

G. Vulnerability to criminality and organized crime

International experience shows that small-scale fishers are highly vulnerable to suffering from the loss or theft of their work equipment (Béné et al., 2015). The loss of equipment represents a situation of vulnerability because it restricts the economic activity of fishing and, consequently, the means of subsistence. In order to return to work, fishers and aquaculture producers usually turn to informal moneylenders, who are occasionally linked to organized crime. This dependence on informal credit is related to the low resilience capacity of fishers with limited access to financial services.

For example, interviews with small-scale fishers in El Salvador reveal that many have been victims of criminal gangs including threats, extortion and robberies. Below is the testimony of one of the fisher interviewed:

“We are exposed to insecurity everyday. We have no security at all. They come to steal our motors. The criminals arrive by boat and, as there is no surveillance, they take their time and threaten anyone who opposes them. With luck they leave us on the shore and then take everything (...) It happens more during certain periods of the year, especially in December. It scares us. During the day or night in the holiday season we are almost afraid to turn the lights on... this is why the boats have guards and weapons, and we can only ask them to leave us alive with a buoy to swim to shore. We are quite exposed” (Quesada, 2017: 70).

Box 1 below summarizes the main risks facing the men and women engaged in small-scale fisheries and aquaculture in Latin America and the Caribbean, outlining specific challenges for national social protection systems in the region.

BOX 1. MAIN RISKS AND SOCIAL PROTECTION NEEDS OF SMALL-SCALE FISHERIES AND AQUACULTURE IN LATIN AMERICA AND THE CARIBBEAN

Gender gaps:

- Women have low economic autonomy, lower access to productive assets and services and high economic dependence on men due to gender systems involved in the allocation of household work and the fish value chain.
- There is a low level of access for women to existing social assistance and protection programs.
- There is a deficit of statistical information on the participation of women in the small –scale fisheries and fish-farming production value chains, and in their access to social protection and promotion policies while conducting these activities.

Climate change and environmental vulnerability:

- High vulnerability and low-income levels due to negative impacts on the quantity and quality of fishing resources available in oceans, rivers and lakes, as a result of changing conditions.
- Losses in aquaculture production due to climatic variations and disasters.
- Greater vulnerability of economic activity (variations in sales prices and inputs, production losses, damage to infrastructure and trade circuits).
- Reduction in levels of food security in families and communities dependent on small-scale fisheries and aquaculture as a consequence of the reduction of fishery resources.

Health and safety in the workplace:

- High vulnerability to occupational accidents due to the development of high-risk tasks and the precariousness of hygiene, health and safety conditions in the workplace.
- Low access to contributory health insurance due to the high informality of the activity.
- Low access to primary healthcare services due to the remote location of some fishing and aquaculture communities.

Pensions:

- Low access to pension schemes in the sector due to labour informality and economic barriers.
- The seasonality and variability of income makes it difficult for workers to contribute regularly to pension funds.
- Low incomes hinder access to contributory pension schemes, or even subsidized pension programs.

Income variability and precarious employment:

- The seasonality of the activity and high variability of income resulting from the changing and uncertain levels of capture fishing and aquaculture production.
- Low incomes and high rates of poverty due to the variability of catches, low productivity and reduced participation in fish value chains.
- Economic and social barriers to saving and access to formal sources of credit, which generates dependence on informal credit.

Decent employment:

- Existence of a low quality labour market due to informality, absence of a minimum wage, precariousness in the organizations of producers and workers, low access to social security, the performance of highly dangerous jobs, and long working hours.

Criminality and organized crime:

- High vulnerability to theft of work equipment, restricting economic activity.
- Risk of threats and extortion.

Source: FAO.



Fish production
©FAO

2. SOCIAL PROTECTION FOR SMALL-SCALE FISHERIES AND AQUACULTURE: THE EXPERIENCE OF LATIN AMERICA AND THE CARIBBEAN

2. SOCIAL PROTECTION FOR SMALL-SCALE FISHERIES AND AQUACULTURE: THE EXPERIENCE OF LATIN AMERICA AND THE CARIBBEAN

The majority of public programs focused on small-scale fisheries and aquaculture in Latin America are almost exclusively aimed at increasing productivity by facilitating access to essential materials and inputs through a productive inclusion approach. Although they have a limited impact without broader social protection policies, these programs can contribute to improving the well-being of these population groups, and may achieve some of the functions of social protection. However, as pointed out in the previous section, the social protection needs of small-scale fishers and aquaculture producers go beyond increasing their economic productivity.

Without social protection mechanisms, the consumption and investment decisions of households in poverty are linked to the same resources, leading them to prioritize their immediate survival through low risk strategies with low profitability. For this reason, the implementation of productive inclusion programs, without social protection programs to protect basic consumption, fails to contain the risks and restrictions that limit the implementation of new production strategies and techniques. These limitations include the lack of liquidity, income instability, and low access to credit, public goods, insurance, and transport and security systems (Moya, 2016).

For example, it is likely that the impact of training workshops will be limited if the target population faces high levels of food insecurity, or that investment in inputs and productive assets under more ambitious business models will be limited by liquidity constraints due to the prioritization of basic needs, or that the sustainable management of fishery resources, especially during closed seasons, will be threatened by the immediate need of families to generate income. In this regard, productive inclusion programs for small-scale fishers and aquaculture producers in the region have been characterized by a limited approach, as they have not taken into account the complexity of the social vulnerabilities of these groups and, therefore, their needs for social protection aimed at promoting self-sufficiency (Rodríguez and Flores, 2014).

The following describes the main social protection programs and initiatives in the region with an impact on small-scale fishermen and aquaculture producers.

A. Insurance and protection mechanisms against climatic shocks, periods of unemployment and workplace accidents

There are some examples of unemployment insurance that benefit the small-scale fisheries and aquaculture sector in Latin America. Mexico has had several micro insurance programs against extreme climatic variations that are aimed at small-scale rural producers. These programs include the Natural Disasters Fund (FONODEN, 1995-2002), the Fund for Rural Populations Affected by Climatological Contingencies (FAPRACC, 2003-2008), the Program for Attention to Climatological Contingencies (PACC, 2008-2011) and the Natural Disasters Attention Component in the Agricultural and Fishing Sector (CADENA, 2011-2013), now called the Rural Support Fund for Climatological Contingencies. As a result of these programs,

83.6% of participants have been able to return to their productive activities after having suffered negative effects due to climatic variations (Cecchini et al., 2015). One of the challenges of these programs has been in their response times, because producers have a high propensity to rely on informal credit immediately after suffering the consequences of inclement weather.

In Costa Rica, there has been collective insurance for small-scale fishers since the 1980s. This insurance works through cooperatives and fishers' associations, allowing their members to register and receive state subsidies (Solórzano-Chavez et al., 2016). One of the challenges of this initiative is to promote the development of fishers' organizations to expand the scope of the insurance. It is worth noting that those fishers who are members of cooperatives are usually not the most vulnerable, due to the transaction costs of forming associations and the existence of gaps in access to information, payment capacity and social participation between different households and productive units. There are no statistics on the level of coverage of this insurance.

In Brazil, there is another example called Unemployment Insurance for Small-Scale Fishers (*Seguro-Desemprego do Pescador Artesanal*). This insurance provides a temporary stipend during the closed season for those fishers who are registered (INSS, online). In addition, this tool fulfils the dual purpose of contributing to the income stability of fishers, and providing incentives for the conservation of the ecosystem. However, one of the limitations of this insurance is that it only covers fishers in the formal sector, since among its requirements is the registration in the General Fishing Registry and regular social security contributions for at least 12 months prior to the request for insurance. These requirements can constitute barriers to entry for poor fishermen who cannot afford to make regular contributions to social security schemes.

In Paraguay, there is a similar mechanism called the National Fishers' Assistance Program. This program began in 2007, with the objective of subsidising fishers who are unable to work during the closed season. This insurance works through an annual payment of approximately USD 2 000, in the form of a non-contributory transfer. It is estimated that the subsidy currently benefits 19 648 fishers who must be registered in the General Fishermen Registry and live in a household that is classified as poor (FAO, online; SAS, online). Unlike Brazil, this insurance does not require contributions to the social security system and, therefore, may offer greater coverage of the vulnerable population that is part of the informal sector in the form of non-contributory social protection.

In Colombia, a bill currently under consideration proposes the creation of unemployment insurance for small-scale fishers, which is similar to that of Brazil and Paraguay (AUNAP, online). This insurance represents an incentive for the sector in the closed season and promises compensation in the amount up to the legal monthly minimum wage. Once this law is approved, its implementation will be under the responsibility of the Ministry of Labour, which will define the mechanism for fishers to access the subsidy. In addition to unemployment insurance, this bill proposes the creation of a subsidized social security scheme for small-scale fishers, bearing in mind that it is one of the most vulnerable social groups.

In the case of Peru, a law was enacted in 2017 that seeks to provide insurance coverage to independent small-scale fishers. Law No. 30 636 created the Mandatory Insurance for Small-Scale Fisherman (SOPA), which acts in the form of personal accident insurance and covers the risk of death and bodily harm suffered by independent small-scale fishers including crew and non-crew members. The approximate cost of the insurance is USD 100 per year and the Peruvian government estimates that it will benefit approximately 40 000 artisanal fishers (Ministerio de Producción del Perú, online). The insurance includes compensation for death, total or partial disability, temporary disability, burial expenses and medical expenses. Also, in Peru there is the Complementary Insurance for High-Risk Work (SCTR), which is an insurance plan for

those who perform high-risk work such as fishing and covers preventive assistance for work-related health problems, and medical assistance including surgery and rehabilitation. However, this type of insurance can only be contracted by the employer (Lévano, 2016). Finally, the General Directorate of Agrarian Promotion offers an insurance policy called “Seguro + VIDA” against accidents, which covers personal accidents and grants compensation in case of death or total or partial permanent disability. The insurance is available to independent small-scale fishers and other fishworkers with a monthly contribution of 5 soles, and its coverage extends 365 days a year (Sarmiento, 2017).

There are no precise statistics on the total coverage of these insurance mechanisms in the region. A pending challenge is the design of mechanisms to extend insurance coverage to the most vulnerable populations of small-scale fishermen and aquaculture producers. It is also worth mentioning that the function of unemployment insurance in fisheries and aquaculture should be aimed at protecting the livelihoods of populations vulnerable to the short-term production impacts of shocks. Solutions to external shocks that affect long-term production should be aimed at the adoption of sustainable capture and production practices, and the incorporation of complementary productive activities that increase the resilience of these vulnerable groups.

B. Social security

In Latin America and the Caribbean, access to social security is heterogeneous among countries. Considering a weighted average for 17 countries in the region, 70.8% of the population over 65 years of age receive some type of contributory or non-contributory pension. However, this average hides important differences between countries. For example, Bolivia provides pensions to 96.4% of its population over 65, Argentina to 90% and Uruguay to 87.4%; while, on the other hand, Honduras only provides pensions for 9.6% of its population in this age group, El Salvador for 16.4% and Guatemala for 19.3% (ECLAC, 2018b: 66). Healthcare coverage presents similar disparities, ranging from close to 100% in Uruguay, 75% in Argentina and 70% in Brazil, to less than 20% in Paraguay (Cecchini et al., 2015: 249).

Regarding the access of populations living in poverty, there are different contributory systems in the region that provide social security for the most vulnerable groups. In Colombia, for example, there is the Pension Solidarity Fund (FSP), which constitutes a special account within the contribution of salaried workers aimed at financing the pension system of the population excluded from the contributory system (Cecchini et al., 2015). In terms of healthcare, Colombia also has the System for Identifying Potential Beneficiaries of Social Programs (SISBEN), which allows subsidized medical services to be channelled to people classified as living in poverty. Although this system is not designed to meet the specific needs of small-scale fishers and aquaculture producers in terms of healthcare, it includes these groups that usually live in poverty.

In terms of contributory health insurance schemes, the vulnerable rural population experiences important barriers to access. One of these barriers is the co-payment requirement. Chile, for example, eliminated the co-payment requirement for certain medical services in 2006, in order to expand coverage in the public health system (Cecchini et al., 2015). Other barriers have to do with physical access to health centres. In the case of small-scale fisheries and aquaculture, there is a low level of health insurance coverage in the region, especially in rural territories and isolated fishing communities. This low level of coverage is explained, in part, by the geographic dispersion of rural populations and the lack of health centres and specialists outside the main urban centres.

There is a very low level of access to social security among small-scale fishers and fish-farmers in Latin America, especially to contributory social security, due to the situation of poverty and informality facing many people in these groups. For example, it is estimated that in Peru only 30% of the small-scale fisheries sector has access to contributory social security plans (including health and pensions), in Chile 25%, and in Colombia only 3% (Villanueva and Flores, 2017).

For its part, Brazil has advanced legislation on social protection for fish workers, although the level of access is still limited due to bureaucratic and administrative barriers. Even so, Brazil has insurance programs for small-scale fishers, which include pensions, unemployment insurance, maternity leave, healthcare and workplace accident insurance. But effective access to these benefits is limited due to the strict requirements of the public administration. Some of the barriers faced by fishing and aquaculture workers are their lack of documentation or, even, updating information on their main economic activity in existing public records. This especially affects women engaged in small-scale fisheries who, due to the existing gender systems and their invisibility as productive entities, are registered as “housewives” and, therefore, do not have the same rights as men (FAO, 2016b).

In the case of Peru, the Special Social Security Scheme for Fishworkers and Pensioners entered into force in 2014, through Law 30003, which establishes monthly contributions between 5% and 8% for fishers, granting them the right to a retirement equivalent to 24.6% of the salary of the previous five years from the age of 55 (Lévano, 2016). However, some barriers to accessing this benefit may be the low level of income of this segment of the population, the obligation of monthly contributions, and the need to be registered within the formal economy.

Ecuador, meanwhile, has a similar social security scheme for rural populations that works in a similar way to the Colombian FSP. This is the Rural Workers Insurance, which includes small-scale fishermen. This insurance is financed by the solidarity contribution of salaried and independent workers who are registered with the Ecuadorian Institute of Social Security and offers services such as healthcare, funeral assistance and retirement due to disability or old age (IESS, online).

Informality is one of the main concerns in terms of access to social security and, consequently, different countries in the region have implemented policies aimed at formalizing the most vulnerable sectors within the framework of broad protection and promotion strategies. Brazil has implemented an incentive mechanism for the formalization of small producers through Law 128 of 2008, which aims to facilitate the formalization of self-employed business owners with at least one employee, providing them with access to social security (including health and pensions) through a reduced contribution of 11%. Similarly, Mexico has introduced an incentive scheme for formalization through a reduced contribution to social security and Value Added Tax (VAT) for small-scale producers (Sojo, 2015).

Argentina and Uruguay also have similar contribution schemes that establish simplified, minimum contribution schemes so that microentrepreneurs can access social security. In Argentina, this scheme is known as *Monotributo Social Agropecuario*, which covers workers in small-scale fisheries and aquaculture (Ministerio de Producción y Trabajo de la Argentina, online). In Uruguay, the *Monotributo* scheme also covers fishers with vessels of up to 4 GRT⁴ (BPS, online), in addition to the modalities of *Monotributo* for associative ventures (*Monotributo Sociedad de Hecho*) and for poor households (*Monotributo Social* of the Ministry of Social Development).

⁴ Total Tonnage or Gross Register Tonnage (GRT) is a ship's total internal volume total based on its permanently enclosed capacity.

C. Non-contributory social protection programs

In addition to the contributory and subsidized schemes, an important component of social protection in the last two decades in Latin America has been in the form of non-contributory programs, especially conditional cash transfer programs (CCTs) and state pensions. In terms of CCTs, the number of people who benefited from this type of program increased from less than one million people in 1996 to 132 million people by 2015, equivalent to 21% of the total population in the region (Cecchini and Atuesta, 2017). Meanwhile, the regional coverage of state pensions (including the elderly, people with disabilities and others) increased from about 1 million people in the early 1990s to more than 24 million in 2016 (ECLAC, 2018b). Although these two types of programs have not been designed to meet the specific needs of small-scale fisheries and aquaculture, they have benefited these groups given the high incidence of poverty and vulnerability among these households.

Conditional cash transfer programs that have had the broadest impact in Latin America and the Caribbean. The original objective of the CCTs is twofold — contributing to both economic well-being and the formation of human capital in vulnerable families (Cecchini and Madariaga, 2011). Under this model, the conditions for the delivery of monetary transfers are usually the fulfilment of routine medical check-ups and school attendance.

Initially, and before its expansion into large urban centres, a large part of the transfer programs were designed to exclusively serve rural populations (such as the former *Progresal/Oportunidades* - currently known as *Próspera* - program in Mexico, the *Tekoporâ* program in Paraguay, and the *Juntos* program in Peru), so that their positive impacts may have the potential to strengthen consumption, build human capital and encourage small investments by small-scale fishers and aquaculture producers in vulnerable situations. Although the positive impact of conditional and unconditional transfer programs on the population living in poverty has been demonstrated at the global and regional levels (Bastagli et al., 2016), specific impact evaluations are not available to measure the magnitude of the effects of these programs on household consumption and livelihoods of small-scale fishers and fish-farmers.

Various impact evaluations have demonstrated the effectiveness of transfer programs to reduce poverty in the region. According to World Bank (2016) estimates, although improvements in labour income continue to have a greater effect, cash transfers have been responsible for a 23% reduction in monetary poverty levels in Latin America during the decade from 2003 to 2013. An additional challenge is to verify the impact of these programs in the sustainable reduction of poverty from a multidimensional approach.

Monetary transfers can either have a reactive or proactive role in emergencies. Ecuador offers a case study of the former where, in the wake of the earthquake on April 16, 2016, monetary transfers were given to those affected through the existing infrastructure for social protection programs, such as the PTC Bono del Desarrollo Humano (Beazley, 2017). In the case of a proactive approach, transfers can be used to reduce liquidity constraints and encourage higher-risk investments, greater profitability and environmental sustainability (or discourage unsustainable practices), thereby strengthening the resilience of livelihoods so that poor households can better cope with emergencies. For example, although the Haitian National Program for the Fight against Hunger and Malnutrition was designed in 2010 to respond to an immediate humanitarian emergency, it also took a strategic long-term prevention perspective. Another example of a proactive program is the Uruguayan Agricultural and Livestock Fund, aimed at providing financial support, infrastructure and productive inputs to farmers whose production is affected by external shocks (FAO, 2017c).

In Latin America and the Caribbean, there is insufficiently explored potential for the implementation of proactive social protection strategies in the case of emergencies for small-scale fisheries and aquaculture. One case in which this approach could be implemented is protection against the negative effects of El Niño on fishing and aquaculture activities. This phenomenon, which occurs periodically and is therefore predictable, represents an external shock for production and livelihoods in this sector.

In terms of state pensions, which are available in at least 18 countries in the region (World Bank, 2016), an important challenge is the strengthening of comprehensive and integrated social information databases to facilitate the selection and inclusion of older people in households dependent on small-scale fisheries and aquaculture. Different countries in the region have implemented identification systems such as SISBEN in Colombia, the Social Registry of Households in Chile and Brazil's Single Registry. These information systems could contribute to the identification of vulnerable people and households in the fisheries and aquaculture sector, as well as from the rural population in general, to strengthen their inclusion in social protection programs through coordinated actions between social and productive sectors.

In addition to pensions, some of these programs also provide insurance for disability and death. An example is Ecuador's Rural Workers Insurance program, which covers retirement due to disability of small-scale fishers and includes funeral expenses in the event of the death of a family member (IESS, online).

Finally, another important example of non-contributory social protection is in school feeding programs. During the 20th century, most countries in the region implemented school feeding schemes and measures to reduce food insecurity, absenteeism and school drop out rates, and improve learning. These programs have undergone significant changes since their initial conception, including in their objectives, coverage, institutional framework, mechanisms for social participation and monitoring and evaluation, among others, while showing flexibility to integrate sector-specific policies and achieve more complex social objectives (FAO, 2013b). Today, there is the potential to generate synergies between this type of program and programs to strengthen the productive and economic inclusion of the small-scale fisheries and aquaculture sector. The inclusion of products from small-scale fisheries and aquaculture in school feeding programs, through improved dietary guidelines and the implementation of local public procurement schemes, could generate positive spill-overs for the economic and social well-being of vulnerable rural populations, including increased incomes for small-scale fishers and aquaculture producers, and improved food security and nutrition for participants of school feeding schemes through the consumption of foods of high nutritional value.

D. Development and productive inclusion programs

Finally, it is important to mention some of the main productive inclusion programs, which have the potential to be part of broad social protection strategies for the fisheries and aquaculture-dependent population.

Although, traditionally, productive inclusion programs are not considered part of the social protection system, when they are linked with social assistance programs within the framework of broad poverty reduction strategies, they can generate significant synergies in social protection and promotion. However, most of the inter-sectoral efforts in the region in this regard are focused on agricultural or livestock initiatives, probably due to the lower influence that specialized fishing agencies have within the productive institutional framework or the distribution of fishing agencies in different ministries or secretariats (for example, agriculture, economy

and production), making it difficult to include them in socio-productive strategies linked to the social protection system.

In the case of aquaculture, there are various development and productive inclusion programs in the region linked to the multiple activities of these households that are usually also engaged in agriculture: Paraguay has the National Sustainable Aquaculture Development Plan; Honduras has the Healthy Schools program aimed at providing training and implementing fish farming projects; Uruguay has the National Directorate of Aquatic Resources (DINARA), which provides free technical assistance to aquaculture producers, and fingerlings at subsidized prices; Panama and Mexico, for their part, promote family aquaculture as a tool for improving food security and overcoming poverty in rural areas; and, finally, Argentina created an Aquaculture Cluster in 2011 that seeks to bring together producers, technology providers and related companies (Rodríguez and Flores, 2014).

In terms of small-scale fisheries, most of the countries of the region have programs aimed at modernizing technology and providing commercial support to fishers. In Colombia, for example, the Rural Development Agency manages the project “Support for the Promotion of Small-Scale Fisheries and Aquaculture Projects at the National Level”, which provides training and financing for the acquisition of equipment (ADR, 2017), while the Department for Social Prosperity (DPS) carries out productive inclusion projects focused on ethnic minorities engaged in small-scale fisheries. These projects include the provision of equipment and the promotion of fishers in value chains. Similar projects are present in other countries of the region. In Mexico, there are also initiatives such as the Institutional Program of INAPESCA 2013-2018, aimed at promoting research and technology transfer to improve the national productivity of fisheries and aquaculture (Secretaría de Gobernación de México, online).

E. Policies for the promotion of decent employment in small-scale fisheries and aquaculture

The legal and institutional structures of Latin American and Caribbean countries have failed to adequately develop policies to promote decent employment, which usually take the form of norms in key areas such as hygiene and safety, working hours, minimum wage, worker organization, hiring regulations and child labour.

In general, existing legal frameworks have a marked urban bias and do not reflect the particularities of rural employment, such as seasonality, high informality, physical risks, different types of employment, the specific needs of each productive sector and the State’s lower capacity for enforcement in rural territories. In this framework, the protection of decent employment for rural workers usually falls within the scope of general legal regimes, while specific regulatory instruments are developed in each country, with the notable exception of broad-ranging regimes for rural workers in Argentina (Agrarian Labour Law⁵) and the Oriental Republic of Uruguay (Statute for Rural Workers⁶).

In this context, small-scale fisheries and aquaculture are relatively small productive sectors within an economic sector that is already invisible from the point of view of labour rights in the region, which means

⁵ Law 27 727 from 2011.

⁶ Created in 1978 and updated in 2012.

progress in this area is limited to good practices in the regulation of specific aspects under existing fishing, aquaculture and agriculture laws, or alternatively, in national labour and social protection policies.

In the case of child labour, Costa Rica's Law 8 922, which prohibits hazardous and unhealthy work for adolescents, explicitly prohibits "*c) Any work or activities on the high seas, on ships of any scale and in the extraction of shellfish; d) Any work or activities performed underwater, diving or involving submersion [and] e) Any work or activities using agrochemicals in in the processing, repackaging, handling, transportation, purchase-sale, application or disposal of waste*" due to the dangerousness of the conditions in which these activities are carried out, establishing a minimum fine of 19 monthly wages in case of non-compliance.

With regard to the minimum wage, the current Rural Worker Statute of Uruguay regulates key areas for all rural workers in the country, including those who work in the aquaculture and fishing sector, such as respect for the minimum wage set by the Council of Salaries and the alignment of the rural labour regime with provisions previously in force at the national level, such as an eight-hour working day and a 48-hour week, lunch breaks, one day of rest per week, preferably on Sunday, annual leave, holiday payments, and dismissals, among others. For its part, the 11th Chapter of Costa Rica's Labour Code specifically regulates work at sea and in the navigable waterways of the country, including norms for all fishing activities related to hiring, wage fixing, and compensation for illnesses and accidents. In particular, Article 120 establishes that "*(...) if the fisher is remunerated according to his share of the catch or piecework, the employment contract must indicate the amount of his participation and the method to be used for its calculation; if he is remunerated through a combination of salary and part of the catch, his minimum remuneration in cash shall be specified, which may not be less than the legal minimum wage*".

Regarding the strengthening of cooperatives, trade unions and associations of small-scale fishers and aquaculture producers, Chile's General Law on Fisheries and Aquaculture⁷ establishes a series of conditions associated with not having incurred in anti-union practices and/or fines in the workplace for failure to renew fishing licenses, patents and concessions. Another example is the case of El Salvador, where Article 69 of the General Law on the Regulation and Promotion of Fisheries and Aquaculture (Decree 637, 2001⁸) establishes preferential access to training and technical assistance programs of the Centre for the Development of Fisheries and Aquaculture (CENDEPESCA) by associations of small-scale fishers legally constituted during the first ten years of the Law. In the same way, the countries of the region have established fisheries governance mechanisms at the national and territorial levels (Marine Area Councils), including by law the participation of unions and cooperatives of artisanal fishers with different levels of functions and powers.

Another highly importance aspect for the protection and promotion of decent employment in the fisheries sector is the regulation of diving to ensure worker safety and timely attention to emergencies (FAO, 2017b). Many countries in the region have developed specific health and labour regulations in this area. In Chile, the Directorate General of Maritime Territory and Merchant Marine (DIRECTEMAR) regulates all types of diving in the country, including that carried out in the fishing and aquaculture sector. In Mexico, norm 014-STPS-2000 of the Ministry of Labour and Social Welfare establishes the safety and health conditions required to protect the health of workers exposed to the risks of diving activities. In the case of Honduras, diving is regulated through the Occupational Health and Safety Regulations for Underwater Fishing, established through Executive Agreement 116-01 of the Ministry of Labour and Social Security. In addition, the inter-institutional Commission to Address the Problem of Dive-fishing (CIAPEB) promotes actions that include

⁷ Published in 1992 and modified in 2017.

⁸ Reformed in 2011 and 2016.

a system of training and certification for divers engaged in fishing, the creation of the Hyperbaric Medical Corridor, the creation of a social security program for workers in marine fishing, a census of divers with disabilities, accidents and fatal incidents as a result of this activity, and reforms to sanitary regulations, among others.

Finally, a common aspect is the implementation of registries of small-scale fishers and aquaculture producers in most of the countries of the region. Beyond their functional utility for the management of productive assistance programs, the link between these tools and the promotion of decent employment standards lies in the potential for increased formalization, the management of incentives and sanctions with respect to access to benefits in case of non-performance, respect for the labour rights of workers, and the potential role of these information systems within the framework of comprehensive social protection systems, especially with regard to the implementation of semi-contributory social security schemes and social benefits.

Table 2 below gives a summary of the main social protection instruments for small-scale fishers and aquaculture producers in a situation of vulnerability.

TABLE 2. MAIN SOCIAL PROTECTION POLICIES AND PROGRAMS FOR SMALL-SCALE FISHERS AND AQUACULTURE PRODUCERS IN LATIN AMERICA AND THE CARIBBEAN

Area	Programs, laws, policies	Description	Case studies
Contributory social protection	Subsidized Health System	Health insurance with a minimum contribution level for individuals in a situation of poverty	Colombia, Chile, Brazil Mexico
	Subsidized and / or Mixed Pension Scheme	Right to retirement for people in a situation of vulnerability who have contributed to the pension system with a minimum contribution during their economically active age, including a state or solidarity contribution	Most of the countries in the region
	Formalization and expansion of the contributory base of social security	Simplified formalization schemes and contribution to social security for micro-entrepreneurs and people in vulnerable situations (Monotributos)	Argentina, Brazil, México, Uruguay
	Insurance against the effects of climatic variations	Insurance against the effects of extreme climatic variations	Mexico and Costa Rica

Non-contributory social protection	Insurance or unemployment transfers during the closure season	Grants monetary transfers to fishers who suspend their work in periods in which environmental authorities restrict fishing	Brazil (semi-contributory), Paraguay (non contributory)
	Conditional cash transfers	Monetary transfers to poor or extremely poor households with minors for the protection of family consumption and construction of human capital in the subsidiary generation.	Most of the countries in the region
	Transfers with a reactive and proactive approach	Design of shock-responsive social protection programs to react opportunely to emergencies and strengthen the environmental, social and economic resilience of the rural population before them proactively.	Haiti, Ecuador and Uruguay
	School feeding and public purchases from small-scale fisheries and aquaculture	Model of sustainable and healthy schools to strengthen current school feeding programs in the region, including food security, nutrition and dynamism objectives for local economies.	School feeding programs in all the countries of the region Pilots of local public purchases in most of the countries of the region ⁹
	Non-contributory Pension Scheme	Social old-age pensions for people in situations of poverty or vulnerability, regardless of whether they have contributed to the pension system during their economically active age. Welfare pensions for people in situations of poverty or vulnerability in case of serious illness and / or disability.	Most of the countries in the region
Productive inclusion programs	Technical assistance programs, access to financing and transfer of productive inputs	Provision of inputs and equipment, training, business strategies and linkage, financial inclusion mechanisms for productive projects in fisheries and aquaculture.	Most of the countries in the region

⁹ In Latin America and the Caribbean, the Brazil-FAO Cooperation Fund has led the implementation of public procurement projects from family farming for school feeding programs in 17 countries of the region. <http://www.fao.org/in-action/program-brazil-fao/program-summary/en/>

Decent employment	Registry of Small-Scale Fishermen and Aquaculture	Existence of specific state-run registries for small-scale fishers, for their identification, formalization and management in social and productive policies.	Most of the countries in the region
	Strengthening of cooperatives, unions and associations of artisanal fishermen and fish farmers	Provisions for the legal protection of fisher's and aquaculture organizations, including strengthening their access to rural services	Chile, El Salvador
		Establishment of national and local fisheries councils, with the formal and regulated participation of fishers and aquaculture organizations	Most of the countries in the region
	Child labour	Specific prohibitions for the involvement of children and adolescents in fisheries and aquaculture activities, establishing control mechanisms and fines for non-compliance.	Costa Rica
	Minimum wage	Establishment of general labour regimes for rural workers	Argentina, Uruguay
Establishment of specific provisions on minimum wage fixing in national regulatory bodies		Costa Rica	
Special regulations for diving	Regulation of diving for fisheries and aquaculture (safety, certification, training, prohibitions, among others)	Mexico, Honduras, Chile	

Source: FAO.



Work injuries in the hands of
an artisanal fisherman
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A ROADMAP TO STRENGTHEN THE SOCIAL PROTECTION OF SMALL-SCALE FISHERS AND FISH-FARMERS IN LATIN AMERICA AND THE CARIBBEAN

3. A ROADMAP TO STRENGTHEN THE SOCIAL PROTECTION OF SMALL-SCALE FISHERS AND FISH-FARMERS IN LATIN AMERICA AND THE CARIBBEAN

As discussed previously, a comprehensive and inclusive social protection system includes concerted actions in social security, social assistance and the promotion of decent employment (FAO, 2017a; FAO, 2015a; Cecchini and Martínez, 2011). In the case of small-scale fisheries and aquaculture, creating comprehensive social protection systems in the region for the effective and adequate inclusion of those involved in these activities not only requires maintaining and expanding existing protection schemes focused on this population, but also higher levels of political, technical and operational coordination between fisheries authorities, ministries of agriculture, development and social protection, labour and social security, health and economy, among others.

Although there are different social protection programs and sector-specific policies in Latin America and the Caribbean, their selection criteria, scope and regulations limit the access of small-scale fishers and aquaculture producers, who also tend to be politically invisible, thereby ignoring their important economic, social and environmental role in food systems, the integral development of coastal areas, and the reduction of rural poverty. One of the main challenges, therefore, is to adapt and strengthen existing social and productive interventions to focus on more complex objectives in terms of poverty and rural development, including new and improved levels of coordination.

Another important limitation in access to social protection for small-scale fishers and aquaculture producers is informality, which hinders access to social security and, in many cases, makes this segment of the population invisible, which also affects their access to non-contributory social protection.

In line with the recommendation concerning the transition from the informal economy to the formal economy of the International Labour Organization (ILO, online), the formalization of fishers and aquaculture producers in a vulnerable situation is a first step to improve the information available about these groups and allow their participation in programs of social protection and productive inclusion. Among the factors that explain the persistent informality of this sector are “[...] *long and complex administrative processes*” (Rodríguez and Flores 2014: 53), as well as the lack of specific legislation according to the economic dimension and social vulnerability of workers in small-scale fisheries and aquaculture. Many of the environmental regulations for fisheries have been designed with large-scale economic activities in mind and with a significant impact on the environment. These regulations ignore the reality of small-scale and, by putting an unnecessary administrative burden on them, generate barriers that discourage their formalization. For example, it is estimated that between 70% and 90% of small-scale aquaculture producers in Brazil do not have operating permits (Rodríguez and Flores, 2014). One consequence of the precarious formalization (and, in turn, the lack of coordination with the registries of social programs) is the difficulty in identifying the segment dedicated to artisanal fisheries and aquaculture in a situation of vulnerability and, therefore, the difficulty of channelling them towards them comprehensive strategies of social protection and productive inclusion.

The situation of poverty in which many small-scale fishers and aquaculture producers live can in itself constitute a barrier to their formalization, due to the precariousness of these economies. In such circumstances,

additional efforts are required to identify the characteristics of these vulnerable populations and generate appropriate targeting and selection mechanisms, in order to expand the coverage of social protection programs, specifically to conditional and unconditional cash transfer programs, free medical attention, investments in human capital through training, and the transfer of production inputs together with training and assistance mechanisms (FAO, 2016a).

Another challenge is related to the dissemination and socialization of information about social protection programs and the timely response of institutions or implementing agencies. Given their isolation and high degree of vulnerability, international experience has shown that a significant proportion of small-scale fishers and aquaculture producers do not understand their social rights, especially if they are not members of cooperatives or associations. Regarding the timely response of institutions, in addition to encouraging informality, another consequence of excessive bureaucracy is complex administrative processes that delay response times in terms of social benefits (Béné et al. al., 2015).

Finally, it is worth mentioning the FAO *Voluntary Guidelines for Securing Sustainable to achieve Small- Scale Fisheries in the Context of Food Security and Poverty the Eradication*. These offer guidelines for the design of policies aimed at small-scale fishers in the region. The key principles are: 1) respect for human rights and dignity, 2) respect for cultures, 3) non-discrimination, 4) equity and gender equality, 5) equity and equality, 6) consultation and participation, 7) respect for the law, 8) transparency, 9) accountability, 10) economic, social, and environmental sustainability, 11) an integrated and holistic approach, 12) social responsibility, and 13) social and economic viability (FAO, 2015b). It should also be noted that the United Nations declared 2022 as the International Year of Small-Scale Fishing and Aquaculture, which represents an opportunity to work towards improving social protection in this sector at the highest level.

Box 2 summarizes the main recommendations to strengthen the social protection of individuals and households engaged in small-scale fishing and aquaculture dependent communities. It also includes actions beyond the social sector, considering the concept of the social protection “system” as a whole, as well as recommendations for initiatives with both short and long-term timeframes.

BOX 2. ROADMAP TO STRENGTHENING THE SOCIAL PROTECTION OF SMALL-SCALE FISHERS AND AQUACULTURE DEPENDENT COMMUNITIES IN LATIN AMERICA AND THE CARIBBEAN

1. INFORMATION SYSTEMS

1.1 Improve information, registration and social protection systems for small-scale fishers and aquaculture producers

- Collection and periodical updating of information organized by fisheries and aquaculture zones about all workers engaged in small-scale fisheries and aquaculture.
- Simplify registration processes for small-scale fishers and fish farmers in order to reduce bureaucratic barriers to access.
- Strengthen information collection regarding participants in social programs, including the identification of individuals and households dependent on small-scale fisheries and aquaculture, through intergovernmental coordination that allows interoperability among different administrative records (particularly between registries of small-scale fisheries and family farming) and the joint management of social and productive programs focused on this population.
- Identify and categorize women engaged in small-scale fisheries and aquaculture according to socio-economic level and production to make visible their role along the entire fish value chain, with the objective of designing and implementing social protection programs aimed at addressing their specific needs and risks.

2. LAWS AND REGULATIONS

2.1 Promote compliance through specific legislation for small-scale fisheries and aquaculture

- Identify the rights to social security and decent employment of small-scale fishers and aquaculture producers under the national legal and institutional frameworks, in accordance with international human rights standards and with special emphasis on the principle of equality and non-discrimination.
- Decriminalization of small-scale fisheries through greater complexity in fisheries legislation to prevent this segment from falling into illegality, thus avoiding the deterioration of employment conditions, while improving access to social protection, income and security levels, among others.
- Update legislation promoting decent employment in small-scale fisheries and aquaculture, taking into account that these tasks are among the most dangerous in the world, and that those who perform them are more exposed to occupational accidents. This process should include elements such as the prohibition of child labour, existence of a minimum wage, hiring regulations, safety and hygiene protocols, training, certification, and the promotion of participation in cooperatives and associations.

2.2 Strengthen the promotion and protection of decent employment

- Supervision of compliance with legislation for the protection of decent employment throughout the fish-value chain, with a special emphasis on the fishing and capture process in the case of men and the processing and commercialization stage in the case of women, as well as diving and child labour.
- Facilitate formalization processes through simplified and differentiated procedures for obtaining permits and licenses, expanding the geographical coverage of the entities responsible for these processes —particularly in the areas where the most vulnerable population resides— and developing communication strategies to inform the population about the nature of the process and the associated benefits.

3. NON-CONTRIBUTORY SOCIAL PROTECTION

3.1 Expand the coverage of non-contributory social protection to poor households that depend on small-scale fisheries and aquaculture, facilitating access to existing social assistance programs

- Strengthen access to conditional and unconditional cash transfers, old-age and disability pensions, and income compensation mechanisms in fishing closed seasons.
- Analyse and increase the technical provisions and measures for differentiated service provision for fisheries and aquaculture-dependent communities through local services, strengthening the coverage and adequacy of the social protection schemes for these specific rural livelihoods.
- Increase awareness, empowerment and government accountability for the population living in poverty regarding non-contributory social protection.

3.2 Strengthen synergies between social protection and productive inclusion interventions to benefit small-scale fisheries and aquaculture-dependent households

- Improve the access of small-scale fisheries and aquaculture-dependent households to conditional and unconditional cash transfers and productive inclusion programs (technical assistance, transfers of assets and production inputs, among others), in order to generate impacts on consumption and productive investments.
- Promote training and financial inclusion programs for small-scale fishers and aquaculture producers in coordination with access to non-contributory social protection programs, increasing their capacity for savings and productive planning.
- Promote and facilitate the obtaining of fishing licenses for small-scale fishers.
- Implement a new impact evaluation system to analyse the effects of non-contributory social protection and productive goods and services on households engaged in small-scale fisheries and aquaculture.

3.3 Link social protection programs and other social benefits and institutions with public procurement mechanisms

- Improve the food and nutritional security of children in a situation of vulnerability through the incorporation of products from small-scale fisheries and aquaculture in the different school feeding programs of countries in the region.
- Strengthen the economic inclusion of small-scale fishers and aquaculture producers through the implementation of local public procurement mechanisms for school feeding programs and other local markets created by the State and the private sector.

3.4 Establish and facilitate access to health services for fishers and aquaculture producers at the local level

- Design and implement programs that aim to inform population groups about the risks inherent to their profession and help them develop plans to mitigate these risks.
- Develop mechanisms to identify healthcare needs at the local level and expand coverage through greater coordination between the authorities in charge of social assistance and ministries of health to strengthen the presence of community health units.

4. SOCIAL SECURITY AND PUBLIC SUBSIDIES

4.1 Improve access to health insurance of the population engaged in small-scale fisheries and fish-farming

- Analyse the contributory capacity of potential users, taking into account the payment limitations of individuals dependent on small-scale fisheries and aquaculture, according to their particular risks and needs.
- Expand social security coverage through subsidized or semi-contributory health insurance schemes.
- Develop mechanisms to incorporate the partners and families of fishers and aquaculture producers as beneficiaries in social security programs.
- Eliminate barriers to access to health services in the informal sector, such as the requirement of excessive documentation, which discourages and limits access to healthcare in this segment.

4.2 Develop semi-contributory pension schemes for small-scale fishers and aquaculture producers

- Adapt national pension schemes to the contributory limitations of workers in the sector, taking into account the economic vulnerability of family farming in general, and small-scale fisheries and aquaculture in particular.
- Develop simplified schemes to promote formalization and contribution to social security for micro-entrepreneurs and people in vulnerable situations (Monotributos) for small-scale fisheries and aquaculture.

4.3 Develop semi-contributory mechanisms for unemployment insurance and/or non-contributory income transfers in closed seasons

- Consider the contributory capacity and the vulnerability of small-scale fisheries and aquaculture households in the development of these mechanisms.
- Encourage mechanisms that contribute to caring for the environment and generate incentives to respect environmental restrictions that allow the renewal of fisheries resources, and contribute to the stability of income throughout of the year.
- Expand the coverage of these mechanisms in the informal sector to make them more effective.

5. PREVENTIVE AND PROACTIVE APPROACH

5.1 Protect the physical and economic security of small-scale fishers and fish-farmers against the threats of organized crime

- Increase the presence of law enforcement authorities in ports and areas of operation of small-scale fisheries with the highest rates of citizen insecurity.
- Promote community organization through the creation of neighbourhood-watch networks and the improvement of physical and social infrastructure.
- Strengthen coordination between the different actors in fishing areas: small-scale fisheries and aquaculture workers, port authorities and law enforcement.

5.2 Promote prevention and mitigation plans for the effects of climate change and other natural events that affect small-scale fishers and fish-farmers

- Develop georeferenced maps of specific environmental risks, including the identification of households and productive units in each territory, with emphasis on coastal and riparian zones, based on administrative records of fisheries, aquaculture and social programs.
- Develop insurance mechanisms for losses caused by natural and climatic events in fisheries and aquaculture.
- Ensure the timely response in case of emergencies. To this end, it is especially important to link technical and operational agreements to national defence and civil protection services, social protection systems, and the governing bodies of fisheries and agriculture in each country.
- In cases where markets are still operating, prioritize the swift and timely implementation of cash transfers in response to emergencies, as this allows affected people to meet their needs immediately.
- Proactive cash transfers, inputs and assistance to promote sustainable production practices from the environmental point of view, reducing liquidity constraints and encouraging sustainable practices through income transfers, training and technology transfers to the fisheries and aquaculture sector.

6. POLITICAL PARTICIPATION

6.1 Promote rural organizations in the fisheries and aquaculture sector at the national and local level

- Promote the creation of management committees in fishing zones.
- Ensure the protection of unions, cooperatives and other small-scale fisheries and aquaculture organizations in the face of anti-union, abusive and/or unfair practices.
- Strengthen economic incentives for the creation and successful operation of cooperatives and associations of small-scale fishers and aquaculture producers.

6.2 Strengthen processes of political participation in decision-making related to small-scale fisheries and aquaculture

- In the case of indigenous peoples whose livelihoods depend on small-scale fisheries and aquaculture, recognize and guarantee their right to give prior, free and informed consent in accordance with the standards of the international human rights system.
- Strengthen public spaces for participation and consultation in the design, implementation and evaluation of social and productive programs for small-scale fisheries and aquaculture.

Fuente: FAO.

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Artisanal Fishing and Fish-Farming are key activities for the inclusive development of rural territories, the sustainable management of natural resources, and strengthening of food security and nutrition at local and national levels. Valuing and strengthening these livelihoods is fundamental for the achievement of the Sustainable Development Goals by 2030, in particular for the goals linked to ending hunger and poverty, the achievement of decent work and economic growth, responsible consumption and production, life below water, life on land and climate action.

Social protection is a key tool for achieving these objectives. When properly designed and implemented, social protection schemes not only are capable of containing risks and satisfying basic needs, but can also promote the safe and dignified labor related to capture, production, processing and commercialization in fisheries, the sustainable management of natural resources, and the adoption of riskier and profitable productive strategies among the most vulnerable.

Despite the great advances in recent decades, social protection systems in Latin America and the Caribbean still present important challenges regarding their adequacy and coverage of the rural population. Explicitly, individuals and households engaged in small-scale fishing and aquaculture dependent communities are especially invisibilized and vulnerable to rural poverty, hunger and food insecurity, and environmental vulnerability.

In this publication, FAO presents a diagnosis of the risks and specific needs of artisanal fishers and fish-farmers in Latin America and the Caribbean, makes a compendium of the main programs and existing social protection initiatives in the region for this collective, and proposes a comprehensive agenda of public policies for strengthening the coverage and adequacy of social protection for these populations aimed at the achievement of sustainable development goals.

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