

Social protection to foster sustainable management of natural resources and reduce poverty in fisheries-dependent communities

Report of the FAO Technical Workshop 17–18 November 2015, Rome



Cover photos from top left, clockwise:

©FAO/X.Bouan. Women living in wetlands in Southern Laos.

©FAO. A woman fisher stands by a lake in Sitio Bulogoand, Barangay Matilac in Pigcawayan municipality and shows a gill net she received through FAO. Cotobato Province, Philippines.

©FAO/A. G. Farran. Fishermen fabricate nets in Wathmuok village, outside Aweil, South Sudan.

©FAO/B. Nyakudjara. The Sifelani group in Hurungwe Zimbabwe benefited from FAO's voucher project and have now invested some of the proceeds into a carpenta selling venture.

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ISBN 978-92-5-109661-1

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Preparation of this document

This document provides a summary of the presentations, discussions, conclusions and recommendations of the workshop on "Social protection to foster sustainable management of natural resources and reduce poverty in fisheries-dependent communities", held on 17–18 November 2015 in Rome, Italy. It was jointly prepared by Mariaeleonora D'Andrea, Nicole Franz, Florence Poulain and Susana Siar from the Fisheries and Aquaculture Department, FAO, and Daniela Kalikoski from the Strategic Programme 3 - Rural Poverty Reduction, FAO. The workshop was jointly organized by the FAO Policy, Economics and Institutions team (FIAP) in collaboration with the Fishing Operations and Technology team (FIAO).

The International Collective in Support of Fishworkers (ICSF) and the Caribbean Natural Resources Institute (CANARI) are gratefully acknowledged for the preparation of the contributed papers, reproduced in the last section of the document as submitted.

Abstract

Fisheries-dependent communities and in particular small-scale fishers are exposed to different social, political and economic risks and vulnerabilities. They face social and political marginalization, poverty is widespread and coupled with poor working conditions. The livelihoods of coastal and inland fishing communities are further endangered by the depletion of fish stocks caused by overfishing. Other vulnerabilities include degradation of aquatic environments coupled with natural disasters and climate change.

Although social protection policies have the potential to stabilize incomes, create a safety net for fishers and have the potential of increasing resilience of fishers against diverse types of vulnerabilities, small-scale fishers have an unmet need for social protection policies and few social protection programmes are designed to meet the specific needs of fishers and fisheries-related workers.

Since 2014–2015, as part of a wider strategy to promote rural development within the framework of poverty reduction, FAO started analyzing the linkages between social protection and sustainable use of natural resources, through country-specific case studies in Myanmar, Trinidad and Tobago, as well as Saint Vincent and the Grenadines.

The technical workshop "Social protection to foster sustainable management of natural resources and reduce poverty in fisheries-dependent communities" gathered 29 participants to discuss available evidence and make recommendations for the work programme of the Fisheries and Aquaculture Department in relation to social protection and poverty reduction in fisheries dependent communities. Among the outcomes, the workshop suggested strengthening the conceptual framework for poverty and natural resources management in fisheries-dependent communities in order to reconcile socio-economic development and natural resources conservation. The workshop also suggested carrying out further country case studies and deepening the understanding of the link between social protection and sustainable use of natural resources, exploring how coherence between social protection and fisheries policies can be promoted at country level.

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Abbreviations and acronyms

ABND Assessment-Based National Dialogue CANARI Caribbean Natural Resources Institute

CARD Council for Agriculture and Rural Development
CIAT International Center for Tropical Agriculture

CSO Civil society organization

ESP FAO Social Policies and Rural Institutions Division

FAA Framework for Analysis and Action

FAO Food and Agriculture Organization of the United Nations

FDP Forest-dependent people

FIMSUL FAO Fisheries Management for Sustainable Livelihoods GFCM General Fisheries Commission for the Mediterranean

HIV/AIDS Human immunodeficiency virus/acquired immunodeficiency syndrome

ICSF International Collective in Support of Fishworkers

IDS Institute of Development StudiesILO International Labour Organization

ISPA Inter Agency Social Protection Assessments
IUU Illegal, unreported and unregulated (fishing)

LEG FAO Legal and Ethics Office
LMICs Lower middle income countries
MCS Monitoring, control and surveillance

PTOP From Protection to Production (programme)

RFBs Regional fishery bodies

SISAN Brazilian System for Food and Nutrition Security

SOCPRO FAO Social Protection Team

SSF Small-scale fishery
WFP World Food Programme

UNICEF United Nations Children's Fund

Background to the workshop

Fisheries represent an important source of livelihoods and employment for around 120 million of people around the globe. When the sector as a whole is taken into account, women make up for more than half of the employed workforce. Furthermore, small-scale fishers constitute the greatest share of people working in the sector.

While small-scale fishers greatly contribute to food and nutrition security for them and their communities, in various developing countries they face political and social marginalization and poverty is widespread among them. Access to markets, financial, social and institutional services along with diversified and alternative livelihoods opportunities is often poor. Small-scale and artisanal fishers face also several challenges connected to their occupation, including cases of child labor, forced labour, poor occupational safety and health. With a very high fatality rate fishing is one of the most dangerous occupation in the world.

Fishers and fish dependent communities face also vulnerabilities related to the degradation of environmental resources. In coastal and inland fisheries communities, the depletion of fish stocks caused by overfishing and poor natural resources management practices coincides with other problems, notably the degradation of aquatic environments (particularly of coral reefs, fish habitats and mangrove forests), natural disaster risks and climate change, and competition over resources with sectors of stronger political or economic influence. All these factors pose major threats not only to traditional fishing and coastal communities, but also to the national and local economy and to food security.

Small-scale fishers, and fish workers, generally lack access to social protection systems, including formal social insurance to cover unemployment, pensions, retirement and disability. In fact, they have an unmet need for social protection, both in terms of social assistance and social insurance and very few social protection programmes are specifically designed for the needs of fishers and fisheries-related workers (boat crew members, fish processors, fish retailers' and fish processing factory workers). The reasons for limited coverage of small-scale fishers need to be explored country by country but the high level of informality, mobility and seasonality specific to the sector play a crucial role.

Social protection systems, though, have the potential of stabilizing fishers and fish workers' incomes and provide a safety net in face of a crisis for them and their families. Social protection, in fact, is increasingly being used as a tool to reduce poverty by means of reducing vulnerability to economic, social and environmental shocks and as a mean of reducing social exclusion.

In the agriculture sector, the From Production to Protection Programme (PtoP) built a solid knowledge base of the impact of cash-transfer on the productive capacity of beneficiary households and positive spillover effects on local economies. By providing more income security and investing in rural livelihoods, social protection can contribute to improve agricultural productivity, stimulate local economic development, build resilience, encourage sustainable natural resource uses and promote social inclusion.

^{1 (}FAO, 2015) Social protection and sustainable natural resource management: Initial findings and good practices from small-scale fisheries. Available at: http://www.fao.org/3/a-i4620e.pdf

The importance of tackling small-scale fishers' vulnerability is acknowledged in the recently endorsed Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines). These guidelines, inter alia, recognize the importance of social development with a focus on small-scale fisheries, vulnerable and marginalized groups, and emphasize that fragmentation among development policies and interventions can compromise effectiveness and lead to inefficiency in resource allocation.

It is imperative to give increased attention to social policies and instruments in order to stabilize incomes generated by the fisheries sector and to enable communities – men and women – to access social services that would allow them to move out of poverty and build resilience to shocks. Social protection systems, with their different instruments and linkages with other poverty reduction schemes, can enable households and individuals to better deal with risks while remaining in compliance with natural resources management measures (e.g. closed fishing seasons or established marine protected areas), and furthermore to sustainably engage in more profitable livelihood and economic activities in fisheries. Helping to lift fisheries-dependent households out of poverty will improve the overall livelihood conditions of rural communities and the local economy.

PARTICIPATION AND SCOPE

The technical workshop convened 29 participants, including external experts from research institutions, CSOs and United Nations organizations, as well as staff from relevant FAO departments. The complete list of participants can be found in Annex 1.

The objectives of the workshop were to

- present and discuss findings of case studies and best practices (commissioned by FAO);
- draw lessons from the above;
- identify pathways through which social protection could foster sustainable natural resources management and resilient livelihoods; and
- provide guidance on enhancing social protection systems to empower rural communities and their organizations so that these can help the transition towards more sustainable and equitable natural resources management and poverty reduction.

The workshop outcomes are expected to contribute towards further exploring and filling the knowledge gap at the interface of social protection and natural resources management, with particular attention to resilience to shocks.

Opening of the workshop

The workshop was opened by Mr Árni M. Mathiesen, Assistant-Director General, FAO Fisheries and Aquaculture Department, and by Ms Maya Takagi, Deputy Strategic Programme Leader, Rural Poverty Reduction, FAO.

Mr Mathiesen and Ms Takagi reviewed the background to the workshop, its objectives and expected outputs. The opening remarks can be found in Annex 2.

Ms Natalia Winder Rossi, Senior Social Protection Officer and Social Protection Team Leader, FAO, provided participants with an overview of the FAO approach to social protection. FAO's operational definition of social protection is "a set of policies and programmes that address economic, environmental and social vulnerabilities to food security and rural poverty, by protecting and promoting livelihoods". The rationale for FAO's engagement in promoting social protection is based on the evidence that social protection interventions have significant impacts on food security, nutrition and rural development outcomes. Therefore, social protection interventions can potentially support FAO's own efforts to reduce poverty in rural areas and increase the resilience of smallholders. In recent years, FAO has produced a body of evidence on the economic and productive impacts of social cash transfers in Latin America and Sub-Saharan Africa². Smallholder households have been found to invest the cash transfers in productive activities. Cash transfers have also had positive effects on local income multipliers and household shifts from wage labour to productive investments for self-employment. Evidence suggests that political will is a key element of promoting social protection systems. However, FAO's support to integrated, nationally owned social protection systems alone cannot be enough to achieve rural poverty reduction. Rather, it needs to be part of a broader strategy for rural development. Ms Winder Rossi also acknowledged the need to establish partnerships with other institutions such as the World Bank, the International Labour Organization and the United Nations Children's Fund.

² See the From Protection to Production (PTOP) project, jointly implemented by FAO and UNICEF (available at http://www.fao.org/economic/ptop/home/en/), which assessed contributions of cash transfer programmes in several subSaharan countries.

Information gathering and analysis – building an evidence base to develop an integrated framework and a theory of change. Findings from recent work

The first session of the workshop set the scene for discussions, providing participants with insights on findings from FAO-commissioned case studies on social protection and other available experiences at global, regional and national levels. Cases from other sectors such as forestry and agriculture were also presented in the session. The main contributions are summarized below.

Chair: Ms Maya Takagi, FAO

SOCIAL PROTECTION AND SUSTAINABLE NATURAL RESOURCES MANAGEMENT: INITIAL FINDINGS AND GOOD PRACTICES FROM SMALL-SCALE FISHERIES

Christopher Béné, Senior Policy Officer, International Center for Tropical Agriculture (CIAT), and Mr Stephen Devereux, Research Fellow, Institute of Development Studies (IDS) presented a study commissioned by FAO. The authors explored how social protection interventions could be used to reduce the vulnerability of households and communities who depend principally on renewable natural resources for their livelihoods and food security. For this, fishing communities (both inland and coastal fisheries) and other operators engaged in related activities (such as fish processors and fish traders) were used as a "generic" case study. The analysis shows that while millions of people in the world depend on small-scale fisheries and related activities for their livelihoods and food security. Most of fishers and fishworkers them are however highly vulnerable to shocks and risks from multiple sources. These shocks include: environmental risks such as climate-related disasters and extreme weather events; economic vulnerabilities; health and demographic vulnerabilities including physical injury (fishing is considered the most dangerous economic activity in the world – 50 times more dangerous than the average activity), illness (including epidemics such as HIV/AIDS), and demographic risks such as disability, old age and death; and social vulnerabilities of many types, including child labour and forced labour of fishing crews and processing factory workers. Yet small-scale fishers are relatively neglected in social and development policies. In particular, very few social protection programmes in lower middle income countries (LMICs) are specifically designed for the needs of these socio-economic groups, who also have difficulties in accessing formal social security systems. The analysis highlights many possible entry points for action and, although the global picture appears gloomy, there are several cases which demonstrate that the situation can be improved. South Africa and Brazil, for example, offer some very useful concrete examples of specific interventions that can be tailored to the fisheries sector, thus confirming that the overall political marginalization characterizing fisherfolk communities can be overcome – although more work remains to be done.3

³ The full report is available at www.fao.org/3/a-i4620e.pdf

FOSTERING SUSTAINABLE FISHERIES MANAGEMENT AND REDUCING POVERTY: THE ROLE OF SOCIAL PROTECTION FOR FISHERS AND FISHING COMMUNITIES

Sebastian Mathew, Programme Adviser, International Collective in Support of Fishworkers (ICSF) presented a global study on social protection systems. The study surveyed various types of social protection schemes in 20 countries of relevance to marine and inland small-scale fishing communities in both the developing and the industrialized world, under the aegis of state and non-state actors. The study provides information on both universal and targeted social protection schemes in the realms of protective, preventive, promotive and transformative measures. It also summarizes key responses from different perspectives on a variety of issues: livelihood strategies of fisheries-dependent households; the kind of shocks and hazards that smallscale fishing communities are exposed to; the extent to which fisheries-dependent households benefit from social protection measures in relation to diversification of livelihoods, resilience, and the status and management of fishery resources; factors that prevent social protection measures from reaching the target groups of fishers and fishworkers; the extent, if at all, to which poverty alleviation, sustainable use of fisheries resources and disaster preparedness benefit from social protection schemes; and the barriers/challenges for the members of target population to maintain themselves as fishers/fishworkers, and the role of social protection policies in addressing these. The results clearly show that although many social protection schemes exist, the amount of assistance reaching small-scale fishing communities under these schemes is small, and plagued with many difficulties. The integration of a social protection principle into fisheries management and disaster preparedness, or alternative livelihood options (for example) combined with strengthening the institutional role of fisher/fishworker organizations, are possible pathways to improve the social well-being of these communities in a sustainable manner.

SUSTAINABLE USE OF NATURAL RESOURCES AND POVERTY REDUCTION IN THE FISHERIES-DEPENDENT COMMUNITIES: FINDINGS FROM TRINIDAD AND TOBAGO

Melanie Andrews, Technical Officer, Caribbean Natural Resources Institute (CANARI), noted how in Trinidad and Tobago a comprehensive social protection programme aimed at reducing poverty already exists. However, the paucity of information on the linkages between social protection, natural resources management and poverty alleviation in fisheries-dependent communities in the country makes it difficult to determine whether national and sectoral social protection programmes are reducing poverty in these communities. This study reviewed the results from a desk study of social protection schemes relevant to fisheries-dependent communities being implemented in Trinidad and Tobago, and semi-structured interviews conducted in the fishing community of Blanchisseuse. It indicates that while poverty among fishers and their communities may be low, their vulnerability may be of more concern. It also shows that while fishers may be benefitting to some extent from the broad range of social protection schemes, the direct benefits from the sector-oriented schemes are limited, as they are being developed and implemented in an ad hoc manner due to the inadequacy of the policy framework in the fisheries sector. The study highlights the need for a clearly defined fisheries policy and plan, incorporating climate change adaptation and disaster risk management, and for a more participatory approach to policy development and implementation.4

SUMMARY OF PLENARY DISCUSSION – PART 1 OF SESSION 1

Maya Takagi, chair of the first part of the session, noted the complementarity of the presentations and their value in providing an introduction to the workshop. Fisherfolk are vulnerable to various constraints, including catch fluctuations and exposure to climate change impacts and natural disasters, which make them prone to losing all their assets at once. They also experience poor levels of health and low levels of education.

⁴ The full study is available in pages 191-319.

It was noted that insurance schemes could be one of the main instruments to reduce vulnerability in fisheries, for example through unemployment insurance schemes. Another important mechanism is measures for adaptation to climate change.

Some opportunities identified by the participants to enable access to social protection by fisherfolk include:

- Strengthening community organizations and cooperatives;
- Integrating social protection into fisheries policy;
- Engaging non-state and para-statal organizations.

It was pointed out that the workshop should focus on how social protection enhances natural resources management. This would also include looking at existing broader social protection schemes and understanding how fisherfolk could be integrated into these schemes.

Chair: Stephen Devereux

POVERTY, VULNERABILITY AND SOCIAL PROTECTION IN RURAL COMMUNITIES OF MYANMAR, IDS

Florence Poulain, Fisheries and Aquaculture Officer, FAO Fisheries and Aquaculture Department, presented the preliminary findings of a study on poverty and social protection among rural households in Myanmar. The study surveyed around 22 000 households and collected qualitative data from 160 respondents. Fishing communities were found to be more vulnerable and food-insecure compared with non-fishing communities. Access to formal or informal social protection measures was reported as being lower in fishing-dependent communities. When households reported having access to social protection, it was mostly through unofficial loans. As a result, for most of the respondents debt burden was a great source of vulnerability.

The study findings were presented during two national workshops⁵, and the following recommendations were made:

- Access to effective and appropriate social protection in rural communities should be increased as a key component of poverty reduction and rural development strategies.
 Further research is also needed to determine the levels of accessibility and the adequacy of social assistance.
- Priority should be given to vulnerable fishing communities for poverty reduction and rural development, particularly to increase access to appropriate and effective social assistance.
- A focus on natural resources management and livelihood diversity is recommended.
 Long-term monitoring of the effects of climate change in fishing communities should be undertaken.
- Rural development and poverty reduction programmes should include activities to
 increase knowledge and practices of sustainable natural resources management at the
 community level, and support development of effective links between community action
 and national policy. Further research is needed to accurately and comprehensively map
 natural resources management.
- Finally, poverty reduction programmes should seek to address the issue of debt burdens by increasing access to appropriate financial assistance, including low- and no-interest loans.

SOCIAL PROTECTION AND FISHERIES IN MYANMAR: FINDINGS FROM A NATIONAL DIALOGUE AND SECTOR ASSESSMENT

Lou Tessier, Project Officer, International Labour Organization (ILO) Liaison Office for Myanmar, noted that while the need for social protection is important (owing to high levels of poverty and rising economic inequality), social protection coverage is very limited

The link to the workshops is available at http://www.fao.org/publications/card/en/c/788af4ea-6c52-4639-9227-5edb3c96ad64/

in Myanmar. In response to this, there is growing momentum for social protection in the country through the revision or formulation of a number of policy and legal frameworks. The ILO facilitated an Assessment-Based National Dialogue (ABND)⁶ on social protection, in collaboration with the World Bank and the World Food Programme, which provided concrete policy options for the extension of social protection that were further integrated in national frameworks. Still, the issue of how to effectively deliver social protection remains, especially in rural communities. The presentation took stock of policy-level advancements and called for the adoption of a sectoral approach to the implementation of social protection. Looking at the findings of the ILO Value Chain Analysis in Fisheries, the presentation provided insights on possible ways for social protection to help the fishery sector be more resilient and competitive. In particular, potential benefits could be seen through:

- Unlocking investment capacities (access to cash);
- Improving labour productivity and staff retention (through maternity interventions, breastfeeding rooms and social security provision); and
- Increased risk mitigation, including insurance against loss of productive assets, quota compensation plans, subsidies for improved inputs, and safer occupational safety and health infrastructure.

EVIDENCE FROM A CASE STUDY ON SOCIAL PROTECTION SYSTEMS FOR SMALL-SCALE FISHERIES IN LATIN AMERICA

Miguel Gonzales, Sessional Assistant Professor, University of York, examined the access of small-scale fishers in Latin America to social protection systems. Small-scale fishers in the region are exposed to numerous health-related issues and are weakly protected by social protection systems, labour reforms or fisheries law. Furthermore, few studies have been conducted with specific reference to small-scale fishers and social protection. The case of scuba diving for lobster fishing illustrates the risks and gaps in social protection systems in the region. The lobster fisheries sector is characterized by a high presence of small-scale fishers. Due to lack of proper training and equipment, there is a high number of decompression accidents among divers. Existing labour legislation in the Nicaragua (insurance, retirement plans) mainly targets industrial fishers where formal employment contracts exist. Cash transfers are provided in some countries: in Nicaragua (during the closed season for lobster), in Colombia (with a short-term subsidy because of the decrease in territorial sea), and in Chile (where cash transfers and other social protection measure are available for artisanal fishers). Social protection systems are included in fisheries law but are fragmented in secondary norms (which have different scales and jurisdictions). The lack of political coherence between different interventions across multiple agencies was underlined. Mr Gonzales concluded that small-scale fishers, the majority of whom are self-employed, are less likely to be covered by existing social protection systems, and therefore rely on occasional programmes from the state. The case of Brazil represents an exception to this: it has informal systems of social protection, which include community-based and family support, to serve as safety nets for fishers in case of accidents and seasonal unemployment.

OPTIONS FOR STRENGTHENING COHERENCE BETWEEN AGRICULTURE AND SOCIAL PROTECTION: IMPLICATIONS FOR THE FISHERIES SECTOR

Marco Knowles, Economist, Social Protection Team, FAO, underlined how social protection and agriculture (including fisheries) are both key to breaking the cycle of rural poverty and hunger. Support to smallholder food production as well as to small-scale fishers' livelihood diversification is needed to reduce food insecurity. Consumption and production decisions are highly interdependent, so risks in income-generating activities affect consumption decisions. He underlined how social protection has the potential to

⁶ The ABND is a procedure to assess the state of Social Protection Floor Policies and identify coverage gaps through national tripartite consultations. See the report from the ABND in Myanmar at http://www.ilo.org/wcmsp5/groups/public/---asia/---robangkok/---ilo-yangon/documents/publication/wcms_386563.pdf.

reduce poverty, food insecurity and hunger and increase dietary diversity. Other longterm effects include improved human capital, labour productivity and employability, and also increased investments in on-farm and off-farm activities. Public work programmes can provide infrastructure and community services (such as landing sites and drying racks), reduce the pressure on social networks and renew the participation in these, and stimulate local economies. For social protection systems to be effective, certain elements are important. In the case of cash transfers, the level of transfer has to be sufficiently large and disbursements need to be regular and predictable. Beneficiary targeting needs to be effective, and the design of social protection interventions needs to be followed by effective implementation. But social protection alone cannot move people out of rural poverty and hunger. Agricultural interventions need to address structural constraints that limit access of smallholders to markets, inputs, credit and insurance, for example. Social protection coverage remains limited especially where rural poverty levels are particularly high. Furthermore, coherence between the social protection and agricultural domains needs to be strengthened, for example through adaptation of social protection measures and agricultural interventions; the combination of social protection and agricultural interventions into a single programme; and the coordination of multiple programmes and policies. Mr Knowles underlined how coherence can be increased through political support but also at policy and operational levels. He concluded stating that although FAO is not a social protection agency, it has a specific comparative advantage. In particular, FAO has a mandate to reduce rural poverty and eradicate hunger and malnutrition; likewise, social protection targets the extreme poor who mostly depend on agriculture for their subsistence. Considering these linkages, FAO has a proven ability to provide evidence-based advice on strengthening the coherence between agriculture and social protection.

INSTITUTIONALIZATION OF THE FOOD AND NUTRITION SECURITY SYSTEM AND FISHERIES POLICIES IN BRAZIL

Maya Takagi, Deputy Strategic Programme Leader, Rural Poverty Reduction, FAO, shared experiences from Brazil on the existing legal and policy framework to ensure sustainable management of fisheries resources and the health and well-being of fishers and fish farmers. She started by recounting the development of the National System of Food and Nutrition Security (SISAN) and underlining its functioning. She remarked how small-scale fishers in Brazil had access to a single registry for Federal Government Programmes, which gave access to cash transfers to the poorest. Small-scale fishers were also included in the Harvest Plan for Fishers and Aquaculture⁷; this was achieved through the provision of extension services. A public procurement programme was established to purchase fish from local fishers and fish farmers. Fish was significantly included in national school feeding programmes, with around 51 percent of Brazilian municipalities including fish in their programmes. The government also put in place a system of social guarantees for fishers. For example, the Seguro Defeso programme was developed to provide unemployment benefits to professional small-scale fishers during the breeding season as compensation for the occurred loss. In addition, fishers were given access to literacy training through the Pescando Letras programme.

SOCIAL PROTECTION FOR BUILDING THE RESILIENCE OF FOREST-DEPENDENT PEOPLE

Qiang Ma, Forestry Officer, FAO, presented the main findings of four studies, including three case studies in Burkina Faso, China and Uganda, and a report of discussions conducted in cooperation with local institutions on the issue of social protection. The presentation focused on the vulnerabilities of forest-dependent people (FDP) and the causes of these;

⁷ The plan was implemented in Brazil in 2012, 2013 and 2014 with the objective of investing in the development of aquaculture, and modernizing and strengthening the fishing industry and fishery trade. The overall objective of the plan was to attain a national fish production of 2 million tonnes by the year 2014.

the social protection instruments applied for the benefit of FDP; interactions and linkages between social protection and forestry policies; and challenges and opportunities. From the case studies it emerged that social protection programmes have the potential to reduce risks and vulnerabilities of FDP and to promote forest conservation. Likewise, forest policies and programmes can increase the social, economic, environmental and political resilience of FDP, and promote sustainable forest management.

SUMMARY OF PLENARY DISCUSSION - PART 2

To conclude the session, Mr. Stephen Devereux summarized the main points raised during the presentations. He recalled how the study on Myanmar found that fishing communities were the most vulnerable and food-insecure among those surveyed in the country. Social protection was poorly understood and respondents had mainly reported access to loans as a form of social protection. Informal loans, however, carry with them the burden of repayment. Therefore any social protection intervention in Myanmar should consider solving people's indebtedness. Informal social protection systems are common in the country and could be the result of a lack of formal social protection interventions as well as of personal preferences. An issue to analyse would hence be whether dependence on informal systems should be reduced, or whether informal systems should be strengthened and become more formal systems of social protection.

According to the case presented by the ILO in Myanmar, market failures (such as the lack of access to credit) are accentuated by the lack of formal social protection mechanisms. Addressing market failures could represent another good entry point for social protection interventions along the fish value chain.

Looking at the regional context in Latin America, social protection is included in many fisheries-relevant laws, but there is a general lack of enforcement (e.g. in the case of Nicaragua). The experience of Brazil, however, represents a good example, where collective action appeared to be key to translating laws into actions and to putting effective monitoring systems in place.

FAO underlined the need to make the economic case for social protection as an important tool for advocacy. It has gathered strong evidence on the economic impact of cash transfers in Sub-Saharan Africa. To date, however, such evidence on the impact of social protection measures for fisheries-dependent communities doesn't exist. The case of Brazil was highlighted as an example of a good regulatory framework set up in relation to food security and social protection, including participatory elements. The regulation and policy in place ensured a good balance of resource conservation and people's empowerment. The public procurement example and the inclusion of fish into school feeding programmes represent a good concrete case on how to ensure policy coherence, but it remains to be seen whether and how this could be replicated elsewhere.

In the forestry-related cases there appear to be similarities with the fisheries-dependent communities. A common threat for forestry and fisheries-dependent communities is the risk of losing access to natural resources as a primary source of livelihood. Informal social protection systems, provided for example by community-based organizations, make specific services available for natural resources dependent communities. Looking jointly at natural resources based livelihoods (fisheries and forestry) to create a common framework could therefore be an important consideration.

During the plenary discussion, the themes discussed included the competences regarding social protection among various ministries at the country level as well as FAO's engagement. Participants also discussed which factors would contribute to effective social protection measures. The text below summarizes the main outcomes from the discussion.

It was noted how **collective action** represented a crucial element in Brazil for extending its social benefits to the fisheries sector. The demand for unemployment benefits coverage came from a strong public mobilization of small-scale fishers. It first started through co-management programmes which allowed fishers to get organized. One of the measures introduced under these programmes was a closure which triggered conflicts on

how to manage it, resulting finally in social protection support. Unemployment benefits, as in the case of the Seguro Defeso programme, might create however a perverse incentive to overfish; this risk needs to be taken into account. It was also stressed that so far little or no evidence exists on the environmental impacts that such programmes might have on fisheries resources.

Coordination and competence. Another issue raised was the need to incorporate the principles of social protection in fisheries policies. In Latin America, a number of countries have introduced progressive labour laws and fisheries policies in the last ten years. A weak point is the lack of enforcement and the lack of a clear understanding on the specific responsibilities of different ministries/authorities. An issue to consider is that social protection is not traditionally perceived by fisheries authorities as part of their traditional realm. The experience from Myanmar shows that involving the appropriate ministry in the case study generated a sort of ownership of the topic. The institutional and financial capacity in relation to social security in Myanmar is in the Ministry of Rural Development.

The issue of social protection has evolved over the years and at times represents a sector all its own, rather than serving the mandate of other ministries. The institutional and financial capacity to implement social protection policies depends on a specific context. In Myanmar, engaging different UN agencies during the ABND helped to develop an integrated social protection policy involving different ministries. Most of the time, financial capacity does not lie with only one ministry but is rather an interministerial issue. In Cambodia, for example, social protection is under the responsibility of the Council for Agriculture and Rural Development (CARD).

The need to convince fisheries constituencies of the importance of social protection in relation to poverty eradication, food security and sustainable natural resources management was underlined. FAO is well placed to support this through evidence gathered from the agricultural sector. The evidence gathered in the forestry sector can also represent a good tool to use for advocacy purposes. **Building the case for social protection is necessary, but not enough.** The political economy issue is fundamental and if evidence is not appropriately taken into consideration, other pathways need to be pursued.

Objectives of social protection measures. In India, within the framework of the FAO Fisheries Management for Sustainable Livelihoods (FIMSUL) project, it emerged that the Ministry of Fisheries actually provides welfare support in addition to fisheries management services. The strong political dimension of social protection measures was underlined in this context. The government manages the political climate of fishing communities in times of environmental crises through social protection measures. What is needed however is to ensure that social protection programmes properly support sustainable natural resources management. The distribution of cash is only a short-term solution to addressing structural problems of the fisheries sector.

The ICSF study provided a large variety of different experiences. In Kerala, India, there exists considerable welfare support in terms of programmes, but these are too small in terms of individual support. In other countries, small-scale fishers are not directly targeted and the emphasis is more on diversification of livelihoods. A third case illustrates the lack of interest of fisheries authorities in engaging in social protection, raising the question of how to bring a rights and responsibilities framework to life. The SSF Guidelines provide such an integrated framework.

⁸ The FIMSUL project was an FAO intervention implemented from 2010 to 2011 to support the Governments of Tamil Nadu (GoTN) and Puducherry (GoP), India, in the development of a broadly based and agreed-upon policy framework for the future management and sustainable use of their marine fisheries resources.

Group discussion 1: Key elements of social protection in small-scale fisheries

Daniela Kalikoski, FAO Strategic Programme 3 team, introduced the objectives of the group discussion. Based on the cases presented, workshop participants were invited to draw lessons that could be scaled up or explored further to inform FAO work planning on social protection for the promotion of sustainable natural resources management. The main points to discuss were the following:

- Which of the lessons identified by the case studies are crucial for strengthening the link between social protection and sustainable natural resources management?
- What combinations of social protection schemes, sector policies and enabling
 institutions (policies, structures, etc.) support sustainable fisheries and forestry,
 including facilitating the transition to alternative, complementary or more resilient
 livelihoods, where needed?
- How do they do so (e.g. providing assets, improving capacity to take risks, allowing stakeholders to invest in livelihood diversification)?

The outcomes of the group discussion are available in Annex 3; the main conclusions are summarized here below:

Role and objective of social protection. The group started by discussing the role of social protection. It was noted that social protection could have multiple objectives for fisheries-dependent communities. The primary objective should be poverty reduction. In certain contexts this may imply, in the long run, providing alternative livelihood options to facilitate the transition out of the sector. Aquaculture was identified to be explored as a viable alternative livelihood in this context, and it was underlined how social protection measures should be part of a territorial development approach.

Gathering and disseminating more evidence. The evidence on the impact of social protection on natural resources management is rather anecdotal and difficult to be generalized. Further work to mine existing evidence but also the generation of new evidence is necessary, for example by analysing social protection programmes and their impact on small scale fishers.

For the fisheries sector, this implies understanding the root causes of poverty and the potential role social protection and/or sectoral interventions can play. This would benefit from a consolidation of initial findings from the FAO-commissioned studies on social protection and fisheries as well as the analysis of existing evidence, including that of other sectors like the agricultural sector and forestry. It would also require commissioning further sector-specific studies to fill the knowledge gap and understand under which conditions social protection can reconcile resource conservation and livelihood protection for fisheries communities.

Social protection income stabilizing function. In this context it was recommended to study and document how fishing communities use cash transfers (including intra-household dynamics) and analyse the link with natural resources management.

Empowerment and collective action in fisheries-dependent communities through awareness raising is key to exercising the right to social protection. The experience from Brazil's Seguro Defeso programme represents a good example of how collective action can play a great role in translating policies and laws into action. The importance of promoting collective action emerged also from a case study presented from the Forestry sector. In Burkina Faso, women shea butter producers reported great social advantages as a result of membership in shea producers' groups.

Enabling environment. Often, the regulatory framework targeting fishers' vulnerability is rather poor. Where it exists, it fails to translate policy into action. The general lack of coordination and coherence among line ministries and relevant policies was identified as a challenge. Facilitation of policy dialogue (e.g. among different ministries of welfare, rural development, fisheries, etc.) should be promoted.

Effectiveness of sector-specific measures to reduce poverty. Another point raised was that social protection for fisheries communities might not be reaching the poorest, in contrast to what is happening in agriculture. For example, promoting education in India reaches 60 percent of fisheries communities, but primarily the better-off in those fishing communities. It was noted that the poorest in fishing-dependent communities should be covered by universal social protection measures.

In this context, the group discussed whether the aim should be to target and address the fishers' specific vulnerability or the poverty among fisher communities. There was agreement that the social development dimension should be included in existing fisheries policies. Poverty programmes might be different from social protection programmes.

Subsidies to fishing communities, including fuel subsidies, might have a perverse effect on fisheries-dependent communities. They can have a stabilizing effect on available income for small-scale fishers' households, but there is a need to ensure the sustainable use of subsidies within fishing communities.

Possible **entry points** identified by the group to strengthen the link between social protection and sustainable natural resource use included improving the existing legislation in a country, and addressing the issue of migrant workers. Other possible entry points may lie in finding innovative ways for the sector to fund itself (for example through insurance schemes) in support of natural resources management and disaster risk reduction. The private sector may already have in place systems and products which could be used. Different private sector actors are engaged in applying the UN Guiding Principles on Business and Human Rights⁹, which include provisions on social protection for everyone.

Country-level work. Country case studies usually cover one specific social protection scheme, and sector-disaggregated impact data is not readily available. This presents an opportunity to move towards a more integrated approach, as there are existing schemes which could be easily adapted to different sectors' needs. The partially informal nature of the small-scale fisheries sector, however, poses an additional challenge. The notion of a social protection floor (see box 1) is important in this context. The issue at hand is how access to these types of social protection can be facilitated for small-scale fishers, and how relevant policies can be coupled. There are opportunities where FAO could contribute: for example, the legal framework for social protection is already in place in Myanmar, and increased cooperation between the Ministry of Labour and the Ministry of Fisheries would be beneficial.

Box 1. Social Protection Floor Initiative

Social protection floors are nationally defined sets of basic social security guarantees which secure protection aimed at preventing or alleviating poverty, vulnerability and social exclusion. National social protection floors should comprise at least the following four social security guarantees, as defined at the national level: a) access to essential health care, including maternity care; b) basic income security for children, providing access to nutrition, education, care and any other necessary goods and services; c) basic income security for persons of active age who are unable to earn sufficient income, in particular in case of sickness, unemployment, maternity and disability; d) basic income security for older persons. Such guarantees should be provided to all residents and all children, as defined in national laws and regulations, and subject to existing international obligations.

 $\textbf{For more info, see:} \ http://www.ilo.org/secsoc/areas-of-work/policy-development-and-applied-research/social-protectionfloor/lang--en/index.htm$

Targeting approach. The distinction between universal social protection measures for targeting the poorest and specific social protection measures targeting the fisheries sector

⁹ Please see http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf

(focusing on risk management and the reduction of fishers' vulnerability) was underlined. In this respect it was noted how social protection insurance could be an important tool to ensure the safety of fishers.

A point was raised on which **legal approach** should be taken into consideration when designing social protection measures, and which targeting approach should be consequently taken. If the human rights based approach is taken into consideration, prioritization (i.e. giving priority to the poorest) can be an option as long as human rights are respected. In some countries with scarce resources, targeted social protection might be the best option to reach the poorest. Law-based social protection has been identified as a good option to make financial resources available and to institutionalize social protection schemes. Box 1 provides definitions of categorical, universal and targeted social protection which were mentioned during the discussions.

Box 2. Designing social protection interventions:

Categorical targeting and universal social protection

In designing a social protection scheme, many considerations may arise based on the legal framework in place (e.g. a human rights based approach) but also on the financial resources available. Targeting the scheme requires identifying which members of society should benefit from it. The options for targeting are: poverty targeting, self-targeting, categorical targeting and universal coverage. The definitions below are quoted from the ILO World Social Protection Report 2014/15:

<u>Universal and categorical scheme.</u> Strictly speaking, universal schemes provide benefits under the single condition of residence. However, the term is also often used to describe categorical schemes that provide benefits to certain broad categories of the population without a meanstest. The most frequent forms of those schemes are those that transfer income to older persons above a certain age or to children below a certain age. Some categorical schemes also target households with specific structures (one-parent households, for example) or occupational groups (such as rural workers). In some schemes, entitlement to benefits may be conditional on performing or accomplishing certain tasks. Most categorical schemes are tax-financed.

Means-tested scheme: a scheme that provides benefits upon proof of need and targets certain categories of persons or households whose means fall below a certain threshold (often referred to as social assistance schemes). A means test is used to assess whether the individual's or household's own resources (income and/ or assets) are below a defined threshold and to determine whether the applicants are eligible for a benefit at all, and if so at what level benefit will be provided. In some countries, proxy means tests are used: that is, eligibility is determined without actually assessing income or assets, on the basis of other household characteristics (proxies) that are deemed more easily observable. Means-tested schemes may also include entitlement conditions and obligations, such as work requirements, participation in health checkups, or (for children) school attendance. Some means-tested schemes also include other interventions that are delivered on top of the actual income transfer itself.

<u>Targeted social protection</u>. Eligibility to social protection measures is means-tested.

Source: ILO, World Social Protection Report 2014/15, available at: http://www.ilo.org/global/research/global-reports/world-social-security-report/2014/WCMS 245201/lang--en/index.htm

Summary of the day

The case studies highlighted how fisheries communities are characterized by a specific set of vulnerabilities which include fluctuations in production; vulnerability to climate change and natural disasters; weak tenure rights; general low levels of education; and the presence of forced labour and child labour.

The day shed some light on how fisheries-dependent communities benefit from social protection measures and how social protection can contribute to the promotion of sustainable fisheries management. The main points are summarized below:

- Insurance was identified as an important tool to be used in the case of unemployment but also the safety of fishermen.
- Measures for risk mitigation and adaptation to climate change are important elements in reducing the overall vulnerability of small-scale fishing communities.
- Similarly to what was found for forest-dependent people, informal networks and para-statal organizations can play a great role in providing social protection assistance to fisheries-dependent communities.

Producer and workers' organizations are therefore key institutions to strengthen. The inclusion of social protection measures in national fisheries policies is imperative.

- In Myanmar, a multiagency platform (consisting of WFP, the World Bank and ILO)
 was created to assess the country's social protection needs and formulate policy
 options. The Assessment-Based National Dialogue (ABND) was identified as a good
 practice to replicate.
- In recent years Latin America has generated good examples of progressive fisheries laws which include social provisions and protection of workers.

DAY 2 – 18 NOVEMBER

STRENGTHENING COHERENCE BETWEEN SOCIAL PROTECTION AND AGRICULTURE: DIAGNOSTIC TOOL AND FRAMEWORK FOR ANALYSIS AND ACTION (FAA)

Marco Knowles, Economist, Social Protection Team, FAO, detailed FAO's effort to strengthen coherence between agriculture and social protection through the development of a Framework for Analysis and Action (FAA) and a diagnostic tool.

The FAA was developed through a combination of methods, including country case studies and literature reviews. The objectives of the FAA are to identify (i) the rationale for promoting coherent social protection measures and agriculture for hunger and poverty reduction; (ii) the elements of an enabling environment to strengthen coherence; and (iii) existing opportunities to explore coherence.

The FAA has been developed jointly with a diagnostic tool for country-specific assessments of coherence. The tool is mainly intended for use by FAO officials and other interested stakeholders to analyse the coherence between social protection and agriculture. The tool does not include measurements of food security or poverty dimensions of vulnerability, and is mainly qualitative. It includes a brief analytical framework, a methodology, and an interview guide for the national, district and community levels. The main areas of inquiry of the diagnostic tool include:

- Policies and programmes;
- The enabling environment;
- Programme performance and beneficiary experiences.

It was noted how presently no political commitment exists to promote coherence between social protection and agriculture. The general perception is that the most vulnerable have weak productive potential. This perception is also demonstrated by the weak policy architecture, with scarce financial resources banking in terms of financial resources in relation to social protection.

Participants noted that the FAO diagnostic tool is easily applicable because it has a limited number of questions (15). They also recommended that FAO explore ways to include the diagnostic tool in the Inter Agency Social Protection Assessments (ISPA).¹⁰

¹⁰ For more information, see http://ispatools.org/

Group discussion 2: Elements of a work plan on social protection and natural resources management

Nicole Franz, FAO Fisheries Policy Analyst, introduced the group discussion based on the work of Day 1 and reviewed the main recommendations proposed to structure the discussions of the day. The outcomes of the discussion are summarized in Annex 4; key recommendations are summarized here below.

There is a need to create a conceptual framework for fisheries-dependent communities, poverty and natural resources management, where socio-economic aspects are reconciled with natural resources management aspects. The broader objective of social protection (rural poverty reduction) should be kept in mind. The development of a specific framework for fisheries and social protection should go hand in hand with concrete country actions, and the two processes should reinforce each other.

Possible entry points are the ongoing effort to revisit, build on and adapt policy-related work. The PTOP project's Framework for Analysis and Action (FAA) of cash transfer programmes in Sub-Saharan Africa is a tool which could be adapted to the fisheries and aquaculture sector and support the gathering of evidence on social protection programmes, together with specific country case studies.

Approach to data, knowledge and information gathering. The group suggested continuing to generate knowledge and collect evidence on the social protection coverage of fisheries dependent households, with particular attention to the links between social protection, poverty and well-being. Specific evidence on the impact that categorical programmes targeting the poorest would have on fisheries-based livelihoods should also be further explored.

The evidence base for the link between social protection and sustainable natural resources management (including fisheries, aquaculture and forestry) needs to be broadened further, and should document success stories and failures. It should also include issues such as migration, indigenous issues and gender equity. One entry point could be data collection carried out at the country level. In addition, evidence should be gathered from least developed countries, as the available cases so far are mainly from middle-income countries. In this respect, strengthening collaboration with the FAO Social Protection Team (SOCPRO) in the Economic and Social Development Department was suggested in order to explore adaptations of existing methods and tools.

Other areas for further investigation include the role that social protection plays in terms of increasing resilience and livelihood diversification throughout the value chain, e.g. whether social protection supports moving up or moving out strategies along the seafood value chain.

The group also suggested developing guidance on an integrated approach to social protection in the fisheries and aquaculture sector and, where feasible, encouraging pilot testing of social protection schemes in fisheries and aquaculture.

Contribution of informal, community-based social protection measures. An open question remains on how to measure the contribution of informal, community-based social protection measures. It was noted how traditional fisheries management systems (for example in Fiji) have two specific roles, the conservation of natural resources on one side and a redistribution objective on the other.

Some experiences on strengthening community-based social protection systems do exist, for example in ILO. As community-based systems are not always universal and equitable, scaling them up may be a challenge. Promoting community-based systems may not always be aligned with the human rights based approach and the responsibilities of the state.

The table below summarizes the recommendations of the workshop:

Overarching messages:

- Social protection (SP) is part of a wider poverty reduction agenda that contributes to sustainable resource management.
- Partnerships are the sine qua non for FAO's work in social protection.
- The entire fisheries value chain should be considered, as well as livelihood options in inland and marine fisheries and in aquaculture.
- Guiding principles of the SSF Guidelines should be applied.

Key components	Existing initiatives/ partners/etc.
Conduct legislative, policy and institutional studies and assessments on SP in	Adapting
natural resources management.	the ABND ¹²
Integrate internationally accepted standards into national laws governing the	methodology for
management of natural resources (e.g. ILO Work in Fishing Convention [C188] or	sectoral needs LEG
the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries).	
Revisit/build on/adapt policy-related work:	FAO's ongoing work
In the From Protection to Production (PTOP) project the PTOP Framework for	on SP framework and
Analysis and Action (FAA)	on the Framework for
data/ evidence and diagnostic tool and country case studies.	Analysis and Action
2. Learn from the fisheries case studies conducted so far: identify key robust	(PTOP); FAO Forestry
conclusions and gaps	Dept.
in order to draft a framework and tools for natural resources management (in	In collaboration with
collaboration with FO and NRC).	partners
Twin-track approach to data/knowledge/information generation.	Linking up with
Generate knowledge and continue collecting evidence on:	impact evaluation
SP coverage of fisheries households	group of SP team
Link between sector-specific SP and poverty, food security and well-being	and PTOP to see
Impact of categorical SP (categorical target: poorest) on fisheries-based	how tools/methods
livelihoods	can be adapted
Link between social protection and sustainable natural resources management	– in partnership,
(including fisheries, aquaculture, forestry)	including at the
Success stories and failures	country level: e.g.
• Issue of migration – e.g. from China, Hong Kong SAR/Taiwan Province of China	Myanmar (with ILO)
Indigenous issues	Explore South-South
Gender equity	cooperation under
Role of SP in sustainable natural resources management and in terms of	SO3
increasing resilience and livelihood diversification through the value chain	
("moving up and out")	
Include fisheries in existing data collection exercises and identify gaps/	
opportunities at the country level.	
Develop preliminary guidance on the process in support of an integrated	
approach to SP in FI/AQ (to support other components at the country level), and	
where feasible encourage pilot testing of SP schemes (e.g. adaptation of existing	
schemes, SP+).	

¹² The Assessment-Based National Dialogue (ABND) was an exercise carried out in Myanmar to extend the social protection floor.

Explore partnership development	Through ES colleagues, e.g. ILO – decent work; child labour; UN Women: in relation to postharvest fishing; World Bank; researchers, NGOs, CSOs; private sector (e.g. on social auditing)
Document and analyse informal community-based SP systems, reconciling social	In collaboration with
protection and sustainable natural resources management (e.g. role in reaching	ESP Rural Institution
people in the informal economy; in fragile/conflict areas where governments are	Team
not well perceived; in reaching women) in terms of:	
Service delivery	
Accountability and fair distribution of benefits	
Interface between formal and informal systems In collaboration with ESP Rural	
Institution Team	
Strengthen and improve capacities to enhance access to/improve delivery of SP	Building on
through:	experience from
Strengthening fisherfolk organizations	Brazil, ICSF study,
Engaging with the private sector	Burkina Faso/FAO
Raising awareness about rights and responsibilities	Forestry Dept
Develop knowledge of state actors on linkages between SP and sustainable	e.g. through South-
natural resources management to inform proper policy design and	South collaboration;
implementation. e.g. through South-South collaboration; regional workshops;	regional workshops;
follow-up to ICSF study	follow-up to ICSF
	study
Explore opportunities to include decent work and employment and SP issues into	Linking with SO3
IUU fishing agenda, including unregulated and unreported fishing in SSFs (access	OO2 ¹³ and SO2 ¹⁴
issue, human rights, sustainable resource management).Linking with SO3 OO2	work on IUU, and
and SO2 work on IUU, and LEG and ILO, RFBs and MCS network, etc.	LEG and ILO, RFBs
	and MCS network,
	etc.

¹³ SO3 OO2 refers to the FAO Strategic Objective 3 on Rural Poverty Reduction and the outcome 2 on implementing programmes and policies that promote the generation of decent farm and nonfarm employment opportunities for men, women and youth.

¹⁴ SO2 refers to the FAO Strategic Objective 2 on making agriculture, forestry and fisheries more productive and sustainable.

Conclusions and final remarks

Lahsen Ababouch, FAO, complimented participants for sharing experiences from different sectors including forestry, fisheries, and legal, and from the FAO Social Protection Team. Mr Ababouch underlined how coverage of fishers by universal social protection measures and the enhancement of the potential of social protection in the natural resources management agenda are key areas to further explore in the future.

The evidence gap includes not only the review of good practices but also what does not work and how FAO can contribute to introduce changes in the sector. An area that requires attention is the protection of migrant workers and the role that advocacy can have in fostering national political will.

Strengthening cooperation with countries is therefore essential. For the way forward it is important to keep in mind that financial resources are limited, priorities will need to be set and more resources will need to be mobilized. Therefore, partnerships with different actors, including the private sector, are key and fit in the new FAO Strategic Framework 2010–2019.

It was suggested that FAO and ILO take the lead on promoting the linkages between social protection and natural resources management.

The entire text of the final remarks is available in Annex 5.

Annex 1: List of participants

Lahsen ABABOUCH

Director, Fisheries and Aquaculture Policy and Resources Division Fisheries and Aquaculture Department Viale delle Terme di Caracalla Rome, Italy 00153

E-mail: lahsen.babouch@fao.org

Melanie ANDREWS

Technical Officer Caribbean Natural Resources Institute (CANARI) Laventille, Trinidad, West Indies E-mail: melanie@canari.org

Maria Felicia ARNAL

Natural Resources and Climate Change Department Viale delle Terme di Caracalla Rome, Italy 00153 E-mail: mariafelicia.arnal@fao.org

Christophe BÉNÉ

Senior Policy Officer International Center for Tropical Agriculture (CIAT) Cali, Colombia E-mail: c.bene@cgiar.org

David CALEF

Fisheries and Aquaculture Department Viale delle Terme di Caracalla Rome, Italy 00153

E-mail: david.calef@fao.org

Anna CARLSON

Consultant, socio-economic issues General Fisheries Commission for the Mediterranean (GFCM) Rome, Italy

E-mail: anna.carlson@fao.org

Ahn CHIGUK

Fishery Officer
Fisheries and Aquaculture Department
Viale delle Terme di Caracalla
Rome, Italy 00153
E-mail: chiguk.ahn@fao.org

Stephen DEVEREUX

Research Fellow Institute of Development Studies Brighton, United Kingdom E-mail: s.devereux@ids.ac.uk

Miguel GONZALES

Sessional Assistant Professor University of York York, Canada

 $\hbox{$E$-mail: miguel_gonzalez7@sympatico.ca}\\$

Marco KNOWLES

Economist
Economic and Social Development
Department
Viale delle Terme di Caracalla
Rome, Italy 00153
E-mail: marco.knowles@fao.org

Sebastian MATHEW

Programme Adviser International Collective in Support of Fishworkers (ICSF) Chennai, India E-mail: sebastian1957@gmail.com

Emma MCINERNEY

Office for Partnerships, Advocacy and Capacity Development Viale delle Terme di Caracalla Rome, Italy 00153

E-mail: emma.mcinerney@fao.org

Rebecca METZNER

Branch Chief, Policy, Economics and Institutions Viale delle Terme di Caracalla Rome, Italy 00153

E-mail: rebecca.metzner@fao.org

Pamela POZARNY

Rural Sociologist Technical Cooperation Department Viale delle Terme di Caracalla Rome, Italy 00153

E-mail: pamela.pozarny@fao.org

Maria Angelita RUVALCABA

Research Assistant
Economic and Social Development
Department
Viale delle Terme di Caracalla
Rome, Italy 00153
E-mail: mariaangelita.ruvalcaba@fao.org

Darana SOUZA

Social Protection Officer Economic and Social Development Department Viale delle Terme di Caracalla Rome, Italy 00153 E-mail: darana.souza@fao.org

Kimberly SULLIVAN

Communication Expert Fisheries and Aquaculture Department Viale delle Terme di Caracalla Rome, Italy 00153

E-mail: kimberly.sullivan@fao.org

Maya TAKAGI

Deputy Strategic Programme Leader, Rural Poverty Reduction Viale delle Terme di Caracalla Rome, Italy 00153

E-mail: maya.takagi@fao.org

Lou TESSIER

Project Officer International Labour Organization Yangon, Myanmar E-mail: tessier@ilo.org

Sara VICARI

Office for Partnerships, Advocacy and Capacity Development Viale delle Terme di Caracalla Rome, Italy 00153

Rolf WILMANN

E-mail: sara.vicari@fao.org

External expert

E-mail: rolf.willmann@gmail.com

Natalia WINDER ROSSI

Economic and Social Development Department Viale delle Terme di Caracalla Rome, Italy 00153 E-mail: natalia.winderrossi@fao.org

Sisay YESHANEW

Legal Office Viale delle Terme di Caracalla Rome, Italy 00153

E-mail: sisay.yeshanew@fao.org

FAO MEETING SECRETARIAT

Mariaeleonora D'ANDREA

Consultant Fisheries and Aquaculture Department Viale delle Terme di Caracalla Rome, Italy 00153

E-mail: mariaeleonora.dandrea@fao.org

Nicole FRANZ

Fishery Policy Analyst Fisheries and Aquaculture Department Viale delle Terme di Caracalla Rome, Italy 00153

E-mail: nicole.franz@fao.org

Daniela KALIKOSKI

Strategic Programme Adviser, Rural Poverty Reduction – Natural Resource Management Viale delle Terme di Caracalla Rome, Italy 00153

E-mail: daniela.kalikoski@fao.org

Florence POULAIN

Fisheries and Aquaculture Officer Viale delle Terme di Caracalla Rome, Italy 00153

E-mail: florence.poulain@fao.org

Susana SIAR

Fishery Industry Officer Fisheries and Aquaculture Department Viale delle Terme di Caracalla Rome, Italy 00153

E-mail: susana.siar@fao.org

Annex 2: Opening statements

Welcome address by Arní M. Mathiesen, ADG, Fisheries and Aquaculture Department, FAO

Honourable guests, Ms Chair, dear colleagues, distinguished participants,

Good morning everybody! On behalf of the organizers of the workshop and the whole FAO Fisheries and Aquaculture Department, I would like to express my warm welcome to you all to this technical workshop on "Social protection to foster sustainable use of natural resources and reduce poverty in fisheries-dependent communities".

Small-scale fishers, boat crew members, fish processors, fish traders and fish processing workers represent 120 million people worldwide, most of them living in lower middle income countries with great geographical and political marginalization. And as you know, those women and men greatly contribute to the food security and incomes of their households and to the local economies they live in.

Despite this, they are a relatively neglected group in terms of social and development policy. The vulnerabilities they face are numerous and span from declining fish stocks, seasonality of fishing operations, to price volatility and social and political vulnerabilities. Climate change and weather-related disasters, including floods, high winds/hurricanes and drought, represent an extra burden on their livelihoods. Furthermore, as the 2015 State of Food and Agriculture report, which is dedicated to social protection this year, states: the exposure and sensitivity of fisheries-dependent communities to risks are relatively high in comparison with other socioeconomic groups, while their ability to cope with or recover from external shocks is relatively low.

Over the years, FAO has been at the forefront of promoting sustainable fisheries. This year we celebrate the 20th Anniversary of the Code of Conduct for Responsible Fisheries.

In 2014, almost 20 years after the Code's approval, the FAO Committee on Fisheries endorsed the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication. These Guidelines are the first international instrument that recognizes the contribution that small-scale fisheries make to food security and poverty reduction. They include a dedicated section on social development, employment and decent work. They have been the result of a long consultation process involving more than 4 000 actors, including governments and civil society organizations.

They are an invaluable tool to further socio-economic development and poverty eradication for small-scale fishers and we all need to work towards their regional and national implementation, following the inclusive model that brought us to their conception and endorsement.

We, as FAO, have to support fisherfolk to fully contribute to food security, poverty eradication and fair economic development. To achieve this, their rights to access social assistance programmes and decent working conditions need to be realized – for them and their families. We have the social responsibility, in collaboration with our member countries, partner organizations, research institutions and fisherfolk representative organizations, to find strategies to reduce fishers' current vulnerability and to increase their capacity to cope with shocks as a way of reducing social exclusion and enabling transition out of poverty, towards thriving blue communities.

In FAO's new strategic framework, social protection is one of the three pillars for reducing rural poverty. The other two are decent rural employment and access to resources, services and institutions.

Our intention for these two days is to discuss and further analyse how social protection systems can contribute to increase their resilience and break the cycle of rural poverty while ensuring sustainable natural resources management.

We will learn from some diagnostic studies that FI carried out with partner organizations at a global, regional and country level on the relation between formal and informal social protection systems and natural resources. We will also draw lessons from the role of social protection and poverty reduction in Brazil, the need of social protection systems for small-scale fishers in Latin America, as well as learning about the experience of ILO in Myanmar. From FAO colleagues, we will hear about how social protection can support forest-dependent communities as well as how to strengthen coherence between social protection and agricultural policies.

Based on the discussions and the working session we will have, which I am sure will be constructive and interesting, we hope to come up with feasible recommendations on how FAO can further promote social protection in a growing blue economy, by supporting fishers through sustainable natural resources management and healthy blue communities.

Before handing over to Ms Maya Takagi, Deputy Strategic Programme Leader for Rural Poverty Reduction and to Ms Natalia Winder Rossi, FAO Senior Social Protection Officer and Social Protection Team Leader, who will present FAO's approach to social protection, I want to say welcome once more on behalf of FAO, and wish you a very lively and fruitful discussion.

Annex 3: Summary of recommendations after Day 1

Key lessons learned/key findings	HOW? Enabling factors, methods, tools
There is a need for a systems/integrated approach to social protection.	Move from fragmented, scattered, siloed programmes to a coordinated set of interventions (e.g. case study from ICSF): • SP and sector-specific measures • Various SP measures • Include DRM and CCA
Reaching the poor in fisheries – need to ensure that: Universal SP reaches and benefits eligible households in fisheries Sector policies reach and benefit the poorest and most vulnerable households We cannot assume that the poor would benefit from SP schemes, because typical welfare measures in fisheries do not really target the poor and major beneficiaries are often better off and organized.	SSF Guidelines could be the starting point – calling for participatory, integrated processes and addressing social protection. Assess policy and legal frameworks (e.g. methodology by ILO in Myanmar). Analyse if fisheries are included in existing programmes – and if not, why (issue of access). Ensure SSF access to existing SP and target sector-specific vulnerabilities along the value chain (e.g. ILO study on entry points from Myanmar). Ensure policy coherence. Learn from good examples (e.g. affirmative action in India, Bolsa Familia in Brazil).
Lack of evidence on the link between SP and sustainable natural resources management (including fisheries, aquaculture and forestry) There is evidence on the impact of universal, categorical and targeted SP on poverty, food security and well-being Very limited evidence on the link between sector-specific SP and poverty, food security and well-being Limited evidence of the impact of categorical SP (categorical target: poorest) on fisheries-based livelihoods: Need for strong advocacy messages Need to understand how SP is used (e.g. cash transfers)	Understand the root cause of poverty and the potential role of SP and/or sectoral interventions. Consolidate and complement initial findings from FAO-commissioned studies. Mine existing evidence. Learn from studies done on agriculture and other natural resource sectors (including forestry, pastoralism, etc.) and SP. Gather economic evidence on the efficiency of SP investment (multiplier effect). Commission additional studies to fill knowledge gaps as required. Understand under what conditions SP can reconcile resource conservation and livelihood protection. SP has an income stabilizing function; study and document how fishing communities use cash transfers/other SP (including intrahousehold distribution) and analyse the link with natural resources management.

Design and implementation need to be properly understood.	Document what worked and what didn't, and why. Ensure participation of beneficiaries in design and implementation. SP should empower and not create dependency.
Empowerment through awareness raising and collective action is key to realizing the right to SP.	SP enhances collective action, e.g. collective management of natural resources. Learn from experience in Burkina Faso/FAO Forestry Dept.
Strong collective action enhances access to SP.	Learn from examples in Brazil/fisheries on translating laws and policies into action.
SP is supplied also by non-state actors, including people's organizations and cooperatives as well as traditional systems, NGOs, harnessing market mechanisms throughout the value chain within the private sector, etc.	Explore services that could be provided by the sector itself (e.g. insurance, risk management, risk pooling, caisse de resilience from West Africa) – Are these compatible with a rights-based approach? Analyse informal SP.
Often an enabling legal framework exists but is not implemented/applied to SSF.	Facilitate policy dialogue (e.g. between Ministry of Welfare/rural development/fisheries) to implement/develop those frameworks (example from Latin America).
The fisheries sector needs specific SP measures due to its specificities/specific vulnerabilities (e.g. one of the most dangerous occupations, closed seasons, etc.).	SP should be considered where appropriate, in combination with fisheries management and development measures to address vulnerabilities (to prevent SP abuse – SP is not a panacea): Adapt universal schemes Develop targeted schemes Pay specific attention to DRM and CCA Learn from experience of FAO Forestry Dept. in China.
Using the Human rights based approach to SP as conceptual framework	SP is universal – but it needs to be able to address sector-specific vulnerabilities.

Annex 4: Summary of final recommendations from the workshop

Overarching messages:

- Social protection (SP) is part of a wider poverty reduction agenda that contributes to sustainable resource management.
- Partnerships are the sine qua non for FAO's work in social protection.
- The entire fisheries value chain should be considered, as well as livelihood options in inland and marine fisheries and in aquaculture.
- Guiding principles of the SSF Guidelines should be applied.

Key components	Existing initiatives/ partners/etc
Conduct legislative, policy and institutional studies and assessments on SP in natural resources management. Integrate internationally accepted standards into national laws governing the management of natural resources (e.g. ILO Work in Fishing Convention [C188] or the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries).	Adapting the ABND ¹⁵ methodology for sectoral needs LEG
Revisit/build on/adapt policy-related work: In the From Protection to Production (PTOP) project the PTOP Framework for Analysis and Action (FAA) data/ evidence and diagnostic tool and country case studies. 2. Learn from the fisheries case studies conducted so far: identify key robust conclusions and gaps in order to draft a framework and tools for natural resources management (in collaboration with FO and NRC).	FAO's ongoing work on SP framework and on the Framework for Analysis and Action (PTOP); FAO Forestry Dept. In collaboration with partners
Twin-track approach to data/knowledge/information generation. Generate knowledge and continue collecting evidence on: SP coverage of fisheries households Link between sector-specific SP and poverty, food security and well-being Impact of categorical SP (categorical target: poorest) on fisheries-based livelihoods Link between social protection and sustainable natural resources management (including fisheries, aquaculture, forestry) Success stories and failures Issue of migration – e.g. from China, Hong Kong SAR/Taiwan Province of China Indigenous issues Gender equity	Linking up with impact evaluation group of SP team and PTOP to see how tools/methods can be adapted – in partnership, including at the country level: e.g. Myanmar (with ILO) Explore South-South cooperation under SO3

¹⁵ The Assessment-Based National Dialogue (ABND) was an exercise carried out in Myanmar to extend the social protection floor.

 Role of SP in sustainable natural resources management and in terms of increasing resilience and livelihood diversification through the value chain ("moving up and out") Include fisheries in existing data collection exercises and identify gaps/ opportunities at the country level. Develop preliminary guidance on the process in support of an integrated approach to SP in FI/AQ (to support other components at the country level), and where feasible encourage pilot testing of SP schemes (e.g. adaptation of existing schemes, SP+).+ 	
Explore partnership development	Through ES colleagues, e.g. ILO -decent work; child labour; UNWomen: in relation to postharvest fishing; World Bank;researchers, NGOs, CSOs; private sector (e.g. on social auditing)
Document and analyse informal community-based SP systems, reconciling social protection and sustainable natural resources management (e.g. role in reaching people in the informal economy; in fragile/conflict areas where governments are not well perceived; in reaching women) in terms of: Service delivery Accountability and fair distribution of benefits Interface between formal and informal systems In collaboration with ESP Rural Institution Team	In collaboration with ESP Rural Institution Team
Strengthen and improve capacities to enhance access to/improve delivery of SP through: • Strengthening fisherfolk organizations • Engaging with the private sector • Raising awareness about rights and responsibilities Develop knowledge of state actors on linkages between SP and sustainable natural resources management to inform proper policy design and implementation.	Building on experience from Brazil, ICSF study, Burkina Faso/FAO Forestry Dept. e.g. through South-South collaboration; regional workshops; follow- up to ICSF study
Explore opportunities to include decent work and employment and SP issues into IUU fishing agenda, including unregulated and unreported fishing in SSFs (access issue, human rights, sustainable resource management). Linking with SO3 OO2 and SO2 work on IUU, and LEG and ILO, RFBs and MCS network, etc.	Linking with SO3 OO2 ¹⁶ and SO2 ¹⁷ work on IUU, and LEG and ILO, RFBs and MCS network, etc.

SO3 OO2 refers to the FAO Strategic Objective 3 on Rural Poverty Reduction and the outcome 2 on implementing programmes and policies that promote the generation of decent farm and non-farm employment opportunities for men, women and youth.

¹⁷ SO2 refers to the FAO Strategic Objective 2 on making agriculture, forestry and fisheries more productive and sustainable.

Annex 5: Concluding statements

Lahsen Ababouch, Director, Fisheries and Aquaculture Policy and Resources Division

Dear colleagues,

I understand that you had two very productive days to exchange experience and discuss how social protection can foster sustainable management of natural resources and reduce poverty in fisheries-dependent communities.

This workshop represents an important milestone in this collective learning process on the subject, together with the findings from the case studies and experiences presented here. You learned from specific country cases in Myanmar, Trinidad and Tobago and Brazil, from regional experiences in Latin America and we heard important findings from the global studies conducted, led by Christopher Béné/Stephen Devereux and by ICSF. All of this contributes to building the evidence base. Importantly, this was also an opportunity to learn from other departments here in FAO – in particular from our colleagues of the From Protection to Production project and from Forestry – which inspired a lot of ideas for adaptation and synergies.

The expected outcomes of the workshop were to further explore and fill the knowledge gap at the interface of social protection and natural resources management, including in relation to resilience to shocks, and to provide guidance on the specific role of FAO in promoting social protection to foster sustainable management of natural resources and reduce poverty.

The discussions here stressed that on one hand there is the need to ensure the inclusion of the fisheries sector in universal, targeted and categorical social protection programmes, while on the other hand the specific vulnerabilities of the fisheries sector may also require sector-specific interventions. The importance of partnerships to achieve this cannot be overemphasized.

It was recognized that while social protection is not a panacea to address all the issues of the fisheries sector, still it is an important tool to address some of the vulnerabilities of the sector which constrain sustainable natural resources management and overall development of the sector.

Key components of an FAO programme of work on social protection and natural resources that you identified include the further development of the evidence base on social protection and sustainable natural resources management. This is key to support the facilitation of dialogue between social and agriculture, natural resources management and resilience-related sectors. This dialogue should contribute to maximize rural development outcomes by operationalizing linkages between social protection and natural resources management interventions – Natalia called this "social protection+". Another important area of work is the adaptation and development of policy tools to support these processes, like for example the proposed review of legal frameworks, as well as the further exploration of the role of non-state actors in delivering social protection to natural resource-dependent communities, which are often part of the informal sector.

As also stressed in the introductory presentation on FAO's approach to social protection, FAO is committed to promoting a systems approach to social protection to avoid fragmentation of interventions, and, together with partners, to build and strengthen nationally owned social protection systems that are well integrated in broader livelihood

promotion and rural development strategies. From the FAO Fisheries and Aquaculture Department we are committed to support this, including through our Blue Growth Initiative and the support provided within the context of the implementation of the SSF Guidelines.

I would like to conclude by thanking you for your active participation in this workshop. We look forward to continue working with you on this important emerging issue of social protection and sustainable natural resources management.

Maya Takagi, Deputy Strategic Programme Leader, Rural Poverty Reduction

Dear colleagues,

As it has been stressed in the first day of the workshop, FAO's engagement in social protection relates to the solid evidence that social protection plays in maximizing food security and nutrition, reducing poverty and triggering community development. Extreme poverty is disproportionally concentrated in rural areas and rural poor are highly dependent on natural resources systems.

Therefore, I would like to congratulate and thank you all for engaging in this very important initiative of moving forward the social protection agenda towards promoting the mechanisms to better understand the linkages between social protection and natural resources management. This is at the heart of FAO's mandate and is a priority within FAO's Strategic Framework to reduce rural poverty.

As you have concluded, some progress has been made but a lot more needs to be done, particularly on the role social protection can play in reconciling poverty reduction and sustainable natural resources management.

In this sense this workshop has been very important in providing concrete and feasible recommendations for an FAO work programme on social protection and natural resources management. I would like to emphasize the importance of partnering with UN agencies, state and non-state actors in delivering FAO's work programme in this subject matter. I also would like to emphasize the importance of engaging in South-South cooperation as a good venue to exchange lessons learned and build capacities.

We look forward to working with you in the coming years and wish you all a safe trip back home.

Annex 6: Workshop agenda

Workshop

Social protection to foster sustainable management of natural resources and reduce poverty in fisheries-dependent communities

17 Nove	mber (DAY 1)
8:45	Opening of the workshop
	Árni M. Mathiesen, Assistant Director-General,
	Fisheries and Aquaculture Department, FAO
	Maya Takagi, Deputy Strategic Programme Leader, Rural Poverty Reduction, FAO
9:00	FAO's approach to social protection
	Natalia Winder Rossi, Senior Social Protection Officer and Social Protection Team Leader, FAO
	 tion gathering and analysis – building an evidence base to develop an integrated framework an / of change. Findings from recent work
Chair: N	laya Takagi, Deputy Strategic Programme Leader,
Rural Po	overty Reduction, FAO
9:15	Social protection and sustainable natural resources management: initial findings and good
	practices from small-scale fisheries
	Christopher Béné, Senior Policy Officer, International Center for Tropical Agriculture (CIAT) ar
	Stephen Devereux, Research Fellow, Institute of Development Studies (IDS)
9:45	Fostering sustainable fisheries management and reducing poverty: the role of social
	protection for fishers and fishing communities
	Sebastian Mathew, Programme Adviser, International Collective in Support of Fishworkers (ICSF)
10:15	Sustainable use of natural resources and poverty reduction in the fisheries-dependent
	communities: findings from Trinidad and Tobago
	Melanie Andrews, Technical Officer, Caribbean Natural Resources Institute (CANARI)
10:30	Coffee break
	tephen Devereux, Research Fellow, e of Development Studies (IDS)
10:45	Poverty, vulnerability, and social protection in rural communities of Myanmar
	Florence Poulain, Fisheries and Aquaculture Officer, FAO
11:15	Social protection and fisheries in Myanmar: findings from a national dialogue and sector assessment
	Lou Tessier, Project Officer, International Labour Organization (ILO) Liaison Office for

11:45	Evidence from a case study on social protection systems for small-scale fisheries in Latin America
	Miguel Gonzales, Sessional Assistant Professor, University of York
12:00	Options for strengthening coherence between agriculture and social protection: implications for the fisheries sector Marco Knowles, Economist, Social Protection Team, FAO
12:15	Lunch
13:45	Institutionalization of the food and nutrition security system and fisheries policies in Brazil Maya Takagi, Deputy Strategic Programme Leader, Rural Poverty Reduction, FAO
14:00	Social protection for building the resilience of forest-dependent people Qiang Ma, Forestry Officer, FAO
14:15	Introduction to working groups Daniela Kalikoski, Strategic Programme Adviser, Rural Poverty Reduction – Natural Resource Management, FAO
14:30	Group discussion 1: Key elements of social protection in small-scale fisheries
15:30	Coffee break
18 Nover	nber (DAY 2)
09:00	Reporting back from the working groups Susana Siar, Fishery Industry Officer, FAO
09:45	Strengthening coherence between social protection and agriculture: diagnostic tool and Framework for Analysis and Action (FAA) Marco Knowles, Economist, Social Protection Team, FAO
10:00	Introduction to working groups – Session 2 Nicole Franz, Fishery Planning Analyst, FAO
10:15	Coffee break
10:30	Group discussion 2: Elements of a work plan on social protection and natural resources management
12:30	Lunch
14:00	Reporting back from the working groups – Session 2 and plenary discussion Florence Poulain, Fisheries and Aquaculture Officer, FAO



CONTRIBUTED PAPERS



Fostering sustainable fisheries management and reducing poverty: The role of social protection of fishers and fishing communities

Prepared by:

International Collective in Support of Fishworkers (ICSF)

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Abbreviations and acronyms

AIDS Acquired immune deficiency syndrome

AMAP Association pour le Maintien de l'Agriculture Paysanne

ANC African National Congress

BE Buddhist Era

CAOPA African Confederation of Artisanal Fisheries Professional

Organizations

CCSS Caja Costarricense de Seguro Social

CCT Conditional cash transfer CSO Civil society organization

DDT Dichloro-diphenyl-trichloroethane ENSO El Niño-Southern Oscillation

EPWP Expanded Public Works Programme

EU European Union FAD Fish aggregating device

FADP Fisheries and Aquaculture Development Plan

FAO Food and Agriculture Organization of the United Nations

FAT Fundo de Amparo do Trabalhador

FEU Fishery Enforcement Unit

FISHCOPFED National Federation of Fishers Cooperatives Ltd

HIV Human immunodeficiency virus

IBAMA Instituto Brasileiro do Meio Ambiente e dos recursos naturais

renováveis

ICSF International Collective in Support of Fishworkers

ILO International Labour Organization
 IMF International Monetary Fund
 IUU Illegal, unreported and unregulated
 KNTI Kesatuan Nelayan Tradisional Indonesia

MOFAD Ministry of Fisheries and Aquaculture Development

MPA Ministério da Pesca e Aquicultura

MPAs Marine protected areas
NAP National Adaptation Plan
NFF National Fishworkers' Forum
NGO Non-governmental organization
NHIS National Health Insurance Scheme

PBF Programa bolsa familia

PRONAF Programa Nacional de Fortalecimento da Agricultura Familiar

RESEX Reserva Extrativista

SDGs Sustainable Development Goals

SEAP Special Secretariat of Fisheries and Aquaculture

SFP School Feeding Programme

SSF Small-scale fisheries

SSF Guidelines Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries

in the Context of Food Security and Poverty Eradication

TAUS Termo de Autorização de Uso Sustentável

UCT EEU University of Cape Town-Environmental Evaluation Unit

UIDAI Unique Identification Authority of India

UNFCCC United Nations Framework Convention on Climate Change

VICOBA Village Cooperative Bank

WFF World Forum of Fish Harvesters & Fish Workers

WFFP World Forum of Fisher Peoples WWF World Wide Fund for Nature

Acknowledgements

The International Collective in Support of Fishworkers (ICSF) would like to thank following respondents to the survey, including its members:

Brazil: Beatriz Mesquita, Researcher, Joaquim Nabuco Foundation and René Schärer, Social Entrepreneur (Members of ICSF);

Cambodia: Kaing Khim, Deputy Director General, Fisheries Administration, Ministry of Agriculture, Forestry and Fisheries, Cambodia;

Canada: Christian Brun, Executive Director, Maritime Fishermen's Union (MFU) and President, Canadian Independent Fish Harvesters' Federation;

Costa Rica: Vivienne Solis Rivera (Member, ICSF) and Estefani Solórzano Chavez (CoopeSoliDar R.L);

France: Alain le Sann (Honorary Member, ICSF) and Rene Pierre Chever (Member, ICSF);

Ghana: Peter LA, (Member, ICSF);

India: Arjilli Dasu, Executive Secretary, District Fishermen's Youth Welfare Association, Visakhapatnam, Andhra Pradesh; C.K. Murthy (Joint Director) and Rekha Anil (Assistant Director), Department of Fisheries, Government of Karnataka, Bengaluru, Karnataka; K.I. Ravindran, Joint Commissioner, Kerala Fishermen's Welfare Fund Board, Thrissur, and S. Ravindran Nair, Joint Director(retd.), Department of fisheries, Thiruvananthapuram, Kerala; Om Prakash Rawat, Director, VIKALP, Tikamgarh, Madhya Pradesh; Rambhau Patil, Emeritus Chairperson, National Fishworkers' Forum, Mumbai, Maharashtra; Rajesh Mangela, Member, Maharashtra Machhimar Kruti Samiti, Mumbai, Maharashtra; and Renga Raju, Joint Director, Department of Fisheries, Government of Tamil Nadu, Chennai, Tamil Nadu;

Indonesia: M. Riza Damanik, Kesatuan Nelayan Tradisional Indonesia (KNTI); Netherlands: Cornelie Quist (Member, ICSF);

Peru: Juan Carlos Sueiro C. Director of Fisheries, Oceana, Peru (Member, ICSF);

Philippines: Dinna L. Umengan, Deputy Executive Director, Tambuyog Development Center and NGO Representative, National Fisheries and Aquatic Resource Management Council (INFARMC) Philippines;

Senegal: Khady Diop, African Confederation of Artisanal Fisheries Professional Organizations (CAOPA)

South Africa: Jackie Sunde (Member, ICSF)

Spain: Antonio Garcia Allut, President, La Fundación Lonxanet para la Pesca Sostenible and professor La Universidad de A Coruña, Galicia, Spain (Member, ICSF)

Sri Lanka: Herman Kumara, Convenor, National Fisheries Solidarity Movement (Nafso – Member WFFP);

St. Lucia: Nadine Nembhard, Caribbean Network of Fisherfolk Organizations (Co-Chair, WFFP);

Tanzania: Rosemarie NG Mwaipopo (Member, ICSF);

Thailand: Ravadee Prasertcharoensuk, Executive Director, Sustainable Development Foundation (SDF) (Member, ICSF);

Uganda: Margaret Nakato, Katosi Women Development Trust (Executive Director, WFF); and

Venezuela: Leo Walter González Cabellos, Académico e investigador en socioeconomía de pesca artesanal, Insituto de Investigaciones Científicas, Universidad de Oriente, Núcleo de Nueva Esparta, Boca del Río, isla de Margarita (Member ICSF).

ICSF is grateful to the World Forum of Fisher Peoples (WFFP) for giving an opportunity to present the draft questionnaire for comments and suggestions during the Coordination Committee Meeting of WFFP in Puducherry, India, on 14-16 July 2015. ICSF acknowledges advice from John Kurien and Rolf Willmann, honorary members of ICSF, in regard to preparing the concept note and questionnaire, and in providing comments on the draft report. ICSF also acknowledges the assistance from Brian O'Riordan, formerly with ICSF Belgium Office, and currently, Deputy Director, Low Impact Fishers of Europe (LIFE) Platform in translating the questionnaire into Spanish and French, in coordinating responses from francophone Africa, Spain, France, and South America, and in translating these responses into English. ICSF further acknowledges assistance from the Documentation Centre, ICSF, in preparing the annexes to this report.

ICSF would like to thank the FAO Fisheries and Aquaculture Department, especially Nicole Franz, Fishery Planning Analyst, Susana Siar, Fishery Industry Officer (Rural Development), Florence Poulain, Fisheries and Aquaculture Officer, Daniela Kalikoski, Fishery Industry Officer (small-scale fisheries) and Mariaeleonora D'Andrea for their comments at various stages of the survey including on the questionnaire and the draft report and suggestions for improvement. The responsibility for whatever errors and omissions that remain in the final report, however, is entirely ICSF's.

"Let us return to what we have called the double movement. It can be personified as the action of two organizing principles in society, each of them setting itself specific institutional aims, having the support of definite social forces and using its own distinctive methods. The one was the principle of economic liberalism, aiming at the establishment of a self-regulating market, relying on the support of the trading classes, and using largely laissez-faire and free trade as its methods; the other was the principle of social protection aiming at the conservation of man and nature as well as productive organization, relying on the varying support of those most immediately affected by the deleterious action of the market—primarily, but not exclusively, the working and the landed classes—and using protective legislation, restrictive associations, and other instruments of intervention as its methods."

--Karl Polanyi, The Great Transformation: the Political and Economic Origins of Our Time (1944)

I. INTRODUCTION

In the above passage, Polanyi refers to the principle of social protection as an organizing principle in society, especially in light of economic liberalism, aiming at the conservation of humans and nature as well as productive organization, relying on the varying support of those mostly affected by the deleterious action of the market such as the working class. In the context of fisheries, the function of social protection is mainly to support those affected by the risks, uncertainties and vulnerabilities peculiar to a common property resource like fisheries, including the impacts of natural and man-made disasters and often social marginalization. Social protection is seen as one of the tools to support sustainable fisheries, to eradicate poverty, to address and reduce inequality and social exclusion and to advance the achievement of the Sustainable Development Goals (SDGs), especially in the context of fishing communities, both in the formal and informal economy.

The Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines)¹ call on States to promote social security protection for workers in the entire value chain of small-scale fisheries. At the community level, the SSF Guidelines support the development of, and access to, services in the realms of promotive and preventive social protection appropriate for small-scale fishing communities, especially with regard to savings, credit and insurance schemes, with special emphasis on ensuring the access of women to such services.

Adopting appropriate types of social protection in society, including for small-scale fishers, fishworkers and fishing communities is important for several reasons. Fishing grounds and fishery resources can provide social assistance functions to rural communities who at times move into fishing when their regular livelihoods are threatened, thus putting additional pressure on often already fragile fisheries resources, fish habitats and adjacent land resources. Threats to livelihoods of fishing communities include risks and uncertainties such as loss of craft and gear, rising costs of inputs and a drop in prices of output, pollution, overfishing, variations in fish catches and extreme climate and weather events.

Therefore, a combination of universal social protection schemes and those specific to sectors including small-scale fisheries is needed to provide social protection to all, including fishing communities, to remove poverty as well as to promote sustainable fisheries.

II. PURPOSE AND STRUCTURE

The purpose of this report is to present the outcomes of a survey among ICSF members and partners on social protection and small-scale fisheries in 20 countries and to see in how far social protection fosters poverty reduction, empowerment, sustainable use of fisheries resources and mitigation of/adaptation to climate change. Respondents were asked to list the State and non-State interventions to overcome a defined set of risks and vulnerabilities, with

¹ Available at http://www.fao.org/3/a-i4356e.pdf

special emphasis on the marginalized and the excluded, including the elderly, women and children in fishing communities and the indigenous peoples.

The survey documented social protection programmes and schemes aimed at addressing risks and vulnerabilities, particularly of small-scale fishers, fishworkers, and fishing communities at various levels to collect evidence of protective, promotional, preventative and transformative social protection schemes:

Africa: Ghana, Senegal, South Africa, Tanzania and Uganda

Asia: Cambodia, Indonesia, the Philippines, Thailand, Sri Lanka, India (Andhra Pradesh, Karnataka, Kerala, Maharashtra, Madhya Pradesh and Tamil Nadu)

Canada

Caribbean: St. Lucia

Central America: Costa Rica

Europe: France, the Netherlands and Spain South America: Brazil, Peru and Venezuela

This report, after introducing the objectives and methodology, discusses the results of the survey undertaken between July and November 2015 in relation to social protection programmes and schemes provided by the state and by non-state actors. The report presents the fishery- and non-fishery-based livelihood strategies of small-scale fishing communities, and how shocks and hazards facing these communities influence their livelihood strategies. Secondly, the report examines the extent to which the fishery-dependent households benefit from various social protection programmes and schemes and their effects on income, livelihood diversification and the status and management of fishery resources. Thirdly, the report looks into factors preventing social protection programmes and schemes from reaching fishing communities and examines if poverty alleviation, sustainable use of fishery resources and disaster preparedness benefit from social protection. Fourthly, the report examines if social protection schemes in combination with fisheries interventions and enabling institutions support sustainable fisheries and transition to alternative livelihoods. Fifthly, the report looks at the barriers and challenges for the small-scale fishing communities in maintaining themselves as fishers and fishworkers and the role of social protection in addressing these barriers. Sixthly, the report makes an attempt to look at how the findings of the survey differ across different social and demographic groups. And finally, the report offers some insights into social protection programmes and schemes in the context of fishing communities, based on the results of the survey.

III. OBJECTIVES OF THE SURVEY

The objectives of the survey were to:

- 1. Document State and non-State social protection schemes in relation to:
 - i. poverty reduction and empowerment;
 - ii. sustainable use of fishery resources; and
 - iii. mitigation of/adaptation to natural disasters;
- 2. Determine access to universal and targeted social protection schemes; and
- 3. Assess, based on evidence, the effectiveness of social protection measures in achieving (i); (ii); and (iii).

In this survey, "social protection" not only refers to "all interventions from public, private, voluntary organizations and informal networks to support individuals, families, households and communities in their efforts to prevent, manage, and overcome a defined set of risks and vulnerabilities" (Brunuri, P. and O'Reilly, M. 2010), particularly in the small-scale fisheries subsector, but also to national legislation and policies that promote human rights.

In this survey, "social protection" not only refers to "all interventions from public, private, voluntary organizations and informal networks to support individuals, families, households and communities in their efforts to prevent, manage, and overcome a defined set of risks and vulnerabilities" (Brunuri, P. and O'Reilly, M. 2010), particularly in the small-scale fisheries subsector, but also to national legislation and policies that promote human rights.

For the purpose of the survey, social protection is differentiated into:

- **Protective measures** to guarantee relief from deprivation;
- **Preventive measures** to avert deprivation in various ways;
- **Promotive measures** to enhance capabilities and build/strengthen resilience; and
- Transformative measures to pursue policies to address power imbalances in society as well as to secure access and use of resources (Devereux, S. and Sabates-Wheeler, R. 2004).

These measures are considered in the context of both marine and inland fisheries.

The *protective measures* were divided into: social assistance (in cash or kind) schemes and social service schemes:

- The social assistance schemes included: disability allowance; sickness allowance; employment injury allowance; medical allowance; maternity allowance; unemployment allowance; old age pension; survivors' pension; school-feeding or nutritional supplements; natural disaster compensation; fisheries/fish plant closure allowance; fishery failure allowance; fishing holiday relief allowance; boat/ fisher repatriation allowance; assistance to families of fishers arrested/detained/ deceased in other countries for fishery violations; and worker adjustment payments (e.g. payment to assist displaced fishers and fishery workers to find alternative employment).
- The social service schemes included: orphanages/centres for abandoned children; old age homes for the poor, maternity home; food/clothing; potable water; ration cards/ration shops; food stamps; free education/waiving school fee; free health care/waiving health charges; sanitation; reduction of electricity and water charges; free training to acquire alternative skills; and overseas employment services to fishers to find work as fishers/fishworkers abroad. Additional schemes were reported by the respondent from the Netherlands, namely, the provision of public information, inter alia, about social assistance; and the provision of free legal assistance to people who cannot afford a lawyer (also see www.overheid.nl/ and www.juridischloket.nl/).

The *preventive measures* included seven social insurance schemes: unemployment insurance; accident insurance; accidental death insurance; health insurance; life insurance; maternity health insurance; and retirement insurance.

The *promotive measures* comprised six types for the purpose of this survey: Government/ private sector/others non-contributory conditional cash transfer (CCT)²; facilitation of intra-regional trade (mainly for women fish traders); purchase of access rights (land/fishing grounds); retraining/reskilling; promoting labour-intensive fishing; and savings, credit and marketing (including micro finance/mobile banking).

Under non-contributory CCT, several schemes were listed. These were: creation of infrastructure (e.g. fish landing centres) and community assets (e.g. cyclone shelter, fish ponds); creation of social infrastructure and amenities (e.g. education, health, housing, and sanitation); improved post-harvest practices; disaster preparedness (e.g. flood -proof housing, vessel safety, training, sanitation on board); habitat protection (e.g. protecting sand dunes, mangroves, seagrass beds and corals); and adopting fisheries management and conservation measures (e.g. abstaining from destructive fishing methods, abstaining from fishing, temporary cessation of fishing, retirement of fishing vessels, use of selective gear, protecting species threatened with extinction, use of smokeless fish processing techniques, and membership in fishers' coops/associations/trade unions).

² Non-contributory means cash transfer to individuals or households usually financed out of taxation, other government revenue, or external grants or loans, without any contribution from beneficiaries or their employers as a condition of entitlement to receive relevant benefits. Conditional cash transfer means cash transfer to beneficiaries, conditional upon accomplishing specific tasks, or cash transfers to families subject to fulfilling specific requirements such as ensuring their children attending school regularly (See Annex 1).

The transformative measures included: legislation/policies to promote the human rights of all and their effectiveness, especially in relation to the right to food; the right to clothing and shelter; the right to education; the right to social security; the rights of the child; and the rights of men, women and children against forced labour and slavery-like conditions. They also included: enabling trade unions, cooperatives, and associations; making provisions for a living wage in fisheries; equitable tenure rights to land and fishing grounds, for men and women; recognizing preferential access to fishing grounds; securing working and living conditions; protecting women against violence and exploitation; securing access to clean energy initiatives in the context of climate change; national climate change adaptation and mitigation; human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) awareness initiatives; and training of fishers for a second professional skill, especially to assist their guided transfer to other sectors and thus to relieve the pressure of overfishing.

IV. METHODOLOGY OF THE SURVEY

Based on a survey of literature and discussions with ICSF members, the ICSF secretariat developed a questionnaire with two parts, which was finalized in consultation with FAO (see Annex 1). The first part dealt with a list of schemes and the second part with a set of questions based on the response to the listed schemes. The questionnaire was presented during the Coordination Committee meeting of the World Forum of Fisher Peoples (WFFP) in Puducherry, India, on 14-16 July 2015, to seek feedback and collaboration in responding to it from the constituents of WFFP and the World Forum of Fish Harvesters & Fish Workers (WFF).

The completed questionnaires were returned from Brazil, Costa Rica, France, Ghana, Peru, Spain, South Africa, Tanzania, Thailand, the Netherlands and Venezuela (by ICSF members); from Canada (by Canadian Independent Fish Harvesters' Federation); from Cambodia (by a fisheries official); from Senegal, St. Lucia and Sri Lanka (by WFFP constituents); from Uganda (by a WFF constituent); from Indonesia (by KNTI—a civil society organization); and the Philippines (by Tambuyog—an NGO). In India, while NGOs/CSOs responded to the questionnaire from the states of Madhya Pradesh and Andhra Pradesh, the state fisheries authorities, both serving and retired, returned the questionnaire from Karnataka, Kerala and Tamil Nadu. In Maharashtra, India, an ICSF staff member filled up the questionnaire in consultation with the representatives of the Koli fishing community. ICSF Belgium Office coordinated the responses from francophone Africa, Spain, France, and South America, and translated the questionnaire as well as the responses from French and Spanish into English (except for Costa Rica). Additional information on specific programmes/schemes was provided by some respondents (e.g. Brazil, South Africa).

V. RESULTS OF THE SURVEY

All 20 countries reported on various programmes and schemes under the above categories (see Annex 2). Almost all countries appeared to have a rights-based framework under which many of the schemes were implemented. The main results are summarized below.

Protective measures

Under non-contributory, unconditional and universal protective measures, social service schemes appeared to be the most commonly subscribed benefit schemes for fishing communities (see Annex 3). All countries represented in the survey provided free education/waiving school fee schemes under social service; followed by sanitation schemes (all respondents except Canada and Peru); free health care/waiving health charges schemes (except Uganda, St. Lucia and Senegal); and orphanages/centres for abandoned children schemes (except Indonesia, Peru, St. Lucia, and Sri Lanka). Under non-contributory, unconditional and targeted—fisheries sector specific— protective

measures, six countries (including France, the Netherlands and Spain from industrialized countries, and the Philippines and Thailand from developing countries) responded having a scheme providing employment services to fishers to find work as fishers/fishworkers abroad.

In relation to social assistance, 14 countries appeared to have school feeding or nutritional supplements schemes, followed by old age pension, maternity allowance and natural disaster compensation schemes (twelve countries each). These schemes are mostly universal schemes. In addition, most of the social assistance schemes provided targeted assistance, in the form of: fishery/fish plant closure allowance (seven countries); fishery failure assistance (seven countries); fishing holiday relief assistance (four countries); boat/fisher repatriation allowance (five countries); assistance to families of fishers arrested/detained in other countries for fishery violations (seven countries); and worker adjustment payments—e.g. payment to assist displaced fishers and fishery workers to find alternative employment (six countries)³. The social assistance schemes in fisheries, however, have a lower coverage compared to universal social assistance schemes.

Preventive measures

Among the preventive measures, all countries in the survey except Sri Lanka, Uganda and Venezuela provided health insurance (see Annex 4). Similarly, 17 countries (except Ghana, Uganda and Venezuela) provided accident insurance, followed by 16 countries providing accidental death insurance. The lowest coverage was for unemployment insurance with only seven countries providing for it (of which four—Brazil, France, the Netherlands, South Africa— were universal schemes and three—Canada, Indonesia, and Spain—schemes focusing on fishery workers). While the unemployment insurance premium was fully paid by the national government in Brazil, it was paid by the crew and the vessel owner—employee and the employer- in France and the Netherlands, and the State and the employer in South Africa (in South Africa, the social security schemes, however, were mostly available only to workers in formal employment). The seguro defeso pesca, the closed fishing season allowance programme in Brazil, reportedly comes under the unemployment insurance programme (see Annex 5).

Promotive measures

Unlike protective and preventive measures, which are mostly universal, the promotive measures are mostly fisheries sector-specific (see Annex 6). Under promotive measures an equal number of countries (70 percent) were reported to provide CCTs to support fish landing centres and fisheries management and conservation. 60 percent of the countries make CCTs to support education, mangrove afforestation and protection of the coast, respectively. These include the *programa bolsa familia*⁴ (PBF) in Brazil that, inter alia, benefits children of fishing communities and the protection of the coast scheme of South Africa targeting coastal black poor communities.

Among the countries covered by the questionnaire, the most common fisheries management and conservation scheme, reportedly, was habitat protection (70 percent), followed by improved post-harvest practices (65 percent), protecting species threatened with extinction (60 percent) and use of selective gear (50 percent). The least common management and conservation scheme seemed to be retirement of fishing vessels (only 20 percent of respondents). In nearly 50 percent of the countries covered by the respondents, CCT towards membership in fishers' organizations such as cooperatives, associations or trade unions were provided. Disaster preparedness schemes were reported from 50 percent of the covered countries, and these, except St. Lucia, the Netherlands, and the Philippines, are mostly specific to the fisheries sector.

³ Interestingly, respondents from Spain and Ghana also reported fuel subsidies as a form of social

⁴ Programa bolsa familia means 'family grant programme'. It is the largest social protection programme in absolute terms in the world, which reached around 11.3 million families comprising 46 million people in Brazil, at an annual cost of US\$3.9 billion (0.4 per cent of GDP) (ILO. 2014).

Under promotive measures, 35 percent of the covered countries supported facilitating intra-regional trade for women fish traders, 40 percent promoted labourintensive activities, 65 percent savings, credit and marketing schemes and 60 percent retraining/reskilling programme to benefit fishing communities. In relation to intraregional trade, in Kerala, India, a subsidised transport service for women fish vendors called *Vanitha* exists. In relation to job creation, several schemes are supported under promotive measures, including constructing fish aggregating devices (FADs) for deployment at sea in St. Lucia; promoting fish-processing and commercial aquaculture activities in Ghana; and establishing dressed, i.e., fish that has been cleaned and eviscerated, and is ready to cook, and dry fish units, micro-enterprises, fish-processing units and marketing assistance in Kerala, India. In South Africa, women and black poor people are targeted by microfinancing schemes. In Brazil exists the example of a microcredit programme, Programa Nacional de Fortalecimento da Agricultura Familiar (PRONAF) benefiting small-scale fishers. Under promotive schemes, South Africa provides universal as well as fisheries sector-specific schemes for leadership training; training in community data-collection and monitoring; and training in eco-tourism.

Transformative measures

Under transformative measures, almost all countries resulted to have legislation and/ or policies to recognize, protect and promote the human rights of all citizens including fishing communities (See Annexes 7 and 8). Respondents from all 20 countries reported the right to social security, and having enabling legislation at various levels for trade unions, cooperatives, and associations to function. Almost all these countries recognize the rights of the child, protect the rights of individuals against forced labour and slavery-like conditions, and the rights of women against violence and exploitation. In France, the rights of women 'master' fishers are recognized. In Spain exists a waiver of beneficiary contribution in relation to social security measures for fishers. Moreover, every 12-month period of service as fisher is recorded as an 18-month period of service. Senegal ratified the African Protocol of Human Rights to protect women against violence and exploitation. Seventy-five percent of the covered countries also recognize the right to food, including fish, shelter and clothing under national law (in Costa Rica, these rights, however, are categorical⁵ and confined to persons below the age of 18). Nearly 50 percent of these countries make provisions for a living wage. In more than 50 percent of these countries, however, these measures are not effective or not effectively reaching the fishing communities.

Less than 50 percent of the covered countries have policies and/or legislation for both men and women in support of equitable tenure rights to land and fishing grounds. For Spain it was reported how small-scale fisheries are discriminated against since access to fisheries is based mainly on the fishing track record of fishing vessels that prejudices against small-scale fisheries. In the Netherlands exists formal legislation and policies in support of equitable tenure rights to land and fishing grounds. However, due to the market-based system and the prevailing socio-cultural values, these measures are not translated into practice. For St. Lucia the example of exclusive marine management areas for fishers and divers was provided. In Ghana, land belongs to the State, but for individuals or families from a particular ethnic group, fishing grounds mostly belonged to families where traditional inheritance systems dictate tenure rights and access. Migrant/settler fishers usually negotiated with land owners on terms and conditions of access.

In Brazil, Termo de Autorização de Uso Sustentável (TAUS), or sustainable use authorization agreement and Reserva Extrativista (RESEX) or extractive reserve, are measures in place to protect equitable tenure rights of small-scale fishing communities.

A 'categorical' social protection scheme means a scheme for certain broad groups of the population (e.g. for children below a certain age or older persons above a certain age (See ILO 2014).

For Peru it was noted that such policies and legislation were confined only to indigenous forest communities and Andean areas but not to the peasant communities along the coast. In South Africa, the Constitution protected property and held that property is not limited to land and includes tenure security. This provision, however, was yet to be interpreted to include fisheries tenure rights. The South African Constitution also prohibited discrimination and promoted gender equity but this has not been secured in fisheries regulations. For Thailand it was reported that the Gender Equality Act, B.E. 2558 (2015) provided overall guarantees, although it did not specifically refer to land. The Land Act, B.E. 2497 (1954), reportedly affirmed the land tenure rights of women. Many small-scale fishery communities, however, were situated on public land, and they did not enjoy legal tenure in Thailand. A number of legal reforms in tenure rights were initiated in Uganda reported and but it was debatable if these reforms promoted equitable access or if they promoted more private interests and private investment on land and fishing grounds.

For nearly 50 percent of countries the recognition of preferential access to fishing grounds existed, especially for vulnerable and marginalized fishers and indigenous peoples. For Brazil there is a one-nautical mile exclusion zone to protect small fishers from trawling as well as exclusion zones for small-scale fishers within the RESEX. In France exists a complex arrangement of fishing zones based on the size of vessels and gear. In India, although the land-locked Madhya Pradesh has no preferential access for fishers to inland fishing grounds, the coastal states like Maharashtra, Karnataka and Kerala have fishing zones to protect the interests of traditional fishers with smaller vessels. In Thailand the Fisheries Act, B.E. 2558 (2015) allows only certain types of fishing gears, predominantly used by small-scale artisanal fishers, in waters up to three nautical miles from the coast. Further, the Promotion of Marine and Coastal Resources Management Act, 2015 supports the role of fishing communities in the management and conservation of marine and coastal resources. In Venezuela, although exclusive fishing zones are created for the vulnerable and marginalized fishers and indigenous peoples, there was poor compliance. In Peru a protection zone for artisanal fisheries up to 5 nautical miles, or 10 nautical miles, as the case may be, from the coast exists. Within the maritime territory of Peru even though there are important and ancient fishery traditions, those who practice these traditions are not considered to be indigenous communities.

In all countries HIV/AIDS awareness initiatives existed. Costa Rica has several institutions working on these.⁶ In Senegal, the State has established a National Council for the Fight Against Aids, a coordination and orientation body to respond to HIV within its borders. Thailand has a high level of awareness about HIV/AIDS. There is a draft Thai legislation called the Protection of HIV Infected Persons and AIDS Sufferers' Act. Uganda observed that HIV/AIDS awareness initiatives exist, but they are yet to reach most of its rural areas. In Venezuela, these initiatives are at the regional level and are undertaken by NGOs and universities.

Fifty percent of countries covered have access to clean energy initiatives in the context of climate change. Fishers were undertaking experiments with wind farms in France. The Netherlands drew attention to the EU subsidies for innovations that reduced fuel consumption in fishing vessels. Peru has commercial-scale wind farms and household level solar power is widespread along the Peruvian coast. St. Lucia has plans in place for solar ice making machines. In Tanzania, similar initiatives exist but are confined only to some project areas. Thailand has a Clean Energy Policy in place that covers fishing communities, but the policy did not provide access to fishing communities to funds made available under this policy.

⁶ see: http://nationesunidas.or.cr/programmsconjuntos/onusida/instituciones-que-trabajan-contra -el-vih-en-er

Nearly 90 percent of countries covered have a national climate change adaptation and mitigation policy. Costa Rica has several policies to reach neutral carbon status by 2021. France has climate change policies even up to the local level. In Kerala, India, such a policy was now in the process of being formulated at the state level. South Africa has a national policy and the fisheries department is currently developing a sectoral policy on climate change. St. Lucia has developed a Strategic Programme for Climate Change Resilience as well as a public awareness and education strategy implementation plan. Spain has a climate change policy, but is poorly implemented. In Sri Lanka a national climate change policy is being developed post-2002 tsunami along with a Disaster Management Act. In Peru such a policy existed but its marine and fisheries component was weak. Although disaster preparedness funds were set aside to address El Niño-Southern Oscillation (ENSO) impacts in Peru, these were mainly meant for urban areas and agriculture and less for damages caused by strong waves and quakes in fisheries. In Thailand, under the United Nations Framework Convention on Climate Change (UNFCCC), a National Climate Change Master Plan and a National Adaptation Plan (NAP) was currently being developed. Uganda has a National Climate Change Policy since 2012.

In slightly more than 50 percent of the covered countries schemes exist to train fishers for a second professional skill, especially to assist their guided transfer to other sectors and thus to alleviate the pressure of overfishing. In Cambodia training in alternative livelihoods skills was provided. Ghana has a number of training programmes ranging from subsistence animal and crop farming to tie and dye batik cloth printing, but these were unsuccessful due to credit and marketing difficulties. In recent times, there has been a significant shift towards training in aquaculture. For the Netherlands such trainings were being organized with support from the EU. In Peru an unsuccessful programme attempted to promote anchoveta for human consumption.

VI. NON-STATE ACTORS AND SOCIAL PROTECTION

For two-thirds of the countries in the survey the participation of non-State actors in social protection schemes was reported. The most active participation was in providing social assistance and in various promotive CCT schemes. For example, at least 50 per cent of the countries covered have schemes like orphanages/centres for abandoned children, free training to acquire alternative skills under social service schemes. A similar number reported schemes under CCT such as: fisheries management and conservation; habitat protection and improved post-harvest operations.

NGOs

In Cambodia and Venezuela, mangrove afforestation was undertaken by environmental organizations. In Peru mangrove afforestation programmes in the Peru-Ecuador border were undertaken by Petrolera in collaboration with an NGO. While fishers' unions provided social assistance to families of fishers arrested in other countries for fishery violations, environmental organizations made CCT towards protection of charismatic species such as dolphins and turtles. In South Africa, environmental organizations also made CCT towards fisheries management and conservation (World Wide Fund for Nature-WWF, for example, sponsors some of the marine protected areas), improved post-harvest practices and disaster preparedness and climate change adaptation training. In Tanzania, environmental organizations through government also provided CCT support for fisheries management and conservation schemes. A Village Cooperative Bank (VICOBA) was successfully being run by environmental organizations (e.g. WWF). In Thailand, under protective schemes, environmental organizations provided fishery failure assistance, boat/fisher repatriation allowance, assistance to families of fishers arrested in other countries, worker adjustment payments, potable water, sanitation, and free training to acquire alternative skills. Under promotive schemes, they also supported, under CCTs, community amenities, protection of the coast, fish landing centres, fish ponds, sanitation, abstaining from destructive fishing, use of selective gear, use of smokeless processing, habitat protection, improved post-harvest practices, and disaster preparedness. Cash assistance was rendered to retraining/reskilling programme, and saving, credit and marketing schemes. In the Netherlands, environmental organizations were involved in CCT schemes towards conservation and management, catch and release of matured eels, fish stock monitoring, and habitat protection. In Brazil, environmental organizations provided free training to fishers to acquire alternative skills under social assistance. They also made CCT to fisheries management and conservation schemes, especially for using selective fishing gear and for protecting marine species threatened with extinction. CCT were also made towards habitat protection and improved post-harvest practices. In Indonesia, environmental organizations were involved in advancing CCT towards fisheries management and conservation as well as habitat protection. In Uganda and Venezuela, environmental organizations were engaging with fisheries management and conservation schemes.

Fisher organizations

In Senegal, fishers' cooperatives and associations played an active role in social protection. They provided fisheries failure assistance; social services such as orphanages, maternity home; free training to acquire alternative skills; CCT for abstaining from destructive fishing, improved post-harvest practices, retraining/reskilling; and saving, credit and marketing schemes. In the Philippines, cooperatives, associations and trade unions, undertook coast protection programmes. In Canada, a fish harvesters' union was involved in New Brunswick in providing health insurance and life insurance schemes to its members. In the Netherlands, fisheries associations provided disability allowance; employment injury allowance; accident and accidental death insurance; assistance to families of fishers arrested or detained in other countries; and made worker adjustment payments to fishers. These associations also provided CCT for habitat protection; providing income support for improved post-harvest practices, especially to improve hygiene; disaster preparedness; facilitation of intra-regional trade; purchase of access rights to fisheries in non-EU countries; and for retraining/ reskilling programmes. In St. Lucia, fisheries cooperatives and associations provided social assistance such as old age pension, natural disaster compensation; social services such as potable water, sanitation, and free training to acquire alternative skills. The cooperatives ran retirement insurance where they themselves paid the premium. They also made CCT towards schemes such as protection of the coast, fish landing centres, education (training of fishers), and health (training in sea safety); fisheries management and conservation measures; introduction of solar panels for ice making machines; habitat protection; post-harvest operations; and disaster preparedness. They were involved in retraining/reskilling programmes especially in relation to running cooperatives; and in assisting members in the construction of FAD for deployment at sea. The cooperatives also extended credit to members based on their shares, awarded dividends and helped members to invest their funds. In Maharashtra, India, fisheries cooperatives provided loans for construction of fishing vessels and to procure subsidized inputs for fishing such as fuel and fishing gear. The cooperatives insured fishing vessels against accidents, and arranged personal accident insurance to enhance sea safety. Cooperatives also assisted in fish marketing and provided assistance to procure transport vehicles and to set up ice factories and cold storage. They registered fishers at the state fisheries department, obtained biometric cards, and sent members for training at the National Federation of Fishers Cooperatives Ltd (FISHCOPFED). The cooperatives operated fair price shops to supply food grains and other provisions, ran gas and kerosene supply for cooking, maintained welding workshops to repair fishing boats, ran canteens and cooperative banks to provide subsidized food and credit. Cooperatives also helped poor children of fishing communities by awarding

scholarships for education, and ran libraries providing students with textbooks. In addition to cooperatives, the community associations assisted in obtaining benefits under various affirmative action schemes at the state and national level.

Private philanthropists and companies

In South Africa, private philanthropists were active in offering social service schemes such as orphanages, old age homes, maternity homes, tax free supply of staple food, food stamps, and free training to youth to acquire alternative skills. They also made CCT to develop new marine products for the market and to undertake fisheries management and conservation, for example, to establish co-management structures and to improve post-harvest operations. Private university research funds were also employed to extend CCT to establish co-management structures and to provide various types of training such as leadership training, training in community data capture and monitoring, training in protection of penguins and turtles, shark watch, and training in gender awareness. In Tanzania, private philanthropies provided school-feeding or nutritional supplements in areas with prolonged drought and also ran orphanages. In Thailand, private philanthropies were involved in implementing social assistance schemes such as school-feeding or nutritional supplements, and in providing almost all social service schemes. In the Netherlands private insurance companies were involved in delivering most of the social assistance schemes, in running social insurance schemes, in retraining/reskilling and in credit and marketing.

VII. KEY HIGHLIGHTS OF THE SURVEY

The level of details provided for each of the countries covered by the surveys varied considerably and are not fully comparable. However, the below sections aim at summarizing key points and evidence gathered from the questionnaires.

Livelihood strategies of fishery-dependent households

In addition to making a living from fisheries, the livelihood strategies of fishing communities included non-fishery economic activities in most cases. In Brazil, PBF and seguro defeso pesca are significant social protection schemes for fishers, but fishers do undertake housework for others and work in the tourism industry. In Cambodia, ecotourism was an alternate activity for fishing communities. In Indonesia, agriculture was an important source of supplementary income for fishers. In Peru, construction, farming and trading are alternate activities for fishers to supplement their income. In Canada, it was common for fishers to be involved in other work during the non-fishing season (4-6 months a year, depending on the climate).

In the Netherlands, livelihood strategies were primarily diversification of incomegenerating activities, such as home processing (to add value) and direct sale of fish to consumers and restaurants; participation in fisheries-based tourism; engaging in monitoring fish stocks; catching and releasing of matured eels; and working for the water board or environmental organizations. There were also some who have an alternative business (non-fisheries) and sometimes a part time or seasonal job.

In Costa Rica, very few alternatives existed for fishers outside of fisheries. Even if suffering from overfishing pressures, fishing was still the primary means of livelihood, although fishers did sometimes take up construction and gardening work. The conditions for accessing social protection also made it difficult to take up other jobs. During the *veda*⁷ period, for example, fishers were eligible to receive fishing holiday allowance only if they did not have another source of income and only if they engaged in voluntary community work.

⁷ Veda is defined by the Fishing and Aquaculture Law of Costa Rica as "the period established by the competent authority during which it is forbidden to make use of the marine resources or a species, in particular, within a determined space, area, zone or time period."

In France, direct sale of fish to tourists and Association pour le Maintien de l'Agriculture Paysanne—Association for the Preservation of Peasant Farming (AMAP)-and participative finance were adopted to supplement income of fishers.

In Spain, there were no standardized strategies adopted by fishery-dependent fishers. If fishing was not going well, an early retirement proposal could be made at the age of 55 years, depending on the circumstances of each fisher. She or he can sell the vessel; scrap the vessel with a subsidy; or emigrate. In family groups with women and children of working age, women usually gathered shellfish; children might go to the cities to work in hotels and restaurants (as waiters, etc.) or seek work as crew on other vessels. Generally, each family member had her own livelihood strategy rather than a collective one.

In Ghana, the livelihood strategies of fisheries households were grouped into two: fishery related and non-fishery related. Both fishery-related and non-fishery related strategies focused on selling fish products, non-fish products or engaging in other activities/services to earn income to augment household income. The classic fishery related strategy was to maximize fish harvest during peak season and processing (smoking, salting and drying) for the off- season. However, with the current depleted fish stocks, there was little processed fish to last the seasonal cycle. Seasonal migration for fishing was practiced to some extent but increasingly this option was yielding lower returns because of high inputs costs, overexploitation and competition from other fishers. Practicing unsustainable/destructive fishing methods, particularly with illegal mesh size/gear have been reported. Similarly, the use of light, dynamite, carbide and to a lesser extent — harmful agro-chemicals (e.g. dichloro-diphenyl-trichloroethane — DDT) also have been reported by fishers and several other sources. Since these practices border on criminality, it was difficult to apprehend the culprits and determine their impact since fishers were unwilling to cooperate, even though they admitted this as a common practice.

The non-fishery related strategies in Ghana included: migration or daily commuting to distant or nearby urban and peri-urban destinations to look for menial jobs (mostly young fishers). Some fishers had multiple skills (carpentry, masonry, etc.) and resorted to these when harvest was poor or during the lean season. Some others had complementary/multiple income generating activities in relatively populous fishing communities. Petty trading was typical in this instance and was engaged by women in the community. Wares were also traded in nearby communities. Whereas (men/husbands) invested in this activity, they did not necessarily engage directly in it due to socio-cultural practices/norms. In severe economic reversals, borrowing in cash/kind/barter was practiced, but these arrangements have not been formalized.

The main policies that directly supported social protection in fishery were the Fisheries Act 2002; Fishery Regulations 2010 and the Ghana Fishery and Aquaculture Development Plan—a creation of the Ghana Poverty Reduction Strategy II. The Ministry of Fishery and Aquaculture Development (MOFAD) implemented and enforced the policies in the plan through its regional and district offices.

In Maharashtra, India, fisherwomen in urban cities have moved to other vocations like domestic work, sale of commodities other than fish, and low profile jobs. In rural fishing villages, women were seen moving into wage labour work in nearby factories, construction work, and petty businesses like *bindi*⁸ -making. Many men in fishing communities have also turned to blue collar jobs. In urban coastal cities, people in almost all fishing villages have rented out their homes, put up vertical constructions or new homes to enhance their household income. Now this way of raising additional

⁸ *Bindi* a decorative mark or jewel usually worn in the middle of the forehead, especially traditionally by married Hindu women but now also more widely as a fashion accessory (Oxford English Dictionary).

income was becoming difficult as the new housing policy strengthened the rights of tenants and slum dwellers.

In South Africa, in general, poor rural and urban households have multiple livelihood strategies to supplement fisheries incomes. Strategies differed across rural and urban divides. They included both fisheries related and non-fisheries related activities. The type of livelihood activities differed considerably for men and women, young girls and young boys. In addition to gender, race and language impacted the livelihood strategies available to the target group as South Africa remains a very racially and linguistically stratified society. This shaped people's access to employment and income-generating opportunities. The extent to which livelihood strategies contributed towards household income also differed across the sectors considerably. This was shaped by the fact that the South African fisheries management policy prescribed a single species rights allocation approach. Those with high value species might be less likely to need to supplement their incomes but in most small-scale fisheries households it was suggested that the majority of households were always trying to supplement their incomes.

Livelihood strategies in rural South African areas included: making or mending fishing gear (nets, traps, etc.) by men and women; keeping small amounts of livestock (men); chicken (women); small household vegetable gardens (women); a member of the household migrates to the urban area and sends back wage earnings and remittances (mainly men, but increasingly also women); seasonal work on local nearby commercial farms (men and women); working as a gillie (fishing helper) for recreational fishing tourists (men); working as a cleaner in coastal holiday homes or in service sector in seasonal tourism initiatives (men and women); ad hoc work on Expanded Public Works Programme (EPWP) (men and women)9; seasonal work in commercial line fish or commercial off shore fisheries (men); part time tourism related guiding or other work; NGO related project work such as craft work/sewing, food gardens, etc. In urban areas these strategies would include: making or mending fishing gear (nets, traps etc.) (men and women); seeking temporary informal work in the construction sector (men); selling small amounts of merchandise from home (household tuck shop/spaza shop) (men and women); working in urban factories (women and men); piece work in service sector; piece work on peri-urban farms; and NGO related project-based short term work.

In Sri Lanka, the fishing communities engaged in producing food items and coir products for supplementary income. In Tanzania, all fishing communities led a diversified livelihood. Major non-fishery activities were agriculture, petty trading and community-based tourism. In Uganda, most of the fishery-dependent households engaged in non-fishery activities in order to supplement their income. Such activities included peasant/small-scale farming, retail trading, animal rearing, construction of rental premises, etc. In Venezuela, fishers earned supplementary income from processing shellfish and making handicrafts from seashells.

In Thailand, while additional livelihoods provided new opportunities, and whilst new generations with further education might decide to move into non-fishery livelihoods, many small-scale fishers would much rather remain engaged in fishery, and improve the livelihood and income they were able to derive from fishery. Therefore, sustainable practices and improved fishery management were seen as the best livelihood development options for small-scale fishery communities.

⁹ EPWP was launched in 2004 in South Africa focusing on 'decent employment through inclusive economic growth'. The programme contributes to key policy priorities of the South African Government such as decent work and sustainable livelihoods, education, health, rural development, food security and land reform, among others (http://www.epwp.gov.za/). There are projects such as Working for the Coast, introduced in 2013, under EPWP, to create job opportunities, training and skills development, particularly in rural communities.

Shocks and hazards facing fishing communities and their impacts

In Brazil, the depletion of fish stocks and occupational diseases have led to reported cases of drug abuse and violence in fishing communities. In Costa Rica, obtaining a fishing permit is conditional upon meeting certain minimum sea safety requirements including the need to carry on board a whistle, an oar, lifebuoys, a water-lantern, etc. But small-scale fishers do not often have their equipment and boats in good condition, which hinder fishers from obtaining fishing permits. Although fishers are not always convinced about the need to carry sea safety equipment on board, they lack financial means to procure such equipment for being issued fishing permits. Depletion of marine fishery resources due to unsustainable bottom trawling is also to the detriment of small-scale fishing operations.

In France, problems arose from vessel breakdowns, sickness or accidents that affected owner-operators. Sickness was taken care of, but there were problems of repayment of loans. Specific insurance policies have been proposed by the fishers' unions to address this issue.

In Ghana, depleted stocks or an "unending bad fishing season" might well explain the reality of vulnerability, it was noted. The poverty levels had been increasing, especially among the coastal artisanal fishers, and they were included in least-income brackets. Fishers are also losing access to traditional fishing grounds in some areas, especially along the Gulf of Guinea (particularly Ghana and Ivory Coast) where they are seen as a security threat to the offshore oil and gas industry. They are literally chased off from the cordoned enclaves by state security operatives. Between 2001 and 2011, the official Ghanaian estimates showed an average drop of 40 per cent in income per canoe fisher. Irregular/volatility of income was a serious shock faced by most fishers. With more fishers after fewer fish, the catch was not predictable, thus adding to uncertainty and risk.

There was competition from middlemen and non-fishers as well. Annual fish production in Ghana was roughly 500,000 tonnes in 2011 and a little over one million tonnes were being consumed leaving a gap of some 50 percent to be met from imports. The shortage of domestic fish production created a big market for middlemen and non-fishers, who pre-financed domestic fishery at terms unfavorable to fishers, to import fish for sale to women traditional fish processors. From historical records and interaction with fishers, it is observed that a fishery which used to be profitable has been reduced to a 'hand-to-mouth' venture, thereby increasing vulnerability of fishing communities. The situation is worsened by the lack of insurance and social security for fishers. As a consequence, fishers are forced to spend little on nutrition, health, improved housing/sanitation, children's education and improving working conditions and replacing worn out equipment/gear. Only a few fishers employed new fishing gear and equipment or had better or well-serviced vessels.

In Maharashtra, India, fish production has decreased, especially the availability of commercially important species. As a result, the operational costs have gone up. Activities by other industries collide with fishing activities. In some areas, the fishing season clashed with oil exploration surveys that forced fishers temporarily out of their fishing grounds. Pollution was also a major detriment in Mumbai for fishing and coastal ecology.

In South Africa, small-scale fishing communities were at risk and vulnerable to a range of social, economic, political, psychological and environmental conditions, circumstances and events. This was in part due to the historical, racially-based marginalization of this sector. This assessment applied broadly at a national level to all small-scale fishing communities, but in specific provinces and localities, and depending on the particular marine ecosystem and coastline, both the risk and vulnerability were greater for some small-scale fisheries communities. Due to marginalization and social, political and economic exclusion in the past, resulting in their invisibility in policy,

as well as specific impacts from apartheid legislation on certain communities, such as forced removals, closure of their fishing grounds and stringent restrictions on fishing, some fishing communities were more at risk and vulnerable than others.

Urban and rural small-scale fisheries communities in South Africa faced different risks and vulnerabilities although both were at high risk of poverty. Single womenheaded households were very prevalent in the rural areas and they faced particular risks. Some small-scale fisheries rural communities did have access to other natural resources as sources of food and livelihood at some times in the year – but these were fairly meager. Similarly, urban SSF households did have some access to alternative employment options but these were very short term and also limited. There was high risk of poverty and food insecurity, loss of property, health related issues (e.g. HIV), alcoholism and drug abuse, and sexual violence. There was also serious risk of arrest and prosecution due to fishing without recognized rights. This risk was exacerbated for small-scale fisheries communities living in or near marine protected areas (MPAs) or world heritage sites.

In addition to the above-mentioned risks, small-scale fisheries communities faced a number of distinct hazards and shocks. South Africa has a dangerous coastline and the small-scale fisheries sector in South Africa has one of the highest statistics for loss of life at sea in the world. Climatic change effects were increasing adverse weather conditions, which were increasing these risks. In addition, they face environmental hazards such as the algae blooms off the west coast which were linked to increased lobster mortalities and contamination of shell fish. Some communities have been impacted by flooding as well as rising coastlines. Many coastal communities have been impacted by tourism and industrial developments along the coast, which have eroded their tenure rights. In some places, such as Saldanha Bay harbour, the marine ecology of the traditional fishing grounds was also impacted by these developments.

MPAs and the imposition of top-down, non-participatory conservation schemes were a hazard that impacted communities negatively. Small-scale fisheries communities had very little access to formal micro-credit and financing support and hence they relied heavily on informal money lenders and the commercial companies and dealers for loans. This was a huge hazard for them and placed them at severe risk of debt burden and the social and economic powerlessness and problems associated with such a burden.

Poor fishing season seemed to be common to Spain, Sri Lanka, Tanzania, Uganda and Venezuela. In Thailand, most of the problems facing small-scale fishing communities were attributed to poor fisheries management. In some cases, the fishing practices of some small-scale fishing communities themselves were not sustainable, it was reported. In other cases, it was overfishing by the commercial fishery sector that was the problem. More generally, problems with applying and enforcing promising policies and laws, and problems of political influence and corruption, were factors that prevented fisheries management measures from being as effective as they should be. In Uganda, fishers were, in addition to bad fishing season, exposed to climate change effects affecting other livelihood strategies adopted by the target group, especially in agriculture. Poor health and lack of proper health infrastructure also affected fishing communities in particular, and HIV rates were much higher than in other communities in Uganda. Venezuela also cited the negative impact of inflation.

Benefits to fishing communities from social protection

In light of limited alternative options and a multitude of shocks and hazards that the small-scale fisheries communities were exposed to, the questionnaire looked at the extent to which the fishery-dependent households benefited from social protection programmes or measures and what the effect on households' income, support to livelihoods diversification, resilience and the status and management of natural resources were. The answer was mixed. Even in a developed country like Canada,

although basic fishery employment insurance was crucial, the fish harvesters had to work apart from any publicly-funded support for additional income to make both ends meet.

In Brazil, there is no evidence about the impact of PBF ¹⁰or other social protection programmes on fishing communities. Data from a reported survey of fishery households in the state of Pernambuco, for example, showed that half of them had access to PBF in 2009 but it was not clear if their access had translated into better education of fishers' children (Lira et al. 2009). The other big cash transfer scheme for fishers was the *seguro defeso pesca*, a closed season transfer in relation to observing fishing holiday with respect to certain species during their breeding period. This programme, although financially benefited bona fide fishers, was steeped in corruption and there were many illegal fishers who benefited from it.

In Costa Rica, the social security system allowed the population to have access to health services and to contribute for obtaining a pension which would enable them to live with dignity when they retire from fishing. It has been estimated that in 2012, a little over 65 percent of the economically active population were covered by the pension scheme, surpassing countries like Uruguay (61.1 percent), Venezuela (60.9 percent) and Argentina (60 percent). Specifically in the fishing area, according to statistics of the Caja Costarricense de Seguro Social (CCSS) or Costa Rican Social Security Institution, there were, by June 2014, about 5,285 (legal) fishers entitled to a health insurance in the fishing area. Of these, 971 fishers (18 per cent) received benefits through special agreements with the fishery cooperative, 1,735 through their personal account (33 per cent), 2,437 (46 per cent) through a private business enterprise and 142 fishers through autonomous institutions. While CCSS statistics showed a reasonable coverage concerning social protection in the fishing sector, there were no differentiated statistics showing the amount accruing to small-scale fishers separately from others. Similarly, there were no specific studies showing how the small-scale fishery sector took advantage of the social protection schemes. Since many fishers were considered illegal, a significant number of small-scale fishers were not covered by social security schemes. They were denied health services and pension. However, all fishers insured by the CCSS could receive medical benefit to meet various medical expenses, thus to improve their living conditions.

In Ghana, the fishers and their dependents were not excluded from social protection programmes under the statutory laws. The social protection measures that had the most positive impact on fishing communities were the pre-mix fuel programme, National Health Insurance Scheme (NHIS) and the School Feeding Programme (SFP). In the face of weakening local currency, fuel subsidies were reportedly helping fishers to buy pre-mix oil at a fairly consistent price. These subsidies, however, were to be scrapped soon due to pressures from the International Monetary Fund (IMF). In reducing infant mortality and malaria deaths in poorer communities (inclusive of fishing community) NHIS has been very beneficial; the scheme however, was criticized for being non-viable and for putting a cap on certain ailments and drugs. A significant readjustment was sought to be made in premiums. For close to a year now (2015), the scheme was heavily indebted to suppliers and healthcare providers and could only provide basic medication.

Although the SFP, Ghana, was a major success serving close to 1.7 million pupils in 4,982 schools and has been instrumental in getting and retaining pupils at school, including from fishing families, it is heading towards a crisis due to political interference, poor quality of food, non-payment to contracted caterers, and circumventing of the procurement process.

¹⁰ The largest social protection programme in absolute terms in the world, which reached around 11.3 million families comprising 46 million people in Brazil, at an annual cost of US\$3.9 billion (0.4 per cent of GDP) (ILO. 2014).

Many schools were now served only once or twice a week. Livelihood Empowerment Against Poverty—a cash transfer programme that targeted single parent with orphan or vulnerable child, elderly poor, or person with extreme disability unable to work—has had a lesser impact in fishing communities. Other social protection that has been of benefit to fishers and their dependents (but to a much lower extent) included: (1) free school uniform & exercise books to pupils (2) National Youth Employment Scheme for apprenticeship & skills training (3) Labour Intensive Public Works to facilitate development in poor communities and (4) Education Capitation Grant for subsidizing education at the basic level.

In the Netherlands, universal social protection was means-tested¹¹ and confined only to households without any means of subsistence or to those heavily indebted households incapable of procuring basic needs. Fishers, home-based fish processors and fish sellers were considered self-employed and therefore were to insure themselves privately. Fishers were also considered as property holders (e.g. fishing gear, house, shed, etc.) and therefore not seen as eligible for social security protection. If income was low, fishers would economize on insurance and take/accept big risks. In particular, collaborative spouses (women) were generally not insured. There was compensation for fishing closure (abolition of fishing rights), but the amounts were getting smaller and smaller. The Welfare State was breaking down, but this affected all vulnerable citizens. In communities (villages), there was also help from neighbours, relatives or the church to households exposed to disasters. Informal social protection was becoming more and more the norm.

In Spain, social protection measures were universal and derived from the State. There were specific measures for the fisheries sector (reduction of social security charges; fuel subsidies; application of a coefficient for reducing charges for years worked in fishing and which records every year as one and a half years, etc.).

In Thailand, most basic social protection was well covered by the Thai government. However, an area where there was problem was with regard to access to and tenure over land and natural resources, which impacted heavily upon the small-scale fishing communities. In this respect, the role of non-State actors, especially NGOs and various fishers associations and federations, was of huge importance and benefit. These two groups were continuously working to ensure that promising provisions in policies and laws towards social protection were realized in a tangible way at the local level for the benefit of small-scale fisher communities.

South Africa has a lengthy but chequered history of providing social protection mechanisms to fishing communities, particularly of those dependent on small-scale fisheries. In the 1940s the State introduced a range of racially-based legislative and policy measures to support the white commercial fishing sector, with a view to reducing poverty specifically amongst the white population. Poverty alleviation schemes were targeted on poor whites living in fishing communities. However, the majority of Black (African and Coloured) fishers who made up the majority of poor fishers who depended on fisheries for their livelihoods did not receive any social protection. Following democracy in 1994, the new democratic government was committed to introducing a range of reforms that aimed at providing protective, promotive and transformative mechanisms to address poverty throughout the country and, in particular, to address the racial inequities in the country. The African National Congress (ANC) embarked on an ambitious Reconstruction and Development programme that aimed to promote and secure the socio-economic rights of those who had been marginalized. This included fishing communities. The South African Constitution provided the legislative basis for this reform. In addition to a number of legal and policy initiatives that would aim to provide

¹¹ A scheme that provides benefits upon proof of need and targets certain categories of persons or households whose means fall below a certain threshold (ILO 2014).

redress and target the poor, the Constitution introduced the right to food security, the right to housing, and the right to social security. Ambitious programmes of service delivery have been implemented. These programmes aimed to address the backlog in basic rights of the majority of South Africans. Fishing communities have benefited from these social programmes but were, in general, not targeted for specific attention, unless they happened to be very poor and rural. Twenty years since democracy and the State was still struggling to address the backlog of basic service provision with regard to basic rights such as the right to water, sanitation, housing, electricity, health and education, although great strides have been made.

Analysis showed that over the last decade spending on social grants in South Africa has continually been placed high up on the expenditure list along with education. Despite a progressive, transformative and developmental approach, certain segments of the population remain marginalized and the reach of this social protection strategy has not provided the support to these communities that was hoped for. Furthermore, the developmental approach to policy and service provision spearheaded by a very progressive department of social development, and integrated into the National Development Strategy, has not been taken up by other line function departments with the same level of understanding, enthusiasm and commitment. In practice, therefore, departments like those responsible for fisheries and environment have not made the same strides in integrating a developmental, rights-based approach to either policy conceptualization and development, or policy implementation. Putting it plainly, these latter departments have not appeared to take on board a deep understanding of the triple pillars of sustainability and the integral connection between human and ecological wellbeing. This is evidenced in the still fairly limited cross-referencing of this approach to social protection and rights approach in the policies of these departments. Where they have introduced public works programmes with a developmental focus, the potential for social protection schemes to contribute towards their mandates remains largely unexplored.

Approaching social protection from another perspective, small-scale fishing communities throughout South Africa, particularly in rural areas, remained marginalized, even within fisheries management itself. Until recently, there were few NGOs working on small-scale fisheries issues from the perspective of the livelihoods and well-being of fishing communities. Most interventions focused on the marine environment. Public interventions specific to fisheries were geared towards protecting the marine environment or supporting the commercial and recreational sectors. Public interventions from a social development/rural development perspective have not targeted fishing communities and small-scale fishing communities have remained marginalized.

The situation of small-scale fishing communities was now changing in South Africa. In the past decade there has been an increased focus on coastal livelihoods (government departments in partnership with academic institutions and NGOs), on small-scale fishing communities' human rights (NGOs and academic and research institutions), on the impact of climate change on the vulnerability of coastal communities (NGOs and academic institutions) and on ensuring that the needs of fishing communities are recognized and integrated into national development plans.

The success of the new initiatives in South Africa varied and was influenced by the neo-liberal political economy of the current context but there was increasing media coverage and policy attention on this sector. The extent to which the target group has already benefited from these interventions varied along the coast and was ad hoc and patchy, rather than a consistent, adequate and effective level of benefit. More vocal, organized communities (such as Coastal Links member communities supported by Masifundise) are attracting the attention of policy makers and are now getting access to a range of social protection, especially preventive and promotive measures. For example, since 2009 the Department of Trade and Industry, in partnership with the department

responsible for fisheries management, has implemented a programme to support the establishment of fisher cooperatives along the coast. They have not yet released statistics on the extent of this support but many communities in two provinces have been given access to finance as well as boats and new equipment through this project. In another example, in the more rural provinces of the Eastern Cape and KwaZulu-Natal coastal communities have benefited extensively from the Expanded Public Works Programme that has put in place short term employment and skills training and provided cash transfers in exchange for employment in clearing alien vegetation, dune rehabilitation and prevention of coastal erosion, fighting fires and cleaning up the coast.

Factors preventing fishing communities from accessing social protection measures. There were several factors that stood in the way of fishing communities from accessing benefits under social protection programmes/schemes. In Brazil, the federal government faced significant difficulty in verifying who is, or who is not, a fisher to include in the scheme. Many non-fishers, especially professionals like taxi drivers who belonged to contributory social security system, where premiums are high, got fraudulently enrolled, for example, under the non-contributory seguro defeso. The situation made it more difficult for bona fide fishers to access the scheme.

In Costa Rica, social protection did not reach many small-scale fishers because of their illegal status and lack of awareness about social protection schemes. In Maharashtra, India, illiteracy, inordinate delay in receiving the benefits under social protection schemes such as accident insurance scheme—and corruption— prevented social protection measures from reaching small-scale fisheries communities. This was now changing with the state departments moving towards a direct cash transfer regime. One of the major demands of National Fishworkers' Forum (NFF), India, was for treating social protection schemes for fishing communities on a par with agriculture. In Indonesia, inadequate contribution of beneficiaries prevented social protection measures from reaching fishing communities.

In Ghana, social protection services such as healthcare and schools were not easily available and this limited access to such services. Many of the social protection services had hidden costs or indirect charges due to inadequate finance, insufficient coverage and poor design. While these may look negligible, to a person/household with little or no income, this could be a major obstacle to benefiting from the service. Arbitrary increment in premiums was another concern that could keep social protection away from fishers. Many fishers were also not aware of some of the safety nets provided by social protection and, as such, did not apply themselves to benefit or insist on their rights. In addition, state-sponsored programmes had the reputation of being poorly communicated or deliberately miscommunicated for political expediency resulting in a mismatch between the programmes' actual intended purpose and expectations thereby leading to slow rate of acceptance and misperception of the programmes' true objectives. There was also evidence to suggest that bad governance practices and plain theft at both central and local offices prevented fishers from benefiting from much needed help. Issues of "artificial shortages", illegal charges and extortion deprived fishers from enjoying the full benefit or forced them to make additional payments. Some of the social protection services are fraught with long waiting periods, bureaucracy and excessive paperwork which deterred intended beneficiaries from accessing the service.

In Peru, other than access to basic health facilities, there are no non-contributory social protection schemes. The factors preventing contributory social protection measures from reaching target groups were the level of premium to be paid (and the procedure for accessing social security, which demanded an employer—often a union/gremio or association—to support them) in combination with a feeling of greater vulnerability, or lack of faith, in the country's social security system. In Venezuela, lack of coordination between different public and private institutions and the leaders of fishing communities was the main factor preventing access to social protection measures. In South Africa, it was low levels of literacy and education, poor communication, lack of awareness of rights

among small-scale fishers, poor road and transport infrastructure in rural areas, and low levels of political organization and power that prevented social protection measures from reaching all small-scale fishing communities. In the Philippines it had mainly to do with poor targeting of beneficiaries.

In Thailand, the main failures were in ensuring rights related to access, tenure, use and management of land and natural resources. While the Constitution and various Acts enshrined the rights of the target groups to land and natural resources, the problems with the proper application and enforcement by government agencies meant that these fundamental rights of small-scale fishery communities were, in practice, often overlooked or even abused. The problems with enforcement often arose from a lack of proper awareness and appropriate skills on the part of the government officials, constraints related to budgets and human resources, and too much emphasis on sectoral approaches by government line agencies, which meant that good governance and democratic process in planning and implementation may not be properly applied.

Benefits of social protection in relation to poverty alleviation, sustainable use of fisheries resources and disaster preparedness

The survey sought to find out the role that social protection programmes or schemes played in poverty alleviation, sustainable use of fisheries resources and in disaster preparedness. Although some benefits were reported in the realms of poverty alleviation, the response in regard to the benefits for sustainable use of fisheries resources and disaster preparedness from social protection was, more or less, negative.

For Canada, the Netherlands, Tanzania and Uganda it was observed that only poverty alleviation benefited from social protection schemes. For the Netherlands, however, it was observed that in the absence of social protection fishers would be forced into poaching to survive. In Maharashtra, India, disaster preparedness and sustainable use of fisheries resources did not benefit from social protection. It was further observed that the old age pension and other cash transfers were inadequate even for the beneficiary to survive.

In South Africa, the links between social protection, poverty alleviation, sustainable use of fisheries resources and disaster preparedness were yet to be made at a policy level. The overall aim of projects still focused on protection of the environment and biodiversity – poverty alleviation and any skill acquisition that happened were secondary added benefits.

For Costa Rica the need to undertake studies to see if the social protection system benefited poverty alleviation, sustainable use of resources and disaster preparedness within the small-scale fisheries sector was highlighted. For Tanzania it was noted that the VICOBA scheme, although benefited poverty alleviation in coastal Tanzania, did not have the desired impact on fisheries, i.e., to prevent destructive fishing, which was the object of the scheme. Destructive fishing still continues, it was observed.

Thailand challenged the notion of social protection schemes reducing poverty and in making fishery practices more sustainable. Social protection measures were useful and helped only in maintaining a basic level of human security for small-scale fisher communities, and in that respect they should remain a fundamental right, it was held. The only way to really reduce poverty and make fishery sustainable was through proper management of marine and coastal resources in the long term. With regard to disaster preparedness, the government has an effective institutional and policy set-up related to preparing for and protecting against natural disasters by establishing and training local community members as Civil Defense Volunteers. However, the poor environmental governance often meant that this good work was undone by man-made disasters, such as industrial development or the construction of heavy infrastructure in the sensitive coastal ecosystems where small-scale fishers earned their livelihoods. For Venezuela it was noted that social protection, by meeting basic needs, can complement fisheries management measures.

Social protection schemes, sustainable fisheries, and transition to alternative livelihoods

The survey also tried to find out if social protection schemes in combination with fisheries interventions and enabling institutions supported sustainable fisheries on the one hand, and facilitated, on the other, a transition to alternative livelihoods (e.g. in case of banning fishing gears, during closed seasons, in response to climate variability and change, etc.). There were hardly any such examples reported, except for South Africa. There were several suggestions, however, on how such a combination might work to enhance livelihood opportunities of fishing communities, both for women and men.

In South Africa, NGOs and academic/research institutions have had various fairly ad hoc and not necessarily sustained projects offering a combination of social protection and fisheries interventions, supporting sustainable fisheries and alternative livelihoods. Examples were the University of Cape Town-Environmental Evaluation Unit (UCT-EEU) co-management project; the WWF-SSF Fisher Improvement Project, Kleinmond, and the Mussel Rehabilitation Project, Coffee Bay. On a national level, in general, rural programmes targeting poor households, aimed to increase the asset base of rural communities, increased their resilience through helping them diversify their livelihood options.

Although not designed as a social protection intervention, the UCT-EEU co-management project highlighted the link between sustainable natural resource utilization and the socio-economic rights of local communities. In particular, it provided evidence that fishers' empowerment to participate in decision-making is a necessary precondition for sustainable resource utilization. The legitimacy of a resource management regime is closely linked to the extent to which the local resource users' rights of access and management are recognized and respected by the State fisheries authorities.

The WWF-SSF Fisher Improvement Project, Kleinmond, South Africa, is in its infancy and only started in 2013. It has not been evaluated yet, however, it is showing signs of success. The project recognizes that improving the long term sustainability of the small-scale fisheries sector needs to explicitly address both environmental and social drivers of unsustainable fishing practices and underdevelopment in the sector. The project recognizes that community empowerment is key to success and has focused on supporting the establishment of a community-based legal entity and building the capacity of this entity to engage in a range of activities aimed at empowering the local community to manage their own marketing arrangements and to add value along the value chain, particularly focusing on women's involvement.

The Mussel rehabilitation Project in Coffee Bay, South Africa, highlighted the integral link between the well-being and social welfare of the local community, women's role as providers of food and sustainable resource use. This Project was only able to demonstrate a measure of success when the food security needs of local women were addressed as a first step towards sustainable resource use. The provision of inputs to women to establish a local food garden where they could grow their own vegetables enabled the women to then take steps to reduce their harvesting of mussels. Once they were able to see the impact of their controlled harvesting of mussels and the re-seeding of the mussel beds they were then able to begin to engage in the co-management of the mussel project. This project thus demonstrated the links between securing basic survival needs and the sustainable use of marine living resources.

As far as Canada was concerned, it was noted that without political will it was difficult for the combination of social protection schemes, fisheries interventions and enabling institutions to work in harmony and the importance of having strong organizations to enable political will was stressed. In the case of Costa Rica attention was drawn to the lack of coordination between social protection measures and fisheries conservation and management measures. The annual closed season (16 May to 16 July) allowance paid to fishers was delayed and the amount was meagre to meet even the basic needs of small-

scale fishers. Furthermore, fishers could not engage in another economic activity if they received closed season or fishing holiday allowance. They also had to pay their social security premium every month, which added to their economic burden in lean seasons.

For Maharashtra, India, it was observed that there was need for legislation and guidelines on sustainable fisheries management to protect small-scale fisheries. The recent digital initiatives of the Indian government and technological innovations such as the Unique Identification Authority of India (UIDAI), direct cash transfer and community service centres, have enhanced access to social protection measures. There was need for greater focus on vulnerable and marginalised groups like unorganized labour, women workers-including widowed, deserted, specially-abled, children and old persons, it was noted. The social protection benefits were to be made universally accessible. Focused attention was necessary on women's issues, especially on those related to post-harvest practices. There was need for provisions to establish women-only cooperatives to promote their business development opportunities. A fish marketing system on a par with the agricultural produce marketing system was proposed, along with a housing policy for fishers, focusing on providing basic amenities like water, electricity, and sanitation. Training in coast protection, tourism, maintaining coastal hygiene and security; and training in fisheries management to fishing communities, especially to monitor destructive fishing practices of fishers by fishers themselves, were additional areas proposed for imparting training.

For Indonesia it was reported that a combination of protective and promotive measures towards better disaster preparedness, education, housing and health so as to improve sanitation and to adopt sustainable fisheries management as well as to promote acquisition of skill in the production, processing, packaging, and marketing of fish, finance management and alternative livelihood activities was sought.

In the case of Peru it was suggested enhancing the capacity of the State to establish a specific framework for social protection of artisanal fishers who do not fit into the current Peruvian employer-employee type of social protection arrangements. In the realms of alternative employment, scallop culture and development of tourism along the north coast of Peru were proposed to be developed. The growing demand for women workers in the export-oriented agro-industry in coastal areas was highlighted, which has also contributed to increasing daily wages in the fish processing plants. However, the working conditions in the agro-industry needed to be regulated. Widening and making more visible the alternative income options for women in the families of fishers would allow not only family incomes to be diversified but also to redefine gender roles in these communities, it was suggested. Families of fishers should also be involved in fisheries management to make sure fishers, not traders, interests are protected.

Tanzania supported enhancing livelihood diversification by fishing households, for example, by promoting small-scale trading, especially through the micro-credit schemes.

From Thailand it was suggested that social protection schemes could not in any way make up for a loss of traditional fishery livelihoods or facilitate a transition of livelihoods into another sector. The emphasis had to be on strengthening communities' rights to access and manage marine and coastal resources and for the long-term sustainable management of coastal ecosystems. Social protection schemes were a useful backup only to ensure basic living conditions and human security needs, but they should in no way be considered as any kind of alternative to maintaining existing, traditional, fishery-based livelihoods. Moreover, there was absolutely no guarantee that small-scale fisher communities would be able to gain equitable and consistent access to effective social protection schemes even if they were vastly improved over prevailing standards.

In the case of Uganda, providing assets and supporting stakeholders in livelihoods diversification to enhance income from alternatives like fish farming and animal rearing, improving access to credit and other productive resources, and enhancing access to education, health services, water and sanitation were welcomed measures.

Role of social protection in addressing the livelihood challenges facing fishing communities

The survey inquired about the barriers and challenges facing fishing communities to maintain themselves as fishers and fishworkers and the role of social protection policies in addressing these barriers and in diversifying and engaging in more sustainable livelihoods. The responses, while drawing attention to major challenges and insurmountable gaps also addressed how to strengthen social protection measures/ schemes in some of the countries.

In the case of Canada respondents were of the view that the owner/operator policy in Eastern Canada was the only way to protect harvesting communities. For Brazil it was observed that the barriers and challenges in Brazil to people to maintain themselves as fishers came primarily from economic activities involving non-fishery sectors that pollute the marine environment. Fishers also had very low income due to depletion of fish stocks and small sizes of their catch. Low impact tourism and creation of marine protected areas to protect the environment and rebuilding fish stocks with the participation of fishers were options that could be favourably considered.

In Costa Rica, the small-scale fishers faced depletion of fishery resources and unfair competition in the nearshore waters from bottom trawling. In addition, the small-scale fishers had to work in difficult conditions. On the other hand, the social protection policies were not sufficient to address the problems confronting the fishers and their families. While tools like the Labor Code and access to social security provided the legal framework for worker protection in general, the particularities and the distinct work of the fishers made it difficult for them to overcome their problems. The State and the society, in general, owed a debt to this sector, and to improve its visibility by enhancing the issue of fish permits to include more fishers, on the one hand, and to improve access, on the other, to health insurance and pension. Furthermore, it was important that social protection options for the sector went together with the implementation of responsible fishing zones.

For France attention was drawn to investment in men and fishing vessels. The challenge was how to replace men and vessels. Investment in fishing is risky, and in case of failure, there was little social protection for the small-scale investor, there was therefore need for aid to guarantee revenues and a provision for reconversion of vessels in case of difficulties or failure to limit the uncertainties and the hazards of fishing.

For Maharashtra, India, increasing costs of fishing business; uncertainty of income from fishing; decreasing access of women to commercially important fish species in fish markets; port and shipping activities; pollution; and urban development were reported as factors pushing fishers out of their business. Current social protection measures are inadequate to provide for fishers in Maharashtra. In addition to work guarantee in fisheries, there should be enhanced allowance during the closed monsoon fishing season, and special and adequate financial assistance for the aged, disabled, children and women workers in the fisheries sector, as well as to secure the basic needs like education, skill development, food, health and life insurance, it was suggested.

For Indonesia lack of capital, bad weather conditions, scarcity of fishery resources, unfair value chain, and debt bondage to middlemen were identified as key barriers to maintain themselves as fishers and fishworkers. In addition to social protection in cash and kind that could provide some relief, there was need for focus on empowerment of women fishers by improving their fish processing activities and by assisting in promoting fair trade activities.

In Tanzania urbanization, acquisition of coastal land by the State, poor organization of fishers, lack of sensitivity of the State to fisheries (except in the case of Zanzibar) and variability of weather appeared as the main challenges facing small-scale fishers. Aquaculture and mariculture offered opportunities to diversify livelihood opportunities, especially in the realms of crab culture, pearl culture and seaweed farming.

In the Netherlands, fishers and fishworkers who were self-employed liked to be independent. There was a strong culture of taking care of themselves. They did not like to ask for handouts, nor did they like state interference. However, it was becoming increasingly difficult to make a living from small- and medium-scale fisheries, because of bureaucracy and restrictive policies of the government and the European Union (EU). Other problems were dislocation of fishers by development projects, MPAs, and pollution. Social protection measures played only a marginal role. In urbanized areas, or areas with significant tourism, there might be alternative employment, but in remote areas there was less/little such opportunity. People from the fishing community, finding work outside fisheries and undertaking migration, generally retained their ties with the community, and identified with the community. They were proud of their culture.

In Peru, artisanal fisheries had a role in absorbing labour displaced from particular places. Currently, the unemployment pressure has reduced. However, the use of environmentally destructive gears, impacted negatively on fishery resources. The pressure to earn income to sustain families was the argument used by those involved in this activity. However, it has never been addressed seriously in ways which would enable to know about better and viable alternatives. External markets had also enhanced demand for resources, leading to an increase in catches for species like squid and mahi mahi, for example, making it necessary to improve capacities for regulation and control.

For Ghana at least six barriers and challenges for stakeholders to maintain themselves as fishers and fishworkers were identified. Firstly, fish stocks in both the marine and inshore fishery peaked in the mid-1980s and have progressively declined to date. While fishers in the inshore sector were relatively better off than their marine counterparts, there was a drop of at least one-third of fish catch per canoe from the year 2000. Secondly, processing facilities were either not available and appropriate, or affordable, thereby leading to high cost of processing and short shelf life of fish. Thirdly, the authorities regarded the oil and gas industry as more profitable than artisanal fishery and for this reason prevented fishers from accessing their traditional fishing grounds which were declared as security zones. Fourthly, the entire Gulf of Guinea was an enclave of illegal, unreported and unregulated (IUU) fishing activity and has adversely affected the fishery in Ghana. It appears IUU was perpetrated by a relatively smaller number of artisanal, industrial and semi-industrial fishers. Fifthly, the over-concentration of economic activities in urban areas was putting a lot of pressure on natural water bodies. The Forestry Act forbade structural development of any kind within 50 m of any water body in Ghana but this was not well enforced. Many lagoons and mangroves such as those of Chemu, Korle, Kpeshie and Gao had been reclaimed for real estate development and this has further worsened the plight of fishers who engaged in lagoon/brackish water-dependent fishery such as shrimp. And finally, the lack of proper regulation and enforcement of applicable legislation and code of conduct remained a constant threat to fishers' livelihoods. Authorities charged with this duty complained of lack of logistics and insufficient budgetary allocation to carry out enforcement. In 2013, a fishery enforcement unit (FEU) was established in MOFAD. It remains to be seen, however, if the Unit will live up to its mandate. There have been some attempts in addressing some of the above challenges but the desired impact was yet to be felt by fishers at the grassroots level. The fundamental reasons for this, though the state authorities claim otherwise, included: (1) the macro-level/top bottom policy approach (2) disjointed social protection in fishery and (3) lack of clear-cut rights-based approach in fishery.

Some of the consequences of the above were: policies and plans in fishery did not get to the root cause of the declining fish stocks and the attendant effect on livelihood and social protection schemes. There was an assumption by the state that by modernizing the fishery sector, many of the issues that plagued fishery (particularly the annual demand-supply fish gap of ~ 500,000 tonnes) would be addressed. This focus was based on the wrong premises as they did not address why there was declining stocks in the

first place. The argument then followed that the fishery ecosystem/health should be restored/improved (together with improved capacity of both traditional systems and statutory agencies to monitor and enforce bye-laws/code of conduct) to make fishery more productive and sustainable.

The existing social protection schemes in fishery were disjointed and detailed no clear and proactive measures for addressing risks and vulnerability in the sector. In the Ghana Fisheries and Aquaculture Development Plan (FADP) for instance, there was a presumption that "the canoe sector will remain at the heart of the Ghana fishing industry." Yet it went on to add "the pathway forward is not however prescribed and the Plan leaves a wide scope for policies to be developed to best meet the needs of Ghana and ensure that increased revenue and wealth generated from Ghana's fisheries is captured and used to best effect." Thus, the FADP concentrated power in the Minister of MOFAD, leading to disjointed and reactive efforts at addressing social protection issues. For example; the commercial production of oil in the Jubilee Oil Field in the Western Region in 2010 severely affected six coastal fishing communities - Ahanta West, Western Nzema, Jomoro, Ellembelle, Sekondi-Takoradi and Shama. Despite several appeals from the fishworkers and assurances by the State to address their concerns, the MOFAD minister in November 2014 reported that "negotiations were underway with the oil companies to find alternative livelihood to the fishing communities." To date, the livelihood concerns have not been addressed and fishers are prevented from accessing their previous fishing grounds for some five years now.

Failure of involving fishworkers in decision making for deeper interrogation of issues have led to the creation of infrastructural projects that have (1) a little impact (2) no impact and/or (3) negative impact on livelihood security. A major component of social protection efforts in fishery was provision of modern infrastructure to fishing communities. A typical facility included a harbour or landing site, ice making plants, processing facilities, cold storage and nursery/crèches. A total of 15 of these facilities were to be constructed. However, fishworkers were neither involved in the design nor how they would be financed and operated. In fact MOFAD conceded that these facilities actually presented a threat to existing fish processing set-ups as they would divert products from traditional processing (e.g. smoking) into fresh or frozen sales and would increase beach prices of fish. Another clear threat was the risk that these facilities would become parallel businesses (employing 'outsiders'/tertiary education graduates) that would compete with the already disadvantaged fishworkers. In essence, the very projects that sought to help the vulnerable turned them into victims because their views/concerns did not influence policy.

Lack of a human rights-based approach to aquaculture may solve aspects of food security but would not address vulnerability and risks in fishery. Aquaculture as practiced in its current form was unsustainable and there was the need for caution. Admittedly, the sub-sector had grown very rapidly and has contributed to bridging the annual fish deficit and employment opportunities. Notwithstanding these pluses, a careful review showed that aquaculture's rapid growth is fueled not by artisanal fishers; but by large scale multinational hatcheries and farms such as Tropo and Crystal Lake as well as the Israeli fish feed miller, Ranaan. Another pointer to the rapid growth was the predominant cage system that was practiced on the Volta Lake. Important concerns such as production systems, breeding, feeding and health on native fishery have received very little attention from state actors and proponents.

For South Africa, the primary barrier facing fishing communities to maintain themselves as fishers/fishworkers was the growing levels of poverty and increasing pressure on the resources in terms of numbers of people relying on fish for food security. However, closely linked to this was the restrictive, rights-based policy approach to fisheries that has been implemented, which had adopted policy and management measures that aimed to minimize the number of resource users and

maximize their profit and value addition- and to exclude poor fishers. Thus fisheries policy itself was a barrier. It was a single species and wealth-based approach and did not adopt a livelihood approach. Yet the State did not have the political will or administrative capacity to ensure that benefits of this approach were redistributed through the exchequer. So this was a barrier to the benefits of this approach and it exacerbated poverty. Social protection provided a very minimal, targeted safety net for poor fisher households in that it enabled them to apply for basic social assistance only if there were children under 18, elderly over 60 or disabled people living in the household. This very narrow targeted aspect has been highly critiqued as it made other households - a household with only adults, for example, very vulnerable. It also meant that many households depended on old age pensions and the elderly were vulnerable to being abused for their pensions. In a context in which there were very high rural HIV levels, the limited social protection for the sick and disabled was problematic. South Africa had a very high level of unemployment and one of the highest ratios of inequity in the world. This restricted the options for livelihood diversification, particularly for poor fishing communities who on average had low levels of education, lacked transport and infrastructure and hence were unable to compete in a highly competitive employment market.

In the case of Thailand respondents stated that social protection measures were of absolutely no benefit in assisting fishers and fishworkers in meeting their challenges but proper, participatory, area-based, ecosystem-based and sustainable management of marine and coastal resources was the only real solution. If climate change was considered a threat, then awareness-raising and capacity building to enable the target groups to carry out informed vulnerability and capacity assessments and implement feasible and effective adaptation measures was, by far, a preferred solution. It should not be believed that social protection measures were in any way a substitute for this kind of important, proactive work. They were only a backup system to ensure some basic minimum standards. Placing too much emphasis on social protection measures took focus away from the real problem, which was that a fundamental paradigm shift was needed within government institutions, with a genuine sense of responsibility towards small-scale fisher communities and their plight, and appropriate capacity building of government officers so that they were able to better understand and address the multiple issues these targeted communities faced.

How findings differ across different social and demographic groups

For Costa Rica it was observed that there were no studies currently available that showed a differentiation across several categories of social protection beneficiaries, particularly in small-scale fisheries. However, it could be said on the basis of the social security statistics that in 2014, in Puntarenas province, which was the main centre of fishing activity, there were 20,283 men and 8,697 women covered under the health insurance (own contribution of premium), and 16,981 men and 6,546 women under the pension scheme, including the fishing sector. However, as already stated, there were no statistics disaggregated by sex showing the breakup according to the small-scale fishers' population, of the boat workers and of other operators in the medium and semi-industrial scale fishing in the country.

For Ghana it was reported that among all economic sectors fisheries was the hardest hit because of declining fish stocks and unpredictability in harvest. Small-scale fisheries in the marine sector reported relatively lower fish catch in comparison to their inshore and freshwater counterparts. Women, girls, boys and elderly were more susceptible to lower quality of life and deprivation. In Central Region, along coastal fishing communities, "sex for fish" a phenomenon where women fish traders and processors had preferential access to fish from male fishers after sex, was reported in 2009. The use of children in fishing (child labour) has abated but the practice was still widespread, especially in fishing activities on the Volta Lake.

In the Netherlands, in urbanized areas or areas with significant tourism, there were better alternative employment opportunities, but in remote areas there was less/little such opportunity. Women and youth of fishing communities were generally going for higher education these days and therefore might have better prospects, but often needed to migrate to the urbanized regions to find jobs.

In Peru, in the past artisanal fishers did not have social security and it was their families which had a decisive role in caring for them. In Tanzania, the experiences were the same across social and demographic groups, but women tended to be more readily engaging in seaweed farming, than men, and comparatively they were active members in the VICOBA scheme that fetched small but steady incomes to enhance livelihood security of women, and for some, even to acquire property.

In Thailand, children and the elderly tended to fare best, because many of the social protection schemes were designed for them and were automatically and consistently applied. More problems occurred in the group of working-age adults. Many adults did not enjoy all of the benefits they should from social protection schemes, partly because of a lack of awareness and knowledge, and partly because of inefficient and inconsistent enforcement on the part of government agencies. The situation was exacerbated for women, because in many scenarios men were considered the head of household and were more likely to participate in meetings where they would learn about the details of various social protection schemes and how to access them. Women, on the other hand, might not so readily learn about their rights and entitlements in this way.

In Maharashtra, India, men reportedly have better access than women to social protection and property with minor exceptions. Boat ownership or land and house ownership, membership in traditional and formal organizations like Nakhava Mandal and cooperatives were mainly for men. Men also had better access to credit to purchase fishing boat. Accident insurance was available through cooperatives only to men.

In Uganda, due to societal cultures many women were illiterate with no formal employment and yet lacked assets including inheritance to productive resources such as land. Women had low mobility and were more vulnerable to poverty thus many social protection schemes needed to pay greater attention to women, girls, boys and the elderly. Women were usually more affected by lack of exposure, skills and opportunities. However, several non-governmental organisations were currently focusing on women as well, showing hope for improvement. Also in Tanzania, there was a big difference between men and women as far as social protection schemes were concerned at various levels.

VIII. CONCLUSION

A wide spectrum of social protection programmes and schemes, both universal and specific to fisheries, is available to marine and inland fishing communities in varying degrees in the countries surveyed in this study. These are under both State and non-State regimes. The fishing communities in countries like Brazil, Costa Rica, South Africa, Thailand, and to a lesser extent Ghana, seem to have had greater social protection coverage of fishing communities than other developing countries included in the survey.

While protective and preventive social protection programmes and schemes were mostly universal, the promotive programmes and schemes were mainly sectoral. There were also preventive contributory unemployment benefit programmes like seguro defeso¹², Brazil, made available to fishers as non-contributory unemployment benefit during annual closed fishing season, also with the intent of promoting fisheries conservation.

¹² Seguro defeso means closed season unemployment insurance (See www.cifor.org/fileadmin/subsites/proformal/PDF/RMcGrath1212.pdf)

What was the effectiveness of social protection schemes in relation to poverty reduction and empowerment, in promoting sustainable use of fishery resources and in mitigating or adapting to climate change? The results are mixed in regard to poverty reduction, poor in regard to promoting sustainable use of fishery resources and none in respect of climate change adaptation and mitigation.

A scheme like the seguro defeso pesca was successful in reaching out to all fishers and making a reasonable regular payment every year, but it also led to widespread abuse and overfishing pressures, raising doubts about the efficacy of downstream social protection measures in a common property regime like fisheries, in the absence of effective fisheries management and upstream social protection measures. In Tanzania, the VICOBA scheme was unable to put an end to destructive fishing that it was originally intended for, but it helped in poverty alleviation by assisting women in coastal fishing communities to modest, steady incomes to enhance their livelihood security.

Although the universal pension scheme of Costa Rica covered nearly two-thirds of the economically active population of the country, its benefits to small-scale fishers were not really known, especially considering that a significant number of small-scale fishers were treated as illegal and not covered by the scheme. The School Feeding Programme, Ghana, benefited pupils from fishing families to attend school, but the programme was slowly breaking down. The National Health Insurance Scheme, Ghana, although beneficial to fishing communities, was being scaled down. In South Africa, in spite of an increased focus on coastal livelihoods in the past decade, the extent to which fishing communities benefited from social protection interventions varied along the coast. More than others, vocal and organized coastal communities were getting access to a range of social protection measures in South Africa, which clearly underscores the benefits of organizing fishers and fishworkers into associations and unions.

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Annex 1: Questionnaire

International Collective in Support of Fishworkers (ICSF)

Formal and Informal Social Protection Schemes and Needs from a Small-scale Fisheries Perspective

Survey Form

08 July 2015

INTRODUCTION

"Social protection" has a much wider meanings than "social security". Social protection has been described by the FAO Secretariat as "all interventions from public, private, voluntary organizations and informal networks to support individuals, families, households and communities in their efforts to prevent, manage, and overcome a defined set of risks and vulnerabilities".

For this study risk is defined as exposure to the possibility of loss, injury, or other adverse or unwelcome circumstance, and *vulnerability* as the state of being susceptible of suffering loss, receiving injury or being affected by an adverse of unwelcome circumstance.

ICSF would like you to identify risks facing small-scale fishers, fishworkers, fishing communities and indigenous peoples in your country, province or locality as well as the vulnerabilities they are susceptible of. Using the categories of schemes listed below, we would like you to list the State and non-State interventions that address these risks and vulnerabilities, with a special emphasis on the marginalized and the excluded including old persons, women and children as well as the indigenous peoples.

Social protection is differentiated into: Protective measures to guarantee relief from deprivation; preventive measures to avert deprivation in various ways; promotive measures to enhance capabilities and build/strengthen resilience; and transformative measures to pursue policies to address power imbalances in society as well as to secure access and use of resources (see Devereux, S. and Sabates-Wheeler, R. 2004).

OBJECTIVES OF THE SURVEY

The objectives of the survey— in the context of risks and vulnerabilities identified at the national, provincial and local level, as appropriate, in small-scale fisheries— are to:

- a. Document State and non-State social protection schemes in relation to:
 - i. poverty reduction/empowerment;
 - ii. sustainable use of fishery resources; and
 - iii. mitigation/adaptation to natural disasters
- b. Determine access to universal and targeted social protection measures; and
- c. Assess, based on evidence, the effectiveness of social protection measures in achieving (a) (i); (a) (ii); and (a) (iii).

KEY QUESTIONS TO BE ANSWERED

Please provide responses to the following questions referring to the social protection measures listed below:

- 1. Are the below schemes universal providing benefits to all residents; or **targeted** providing benefits only to those in the fisheries sector?
- 2. Are benefits under the below non-contributory (non-conditional/conditional), and contributory schemes made available by: (i) the State authorities at various levels; (ii) by the Non-State actors including private philanthropies, voluntary organizations and informal networks at different levels? (Please specify the type of non-State actor). (Note: non-contributory means cash transfers to individuals or households usually financed out of taxation, other government revenue, or external grants or loans; contributory means schemes where contributions are made by beneficiaries. Conditional means cash transfers to beneficiaries, conditional upon accomplishing specific tasks, or cash transfers to families subject to fulfilling specific requirements such as ensuring their children attending school regularly) (ILO 2014).
- 3. Please indicate below, if possible, which are the rights-based schemes (Note: rights-based scheme means a particular social protection scheme as an entitlement, or a legal right, of the beneficiary).
- 4. Please indicate below, if possible, the market-based schemes. (Note: *market-based* schemes are schemes targeting those from whom the most economic benefits are expected).
- 5. Please indicate below which are the schemes that are both rights-based and market-based (e.g. employment guarantee schemes, alternative livelihood schemes, fisheries conservation and management schemes, etc).

SOCIAL PROTECTION 1. PROTECTIVE MEASURES:	I. PR	OTECTIVI	E MEASU					,					
				If Yes, can	you please	put an 🕽	can you please put an X mark below, as appropriate?	s appropriate?					
				State spon	State sponsored or supported	ported	Non-State						
1. Social assistance schemes (in cash or kind)	N X	Universal	Targeted to Fisheries	National	Provincial Local	Local	Private Philanthropies	Coops / Associations / Trade Unions	Environmental Organizations	Bilateral	Others	Rights based shemes	Market based schemes
(a) Disability allowance													
(b) Sickness allowance													
(c) Employment injury allowance													
(d) Medical allowance													
(e) Maternity allowance													
(f) Unemployment allowance													
(g) Old age pension													
(h) Survivors' pension													
(i) School-feeding or nutritional supplements													
(j) Natural disaster compensation													
(I) Fisheries/fish plant closure allowance													
(m) Fishery failure assistance													
(n) Fishing holiday relief assistance													
(o) Boat/fisher repatriation assistance													

(p) Assistance to families of fishers arrested/detained/ deceased in other countries for fishery violations (q) Worker adjustment payments (e.g. payment to assist displaced fishers and fishery workers to find alternative employment) (r) Any other			
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				If Yes, can	you please	put an X	can you please put an X mark below, as appropriate?	appropriate?					
				State spon	State sponsored or supported	ported		No	Non-State				
2. Social service schemes	N/X	Universal	Targeted to Fisheries	National	Provincial	Local	Private Philanthropies	Coops / Associations / Trade Unions	Environmental Organizations	Bilateral	Others	Rights based shemes	Market based schemes
(a) Orphanages/ centres for abandoned children													
(b) Old age homes for the poor													
(c) Maternity home													
(d) Food or clothing													
(e) Potable water													
(f) Ration cards/ration shops													
(g) Food stamps													
(h) Free education/waiving school fee													
(i) Free health care/waiving health charges													
(j) Sanitation													
(k) Reduction of water and electricity charges													
(l) Free training to acquire alternative skills													
(m) Overseas employment services to fishers to find work as fishers/fishworkers abroad													
Any other (Please specify)													

			Market Premium based paid by schemes								
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			Others B								1 the 12st
			Bilateral								
	e?	Non-State	Coops / Environmental Associations / Organizations Trade Unions								or non-State
	If Yes, can you please put an X mark below, as appropriate?	Ž	Coops / Associations / Trade Unions								d by the State
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	out an	or	Local								40 44
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	If		Targeted to Fisheries								oficions .
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SURE			N X								
II. PREVENTIVE MEASURES			Social insurance schemes	(a) Unemployment insurance	(b) Accident insurance	(c) Accidental death insurance	(d) Health insurance	(e) Life insurance	(f) Maternity health insurance	(g) Retirement insurance	Dlance enecify if areaminme are heneficiary contributions (martly or fully) or maid by the Crate or non State actors in the last column

III. PROMOTIVE MEASURES	SURE	S											
				If Yes, can	you please	but an X	can you please put an X mark below, as appropriate?	s appropriate?					
				State spons	sponsored or supported	ported	Non-State						
Promotive schemes	Z >	Universal	Targeted to Fisheries	National	Provincial Local		Private Philanthropies	Coops / Associations / Trade Unions	Environmental Organizations	Bilateral donors	Others	Rights based shemes	Market based schemes
(A) Non-contributory conditional cash transfers:													
1. Employment Guarantee Schemes													
a. Roads, etc													
b. Community amenities(e.g. cyclone shelter)													
c. Mangrove afforestation													
d. Protection of the coast													
e. Fish landing centres, etc													
f. Fish ponds, etc													
g. Any other													
2. Other non-contributory, conditional cash transfers:													
a. Education													
b. Health													
c. Housing													
d. Sanitation													
e. Fisheries management and conservation													

i. Abstaining from destructive fishing methods (e.g. dynamite, cyanide, small-mesh nets, trawis, etc)	ii. Abstain from fishing	iii. Temporary cesatsion of fishing	iv. Retirement of fishing vessels	v. Use of selective gear (e.g. non-trawl, TEDs, circle hooks etc)	vi. Protecting species threatened with extinction	vii. Use of smokeless fish processing techniques (women)	viii. Belonging to fishers' coopslassns/trade unions	ix. Others (please specify)	f. Habitat protection (e.g. sand dunes, mangroves, seagrass beds, corals, etc)	g. Post-harvest operations(e.g. improved post-harvest practices, reducing waste)	h. Disaster preparedness (e.g. flood-proof housing, vessel safety, training, sanitation on board)	i. Any other (Please specify)

				Market based schemes			
				Rights based shemes			
				Others			
				Bilateral			
		s appropriate?	Non-State	Environmental Bilateral Others Organizations donors			
		X mark below a	No	Coops / Associations / Trade Unions			
		If Yes, can you please put an X mark below as appropriate?		Private Philanthropies			
		Yes, can y	pported	Local			
		Ħ	State sponsored or supported	Universal Targeted National Provincial Local to Fisheries			
			State spor	National			
				Targeted to Fisheries			
				Universal			
				N ×			
(B) Facilitation of Intra-regional trade (for women fish traders)	(C) Purchase of access rights (land, fishing grounds)			Promotive schemes	(D) Retraining/ reskilling programme (Specify)	(E) Promoting labour-intensive activities (Specify)	(F) Savings, credit and marketing (including microfinance/mobile banking)- Please specify

IV. TRANSFROMATIVE MEASURES	Yes/ No	Further Comments
a) Are there effective legislation/policies to recognize, protect and promote the human rights of all—citizens and others—including the right to development and the rights of women, consistent with international human rights standards?		
b) Are these measures effectively reaching the fishing communities?		
c) Is there adoption and application of a human rights-based approach, especially to ensure social protection of fishers, fishworkers and fishing communities?		
d) Are there effective mechanisms, processes and institutions in place for citizens/persons to benefit from social protection measures at the national/provincial/district/local levels?		
e) Is the right to food, including fish, and right to clothing and shelter recognized under national law?		
f) Is the right to education recognized under national law?		
g) Is the right to social security recognized under national law?		
h) Are the rights of the child recognized under national law?		
i) Are there legislation to protect the rights of men, women and children against forced labour and slavery-like conditions?		
j) Is there legislation to enable trade unions, cooperatives, associations, etc, to function at various levels?		
k) there a provision for living wage, especially in fisheries-related activities?		
I) Are there policies/legislation in support of equitable tenure rights to land and fishing grounds, for both men and women?		
m) Is there recognition of preferential access to fishing grounds (e.g. creation of exclusive fishing zones) for the vulnerable and marginalized fishers and indigenous peoples)?		
n) Is there legislation to secure working and living conditions including occupational safety and health of fishers and fishworkers?		
o) Are there effective legislation to protect the rights of children and to protect the rights of men, women and children from forced labour?		
p) Is there legal protection for women against violence and exploitation?		
q) Is there access to clean energy initiatives in the context of climate change?		
r) Is there a national climate change adaptation and mitigation policy? $ \\$		
s) Are there HIV/AIDS awareness initiatives?		
t) Is there training of fishers for second professional skill to assist their guided transfer to other sectors and to relieve the pressure of overfishing?		

Based on the information generated from answering the above questions please attempt the following questions, if possible:

- 1. What are the livelihood strategies adopted by the target group (fisheries-dependent households) and how do these strategies contribute to the household income? "Do the target group, for example, engage in non-fishery activities in order to supplement their income from fishery-related activities, if so please describe them?
- 2. To what shocks /hazards are they exposed (e.g. bad fishing season, severe storms, irregular income, illness) and how do these affect the livelihoods strategies adopted by the target group (at a household level) or necessitate appropriate protective/ preventive/promotive measures?
- 3. To what extent, based on evidence, do the target group (fisheries-dependent households) benefit from public, private or informal social protection programmes/ measures and what effect does this have on households' income, support to livelihoods diversification, resilience and the status and management of natural resources?
- 4. What prevents social protection measures from reaching the target groups of fishers/fishworkers/fishing communities/indigenous peoples in some cases?
- 5. To what extent, based on evidence, do poverty alleviation, sustainable use of fisheries resources and disaster preparedness, benefit from social protection schemes?
- 6. What types of combinations of social protection schemes, fisheries interventions and enabling institutions (policies, structures, etc.) support sustainable fisheries, including facilitating transition to alternative or complementary or more resilient livelihoods where needed (e.g. in case of banning fishing gears, during closed seasons, in response to climate variability and change, etc)?
- 7. How do they do so (e.g. providing assets, improving ability to take risks, allowing stakeholders to invest in livelihood diversification)?
- 8. What are the barriers and challenges for the target population to maintain themselves as fishers/fishworkers? How do social protection policies contribute to addressing these? What are the options/challenges to diversify and engage in more sustainable livelihoods or more resilient livelihoods?
- 9. How do these findings differ across different social and demographic groups, including men, women, girls, boys, the elderly, etc.?

Annex 2: Protective measures, preventive measures and promotive measures: schemes at a glance

ICSF- FAO: Formal and Informal Social Protection Schemes and Needs from a Small-scale Fisheries Perspective – 2015

		1. (n) Boat/fisher repatriation assistance	Cambodia	Netherlands	Philippines	Spain	Thailand												
		1. (m) Fishing holiday relief assistance	Costa Rica	France	India-Kar	India-Ker	India-TN	Spain											
		1. (l) Fishery failure assistance	Canada	France	India-Kar	India- Mah	India-TN	Indonesia	Senagal	Spain	Thailand								
		1. (k) Fisheries/fish plant closure allowance	Brazil	Cambodia	France	India-Ker	Netherlands	Senagal	Spain										
		1. (j) Natural disaster compensation	Cambodia	Canada	France	Ghana	India-Kar	India-Ker	India-Mah	India-MP	Indonesia	Netherlands	Philippines	Saint Lucia	South Africa	Spain	Thailand		
sə	1. Social assistance schemes (in cash or kind)	1. (i) Schoolfeeding or nutritional supplements	Brazil	Cambodia	Canada	France	Ghana	India-Kar	India-Ker	India-Mah	India-MP	Indonesia	Netherlands	Peru	Philippines	South Africa	Spain	Tanzania	Thailand
I. Protective Measures	schemes (in	1. (h) Survivors' pension	Brazil	Cambo- dia	France	Ghana	India-Kar	India-Ker	India-MP	Indonesia	Nether- lands	Spain							
I. Protec	assistance	1. (g) Old age pension	Brazil	Cambo- dia	Canada	Costa Rica	France	Ghana	India-Kar	India-Ker	India- Mah	India-MP	Indonesia	Nether- lands	Saint Lucia	South Africa	Spain	Thailand	
	1. Social	1. (f) Unemployment allowance	Brazil	Cambodia	Canada	France	India-Ker	Indonesia	South Africa	Spain									
		1. (e) Maternity allowance	Brazil	Cambodia	Canada	Costa Rica	France	Ghana	India-Kar	India-Ker	India-MP	India-Mah	India-TN	Indonesia	Nether- lands	Philippines	South Africa	Spain	
		1. (d) Medical allowance	Brazil	Cambodia	Canada	Ghana	India-Kar	India-Ker	India-Mah	Indonesia	Nether- lands	Philippines	Saint Lucia	South Africa	Spain				
		1. (c) Employment injury allowance	Brazil	Cambodia	Canada	Costa Rica	France	Ghana	India-Ker	Indonesia	Netherlands	Philippines	Saint Lucia	Spain					
		1. (b) Sickness allowance	Brazil	Cambodia	Canada	Costa Rica	France	Ghana	Indonesia	Netherlands	Philippines	Spain							
		1. (a) Disability allowance	Brazil	Cambodia	Costa Rica	France	Ghana	India-AP*	India-Kar	India-Ker	India-Mah	India-MP	India-TN	Netherlands	Philippines	Saint Lucia	Spain		

1. (o) Assistance to families of fishers arrested/detained/deceased in other countries for fishery violations	1. (p) Worker adjustment payments (e.g. payment to assist displaced fishers and fishery workers to find alternative employment)	1. (q) Any other
Cambodia	Cambodia	India-Ker
India-TN*	India-Ker	Saint Lucia
Indonesia	Netherlands	
Netherlands	Peru	
South Africa	Spain	
Spain	Thailand	
Thailand		

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		Any other (Please specify)	Netherlands	Saint Lucia														
		2 (m) Overseas employment services to fishers to find work as fishers/ fishworkers abroad	Cambodia	France	Netherlands	Philippines	Spain	Thailand										
		2 (l) Free training to acquire alternative skills	Brazil	Cambodia	France	Ghana	India-AP	India-Kar	India-Ker	India-MP	Indonesia	Netherlands	Philippines	Saint Lucia	Senegal	South Africa	Spain	Tanzania
		2 (k) Reduction of water and electricity charges	Cambodia	Canada	France	India-Kar	India-Mah	Indonesia	South Africa	Spain	Tanzania	Thailand						
		2. (j) Sanitation	Brazil	Cambodia	Costa Rica	France	Ghana	India-AP	India-Kar	India-Ker	India-Mah	India-MP	India-TN	Indonesia	Netherlands	Philippines	Saint Lucia	Senegal
S	ies	2. (i) Free health care/ waiving health charges	Brazil	Cambodia	Canada	Costa Rica	France	Ghana	India-AP	India-Kar	India-Ker	India-Mah	India-MP	India-TN	Indonesia	Netherlands	Peru	Philippines
I. Protective Measures	2. Social Service Schemes	2. (h) Free education / waiving school fee	Brazil	Cambodia	Canada	Costa Rica	France	Ghana	India-AP	India-Ker	India-Mah	India-MP	India-TN	Indonesia	Nether- lands	Peru	Philippines	Saint Lucia
I. Protec	2. Social S	2. (g) Food stamps	Cambodia	Canada	France	South Africa	Sri Lanka											
		2. (f) Ration cards / ration shops	France	India-AP	India-Kar	India-Ker	India-Mah	India-MP	India-TN	Sri Lanka								
		2. (e) Potable water	Brazil	Cambodia	Costa Rica	France	Ghana	India-AP	India-Kar	India-Ker	India-Mah	India-MP	Indonesia	Nether- lands	Philippines	Saint Lucia	Senegal	South Africa
		2. (d) Food or clothing	Brazil	Canada	France	Ghana	India-AP	India-Kar	India-Ker	India-Mah	Indonesia	Netherlands	Philippines	Saint Lucia	South Africa	Thailand	Venezuela	
		2. (c) Maternity home	France	Ghana	India-AP	India-Kar	Indonesia	Netherlands	Philippines	Senegal	South Africa	Spain	Sri Lanka	Thailand				
		2. (b) Old age homes for the poor	Canada	France	Ghana	India-AP	India-Kar	India-Ker	India-Mah	Netherlands	Philippines	Saint Lucia	South Africa	Spain	Tanzania	Thailand	Venezuela	
		2. (a) Orphanages/ centres for abandoned children	Brazil	Cambodia	Canada	Costa Rica	France	Ghana	India-AP*	India-Kar	India-Ker	India-Mah	India-MP	India-TN	Netherlands	Philippines	Senegal	South Africa

Thailand	Uganda	Venezuela					
South Africa	Spain	Sri Lanka	Tanzania	Thailand	Uganda	Venezuela	
South Africa South Africa	Spain	Sri Lanka	Tanzania	Thailand	Venezuela		
Senegal	South Africa	Spain	Sri Lanka	Tanzania	Thailand	Uganda	Venezuela
Thailand	Venezuela						
Spain	Tanzania	Thailand	Uganda	Venezuela			

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			II. Preventive measures	res		
			Social Insurance Schemes	mes		
(a) Unemployment insurance	(b) Accident insurance	(c) Accidental death insurance	(d) Health insurance	(e) Life insurance	(f) Maternity health insurance	(g) Retirement insurance
Brazil	Brazil	Brazil	Brazil	Cambodia	Brazil	Brazil
Canada	Cambodia	Cambodia	Cambodia	Canada	Canada	Costa Rica
France	Canada	Canada	Canada	Costa Rica	Costa Rica	France
Indonesia	Costa Rica	Costa Rica	Costa Rica	France	France	India-Ker
Netherlands	France	France	France	India-Kar	India-Ker	India-Kar
South Africa	India-AP*	India-AP	Ghana	India-Ker	India-TN	Netherlands
Spain	India-Kar	India-Kar	India-Ker	India-Mah	Ghana	Philippines
	India-Ker	India-Ker	India-Kar	India-MP	Indonesia	Saint Lucia
	India-Mah	India-Mah	Indonesia	Netherlands	Philippines	South Africa
	India-MP	India-MP	Netherlands	Philippines	Saint Lucia	Spain
	India-TN	India-TN	Peru	Saint Lucia	Spain	Tanzania
	Indonesia	Indonesia	Philippines	Senegal	Tanzania	Venezuela
	Netherlands	Netherlands	Saint Lucia	Spain	Thailand	
	Peru	Philippines	Senegal	Tanzania		
	Philippines	Saint Lucia	South Africa	Thailand		
	Saint Lucia	Senegal	Spain			
	Senegal	South Africa	Tanzania			
	South Africa	Spain	Thailand			
	Spain	Sri Lanka				
	Sri Lanka	Tanzania				
	Tanzania	Thailand				
	Thailand					

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			III. Promotive Measures	ıres		
	Promotiv	Promotive Schemes: (A) Government/private sector/others non-contributory conditional cash transfers: 1. Employment Guarantee Schemes	ent/private sector/others non-contril 1. Employment Guarantee Schemes	non-contributory conditi Schemes	onal cash transfers:	
A1. a. Roads, etc	A1.b. Community amenities (e.g. cyclone shelter)	A1.c. Mangrove afforestation	A1.d. Protection of the coast	A1.e. Fish landing centres, etc	A1.f. Fish ponds, etc	A1. g. Any other
France	France	Cambodia	Cambodia	Cambodia	Cambodia	India - Ker
Ghana	Ghana	Ghana	France	France	France	Saint Lucia
India-Kar*	India-Kar	India-Kar	Ghana	Ghana	Ghana	South Africa
India-Ker	India-Ker	India-Ker	India-Kar	India-Kar	India-Ker	
Senegal	Philippines	Indonesia	India-Ker	India-Ker	India-Mah	
South Africa	South Africa	Peru	Indonesia	Indonesia	India-MP	
Spain	Thailand	Philippines	Philippines	Peru	Philippines	
Tanzania	Venezuela	Senegal	Saint Lucia	Saint Lucia	Saint Lucia	
Thailand		South Africa	Senegal	Senegal	Senegal	
Venezuela		Tanzania	South Africa	Spain	Tanzania	
		Thailand	Spain	Tanzania	Thailand	
		Venezuela	Tanzania	Thailand	Uganda	
			Thailand	Uganda	Venezuela	
			Venezuela	Venezuela		

	A2.i. Any other (Please specify)	South Africa														
	A2.h. Disaster preparedness (e.g. flood-proof housing, vessel- safety, training, sanitation on board)	Cambodia	France	Ghana	India-Kar	India-TN	Netherlands	Peru	Philippines	Saint Lucia	South Africa	Sri Lanka				
onal cash transfers:	A2.g. Post-harvest operations (e.g. improved postharvestprac- tices, reducing waste)	Brazil	Cambodia	France	Ghana	India-Kar	Peru	Philippines	Saint Lucia	Senegal	South Africa	Tanzania	Uganda	Venezuela		
Government/private sector/others non-contributory conditional cash transfers: 2. Other non-contributory, conditional cash transfers	A2.f. Habitat protection (e.g. sand dunes, mangroves, sea- grass beds, corals, etc)	Brazil	Cambodia	France	Ghana	India-Kar	India-TN	Netherlands	Philippines	Saint Lucia	Senegal	South Africa	Spain	Tanzania	Thailand	Venezuela
tor/others non- ry, conditional	ix. Others (please specify)	Saint Lucia	South Africa													
Government/private sector/others non-contributory c 2. Other non-contributory, conditional cash transfers	A2.e. viii. Belonging to fishers' coops /assns/trade unio	Brazil	Cambodia	France	Ghana	India-Kar	Peru	Saint Lucia	Senegal	Spain						
	A2.e. vii. Use of smokeless fish processing techniques (women)	France	Senegal	Tanzania	Venezuela											
Promotive Schemes: (A)	A2.e. vi. Protecting species threatened with extinction	Brazil	France	Ghana	India-Kar	Netherlands	Peru	Philippines	Saint Lucia	Senegal	Spain	Tanzania	Thailand			
	A2.e.v. Use of selective gear (e.g. non- trawl,TEDs, circle hooks etc)	France	Ghana	India-TN*	India-Kar	Netherlands	Peru	Philippines	Saint Lucia	Senegal	Spain	Tanzania				
	A2.e. iv. Retirement of fishing vessels	France	Ghana	Senegal	Venezuela											

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	rsive (F) Savings, credit and marketing (including microfinance/mobile banking) - Please specify	Brazil	Cambodia	France	Ghana	India-Kar	India-Ker	India-MP	India-Mah	Indonesia	Netherlands	Philippines	Saint Lucia	Senegal	South Africa	Tanzania	Thailand
es: (B) – (F)	(E) Promoting labour-intensive activities (Specify)	Cambodia	Ghana	India-Ker	Indonesia	Philippines	Saint Lucia	Senegal	Venezuela								
Promotive Schemes: (B) – (F)	(D) Retraining/ reskilling programme (Specify)	Cambodia	France	Ghana	India-Ker	Indonesia	Netherlands	Philippines	Saint Lucia	Senegal	Spain	Thailand	Uganda				
	(C) Purchase of access rights (land, fishing grounds)	France	Ghana	India-Kar	Indonesia	Netherlands											
	(B) Facilitation of Intra-regional trade (for women fish traders)	Cambodia	Ghana	India-Ker	Indonesia	Netherlands	Senegal	Uganda									

Complied by International Collective in Support of Fishworkers (ICSF)

Annex 3: Social protection—**protective measures**

1. Social assistance schemes (in cash or kind)

Country							(a) Disability allowance	vance					
	N/X	Universal	Targeted	State spon	State sponsored or supported	ported		N N	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ TradeUnions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil	>	×		×								×	
Canada	>												×
Cambodia	>-	×	×	×	×	×		×	×			×	
Costa Rica	>	×		×								×	X (only in poverty condition)
France	>-		×	×								×	
Ghana	>	×											
India	XAP* XKAR XKER XMP XMAH XTN	XKAR XMP	XKER XMAH XTN	XKER XMP XTN	XKAR XKER XMP XTN			XKER XMAH			XKER		
Indonesia													
Netherlands	>	×		×				X(fisheries)			×	×	×
Peru													
Philippines	>	×		×								×	
Saint Lucia													
Senegal													
South Africa	>	×		×								×	
Spain	>	×	×	×	×	×							
Sri Lanka													
Tanzania													
Thailand													
Uganda													

Country													
							(b) Sickness allowance	ance					
	Y/N	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ TradeUnions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Brazil	>	×		×								×	
Canada	>	×		×									
Cambodia	>	×	×	×	×	×	×	×					
Costa Rica	>	×		×								×	
France	>		×	×								×	
Ghana	>	×											
India	XAP												
Indonesia	>		×		×					×	×	×	
Netherlands	\	×		×							×	×	×
Peru													
Philippines	>	×	×	×	×	×	×	×				×	×
Saint Lucia													
Senegal													
South Africa													
Spain	>	×	×	×	×	×							
Sri Lanka													
Tanzania													
Thailand													
Uganda													
Venezuela													

Country						(c) Em	(c) Employment injury allowance	allowance					
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Brazil	>-	×		×								×	
Canada	>-	×			×								
Cambodia	>	×	×	×	×	×	×	×	×			×	
Costa Rica	>-	×		×								×	
France	>-		×	×								×	
Ghana	>	×											
India	XAP XKER		XKER		XKER						XKER		
Indonesia	>	×											
Netherlands	٨	×						X(fisheries)					
Peru													
Philippines	Υ	×		×								×	
Saint Lucia	\		×			×		×				×	
Senegal													
South Africa													
Spain	>	×	×	×	×	×							
Sri Lanka													
Tanzania													
Thailand	_												
Uganda													
Venezuela													

Country							(d) Medical allowance	ance					
	N/Y	Universal	Targeted	State spon:	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil	>	×		×								×	
Canada	>-	×			×			×					
Cambodia	>-	×	×	×	×	×			×				
Costa Rica													
France													
Ghana	>	×											
India	XAP XKAR XKER XMAH	XKAR	XKER XMAH		XKER			ХМАН					
Indonesia	>		×		×					×	×	×	
Netherlands	>	Income dependent		×								×	
Peru													
Philippines	>						×						×
Saint Lucia	>		×			×		×				×	
Senegal													
South Africa	>										_	Xonly for ærtain ætegoriæl of workers	×
Spain	>	×	×	×	×	×							
Sri Lanka													
Tanzania													
Thailand													
Uganda													
Venezuela													

Uganda													
Venezuela													
Country						۳	(e) Maternity allowance	wance					
	N/Y	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil	>	×		×								×	
Canada	>	×		×									
Cambodia	>	×	×	×	×	×	×		×	×			
Costa Rica	>	×		×								×	
France	>	×		×								×	
Ghana	>	×											
India	XAP XKAR XKER XMP XMAH XTN	XKAR XMP	XKER XMP	ХМАН	XKER XMP XMAH XTN								
Indonesia	>		×	×									
Netherlands	>	×		×							×	×	×
Peru													
Philippines	>	×		×			×					×	×
Saint Lucia													
Senegal													
South Africa	>											As above	×
Spain	\	×	×	×	×	×							
Sri Lanka													
Tanzania													

Thailand													
Uganda													
Venezuela													
Country						(f) U	(f) Unemployment allowance	lowance					
	N/Y	Universal	Targeted	State spon	State sponsored or supported	ported		NC	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil	>	×	×	×								×	
Canada	>		×	×									
Cambodia	>-		×	×	×	×	×	×	×			×	
Costa Rica													
France	>	×		×								×	
Ghana													
India	XKER		XKER	XKER	XKER						XKER		
Indonesia	>		×	×							×	×	
Netherlands	>	Tempoary allowance allowance, only for insured worker		×							×	×	×
Peru													
Philippines							×						
Saint Lucia													
Senegal													
South Africa	>-											As above	×
Spain	\	×	×	×	×	×							
Sri Lanka													
Tanzania													

Parisidad Pari														
Vivi Universal Targeted State sponsored or supported Number Aviation Aviat	Inaliand													
Ministrate Targeted State sportscript of a private Automatical plainthopies Automatical plai	Uganda													
Table Tabl	Venezuela													
Y/N Universal Targeted State sponsored or supported Acade Private Cooption Cooption	Country							(g) Old age pen:	sion					
Y		N/X	Universal	Targeted		sored or supp	orted		No	n-State			Rights	Market
Y X				at Fisheries		Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Y	Brazil	>-	×	×	×								×	
Y	Canada	>	×		×									
Y	Cambodia	>	×	×	×	×	×		×	×			×	
Y	Costa Rica	>	×		×								×	
Y X	France	>		×	×								×	
XAP XKAR XKER XMP XMAH XMER XMAH	Ghana	>	×											
	India	XAP XKAR XKER XMP XMAH	XKAR XMP XMAH	XKER XMP	XMP	XKER								
	Indonesia	>		×	×							×	×	
	Netherlands	>	×		×				×			×	×	×
	Peru													
* X X X X X X X X X X X X X X X X X X X	Philippines													
	Saint Lucia	>		×			×		×				×	
x x x x x x x x x x x x x x x x x x x	Senegal													
	South Africa	>	×										×	
	Spain	>	×	×	×	×	×							
x z	Sri Lanka	>			×								×	
x z	Tanzania													
	Thailand	>	×		×								×	
	Uganda													
	Venezuela	z												

Country							(h) Survivors' pension	ısion					
	N/X	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil	>-	×		×								×	
Canada													
Cambodia	>-	×	×					×	×			×	
Costa Rica													
France	>		×	×								×	
Ghana	>-	×											
India	XKAR XKER	XKAR	XKER	XMP	XKER								
Indonesia	>		×	×							×	×	
Netherlands	>	×		×							×	×	×
Peru													
Philippines													
Saint Lucia													
Senegal													
South Africa													
Spain	>	×	×	×	×	×							
Sri Lanka													
Tanzania													
Thailand													
Uganda													

Country Mon-State Fights Fig	Venezuela													
YM Niversear Targeted State sponsored or supported Associations Assoc	Country					S (I)	chool-fe	eding or nutritio	onal supplement	S				
		N/X	Universal	Targeted	State spon	sored or supp	oorted		NC	on-State			Rights	Market
Y				at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Y X X X X X X X X X	Brazil	>-	×			×	×						×	
ical Y X	Canada	>-	×					×						
ica Y X	Cambodia	>		×	×	×	×		×	×				
Y	Costa Rica													
Y X	France	>	×				×						×	
XAP XKAR	Ghana	>	×											
N	India	XAP XKAR XKER XMP XMAH	XKAR XKER XMP XMAH		XMP	XKER XMP							ХМАН	
rds Y X	Indonesia	>		×							×		×	
N	Netherlands	>					×					×		
SS	Peru	>			×									Y, public/ national programmes
ica	Philippines	>	×		×								×	
ica	Saint Lucia	z												
ica	Senegal													
x x x x x x x x x x x x x x x x x x x	South Africa	>	×			×		×					×	
× × ×	Spain	>-	×	×	×	×	×							
x x x	Sri Lanka													
	Tanzania	>	×		×			×			×		×	

Thailand	>	×		×			×					×	
Uganda													
Venezuela													
Country						(j) Nat	(j) Natural disaster compensation	pensation					
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada	>-			×									
Cambodia	>-	×	×	×	×	×		×	×				
Costa Rica													
France	٨	×		×									×
Ghana	>	×											
India	XAP XKAR XKER XMP XMAH	XKER XMP	XKAR XKER XMP XMAH	XKER XMP	XKAR XKER	XKER XMP	XKER	XKER XMAH	XKER	XKER	XKER		
Indonesia	٨		×	×							×	×	
Netherlands	>	×					×	×			×		×
Peru													
Philippines	>		×	×								×	
Saint Lucia	\		×	×		×		×			×		×
Senegal													
South Africa	>			×									
Spain	>	×	×	×	×	×							
Sri Lanka													
Tanzania													
Thailand	>	×		×									
Uganda													
Venezuela													

Country					(K) Fisheri	(k) Fisheries/fish plant closure allowance	ure allowance					
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil	>		×	×									×
Canada													
Cambodia	>	×	×	×	×	×		×	×			×	
Costa Rica													
France	>	X plans	X fisheries	×								×	
Ghana													
India	XKER		XKER		XKER						XKER		
Indonesia											×	×	
Netherlands	>		>	X (often EU subsidized)						×			
Peru													
Philippines													
Saint Lucia													
Senegal	\	×									×	×	
South Africa													
Spain	>	×	×	×	×	×	×						
Sri Lanka													
Tanzania													
Thailand													
Uganda													
Venezuela													

Country						(I) F	(I) Fishery failure assistance	sistance					
	N/X	Universal	Targeted		State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada	>			×							×		
Cambodia													
Costa Rica													
France	>		×									×	
Ghana													
India	XKAR XMAH XTN		XKAR XMAH XTN		XKAR XMAH XTN								
Indonesia	>		×	×									
Netherlands													
Peru													
Philippines													
Saint Lucia													
Senegal	>		×			×		×			×		
South Africa													
Spain	>	×	×	×	×	×							
Sri Lanka													
Tanzania													
Thailand	>		×	×					×				×
Uganda													
Venezuela													

Country						(m) Fish	(m) Fishing holiday relief assistance	f assistance					
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Brazil													
Canada													
Cambodia													
Costa Rica													
France	>		×										
Ghana													
India	XAP XKAR XKER XTN		XKAR XKER XTN	XKAR	XKAR XKER XTN								
Indonesia													
Netherlands													
Peru													
Philippines													
Saint Lucia													
Senegal													
South Africa													
Spain	>	×	×	×	×	×							
Sri Lanka													
Tanzania													
Thailand													
Uganda													
Venezuela													

Country						n) Boat/	(n) Boat/fisher repatriation assistance	on assistance					
	N/Y	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial Local	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Brazil													
Canada													
Cambodia	>-		×	×	×	×		×	×			×	
Costa Rica													
France													
Ghana													
India													
Indonesia													
Netherlands	>										×		×
Peru													
Philippines	>					×	×					×	
Saint Lucia													
Senegal													
South Africa													
Spain	>-	×	×	×	×	×							
Sri Lanka													
Tanzania													
Thailand	>		×	×				×	×				×
Uganda													
Venezuela													

Country			(o) Assis	tance to fan	nilies of fishe	rs arrest	ed/detained/dec	eased in other c	(o) Assistance to families of fishers arrested/detained/deceased in other countries for fishery violations	y violation	Ń		
	N/Y	Universal	Targeted	State spon	State sponsored or supported	orted		N	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia	>	×	×	×	×	×		×	×			×	
Costa Rica													
France													
Ghana													
India	NTX		NTX		NTX								
Indonesia	>		×	×							×	×	
Netherlands	>	×		×				×			×	×	×
Peru	>										YFEDCOO P in Euador also helps the syndicate in Arica (Chile)		
Philippines													
Saint Lucia													
Senegal													
South Africa	\			×									
Spain	Υ	×	×	×	×	×							
Sri Lanka	>			×								XThisshould be arranged after regotiating with the Ministry of Fisheries by multi day boat crew member families	

Trailand Y	Tanzania													
Lange Lang	Thailand	>-		×	×				×	×				×
This base This	Uganda													
The continue of the continue	Venezuela													
This continue Tangeted State sponsored or supported Tangeted State sponsored or supported Tangeted Tangeted Tangeted Tangeted Tangeted Tangeted Tangeted Tangeted Tangeted Tangeted Unions Tangeted	Country)W (d)	orker adjustmo	ent payment	s (e.g. payme	nt to as	sist displaced fisl	hers and fishery	workers to find a	Iternative 6	employm:	ent)	
Authority Auth		N/A	Universal	Targeted	State spon	sored or supp	orted		N N	n-State			Rights	Market
Africa Y				at Fisheries	National		Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
A	Brazil													
Nice X	Canada													
Rical Nice Nice <t< td=""><td>Cambodia</td><td>>-</td><td>×</td><td>×</td><td>×</td><td>×</td><td>×</td><td></td><td>×</td><td>×</td><td></td><td></td><td>×</td><td></td></t<>	Cambodia	>-	×	×	×	×	×		×	×			×	
XKER	Costa Rica													
XKER	France													
Ssial XKER XK XK <t< td=""><td>Ghana</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Ghana													
Fands	India	XKER		XKER	XKER	XKER			XKER					
rlands Y X (forfisheres oftened) X X X X X X y Y Africa X	Indonesia													
vines + <td>Netherlands</td> <td>>-</td> <td>×</td> <td>×</td> <td>X (for fisheries often EU subsidized)</td> <td></td> <td>×</td> <td></td> <td>×</td> <td></td> <td>×</td> <td>×</td> <td></td> <td></td>	Netherlands	>-	×	×	X (for fisheries often EU subsidized)		×		×		×	×		
ucia al Africa Y X X X X X X	Peru	>-												SUPREME DECREE 005- 2012 Produce envisaged a programme of reconvertion but
al Africa Y X X X X X	Philippines													
Africa	Saint Lucia													
Africa Y X X X X	Senegal													
× × × ×	South Africa													
	Spain	>	×	×	×	×	×							

Sri Lanka													
Tanzania													
Thailand	\		×	×					×			×	
Uganda													
Venezuela													
Country							(q) Social security	ity					
	N/X	Universal	Targeted		State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Brazil													
Canada													
Cambodia													
Costa Rica													
France													
Ghana													
India													
Indonesia													
Netherlands	\	×				×	×					×	
Peru													
Philippines													
Saint Lucia													
Senegal													
South Africa													
Spain													
Sri Lanka													
Tanzania													
Thailand													
Uganda													
Venezuela													

Country					(r)	hild allo	wance for parer	(r) Child allowance for parents with children					
	N/A	Universal	Targeted		State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial Local		Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Brazil													
Canada													
Cambodia													
Costa Rica													
France													
Ghana													
India													
Indonesia													
Netherlands	\	×		×								×	
Peru													
Philippines													
Saint Lucia													
Senegal													
South Africa													
Spain													
Sri Lanka													
Tanzania													
Thailand													
Uganda													
Venezuela													

Country					(s)	lousing I	(s) Housing rent allwance income dependent	ome dependent					
	N/X	Universal	Targeted	State spon:	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial Local		Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Brazil													
Canada													
Cambodia													
Costa Rica													
France													
Ghana													
India													
Indonesia													
Netherlands	>	X (Income dependent)		×								×	
Peru													
Philippines													
Saint Lucia													
Senegal													
South Africa													
Spain													
Sri Lanka													
Tanzania													
Thailand													
Uganda													
Venezuela													

Country							(t) Any other						
	N/Y	Universal	Targeted	State spons	State sponsored or supported	orted		N	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia													
Costa Rica													
France													
Ghana	>		×										
India	XKER		XKER		XKER								
Indonesia													
Netherlands													
Peru													
Philippines													
Saint Lucia													
Senegal													
South Africa	>	×		×									
Spain													
Sri Lanka													
Tanzania													
Thailand													
Uganda													
Venezuela													

Country					(a) O	rphanag	(a) Orphanages/centres for abandoned children	andoned childre	ų.				
	N/A	Universal	Targeted	State spon	State sponsored or supported	oorted		N	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based
Brazil	>	×				×	×					×	
Canada	>						×						
Cambodia	>	×		×	×	×	×	×	×	×		×	×
Costa Rica	>	×		×								×	
France	>	×		×								×	
Ghana	>	×											
India	XAP XKAR XKER XMP XMAH	XKAR XKER XMP XMAH	XMP	XMP	XMP XMAH		ХМАН					ХМАН	
Indonesia													
Netherlands	>	×		×		×						×	
Peru													
Philippines	\	×		×			×					×	
Saint Lucia													
Senegal	>	×			×			×					
South Africa	>	×		×	×	×	×					×	
Spain	>	×		×									
Sri Lanka													
Tanzania	\	×		×			×						
Thailand	>	×		×			×					×	
Uganda	>						×						
Venezuela	>						>					>	

Country						O (q)	(b) Old age homes for the poor	r the poor					
	N/A	Universal	Targeted	State spons	State sponsored or supported	oorted		N	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Brazil													
Canada	>	×			×								
Cambodia													
Costa Rica	>	×											
France	>	×				×						×	
Ghana													
India	XAP XKAR XKER XMAH	XKAR XKER XMAH			ХМАН							ХМАН	
Indonesia													
Netherlands	\	×		×		×	×				×	×	×
Peru													
Philippines	>						×					×	
Saint Lucia	\					×	×				×		
Senegal													
South Africa	>	×		×	×	×	×					×	
Spain	>	×		×									
Sri Lanka													
Tanzania	\	×		×								×	
Thailand	>	×		×			×					×	
Uganda													
Venezuela	>-					×						×	

Country							(c) Maternity home	ıme					
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		NC	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Brazil													
Canada													
Cambodia													
Costa Rica													
France	>-	×		×								×	
Ghana	>-	×											
India	XAP XKAR	XKAR											
Indonesia	\		×		×						×	×	
Netherlands	Υ	×				×						×	×
Peru													
Philippines	Υ						×					×	
Saint Lucia													
Senegal	\	×		×	×	×		×				×	
South Africa	\	×			×		×						
Spain	Υ	×		×									
Sri Lanka	>			×		×						This is provided through national health schemes for all. Not only for fishing communities exclusively	

Tanzania													
Thailand	\	×		×		×						×	
Uganda													
Venezuela													
Country							(d) Food or clothing	ing					
	N/X	Universal	Targeted		State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial Local	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil	>	×	×	×			×					×	
Canada	>-						×						
Cambodia													
Costa Rica													
France	>	×										×	
Ghana	>	×											
India	XAP XKAR XKER XMAH	XKAR XKER										ХМАН	
Indonesia	>		×		×						×	×	
Netherlands	\						×						
Peru													
Philippines	>	×		×								×	
Saint Lucia	>					×	×				×		
Senegal													
South Africa	>	×		×	×	×	×			×		×	
Spain													
Sri Lanka													
Tanzania													
Thailand	>	×		×			×					×	

Value Valu	Uganda													
Table Matter Same Attribute Attrib	Venezuela	>						×					×	
Youngerial Targeted State sponsored or supported Associations Associati	Country							(e) Potable wa	ter					
1		N/X		Targeted		sored or supl	ported		N	n-State			Rights	Market
1				at Fisheries		Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions		Bilateral donors/ EU	Others	based schemes	based schemes
Size	Brazil	>-	×			×							×	
ical Y X	Canada													
Y	Cambodia	>-	×	×	×	×	×	×	×	×	×		×	×
Y	Costa Rica	>	×		×		×		×				×	
Y	France	>	×				×							×
SAP XKAR NAP SKER XMP SKER XMP SKER XMP SKER XMP XKAR XMP SKER XMP XMAH XMAH XMAH XMAH XMAH XMAH XMAH XMAH XMAH XMAH XMAH XMAH XMAH XMAH	Ghana	>	×											
	India	XAP XKAR XKER XMP XMAH	XKAR XKER XMP XMAH		XMP	XKER XMP XMAH	XKER							
	Indonesia	>		×		×						×	×	
	Netherlands	>	×		×	×	×						×	×
	Peru													
	Philippines	>		×	×								×	
	Saint Lucia	>		×			×		×				×	
	Senegal	>	×											
	South Africa	>	×		×	×	×						×	
	Spain													
	Sri Lanka													
	Tanzania													
× × ×	Thailand	>	×		×			×		×			×	
× -	Uganda	>						×					×	
	Venezuela	>			×								×	

Country						(f) R	(f) Ration cards/ration shops	sdoys u					
	N/X	Universal	Targeted	State spon	State sponsored or supported	orted		N	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia													
Costa Rica													
France	>	×				×	×						
Ghana													
India	XAP XKAR XKER XMP XMAH	XKAR XKER XMP	ХМАН	XMP	ХМР ХМАН			ХМАН				ХМАН	
Indonesia													
Netherlands													
Peru													
Philippines													
Saint Lucia													
Senegal													
South Africa													
Spain													
Sri Lanka	>			×								Rations are provided utnough a national scheme call Samurdhi. This is social safety net for poor people and necessarily for fishers. Si alone.	

Tanzania													
Thailand													
Uganda													
Venezuela													
Country							(g) Food stamps	bs					
N/X	l Universal		Targeted	State spons	State sponsored or supported	oorted		No	Non-State			Rights	Market
		at	Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada Y	×			×									
Cambodia	×			×			×	×					×
Costa Rica													
France	×					×						×	
Ghana													
India XKER	R XKER	H.		XKER	XKER								
Indonesia													
Netherlands													
Peru													
Philippines													
Saint Lucia													
Senegal													
South Africa				×		×	×					×	
Spain													
Sri Lanka Y				×								As above	
Tanzania													
Thailand													
Uganda													
Venezuela													

Country						h) Free	(h) Free education/waiving school fee	ng school fee					
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil	>	×			×	×						×	
Canada	Υ	×		×									
Cambodia	>-	×		×	×	×	×	×					×
Costa Rica	>-	×		×								×	
France	Υ	×		×								×	
Ghana	>	×											
India	XAP XKER XMP XMAH	XKAR	XKER XMP	XKER XMP	XKER XMP			ХМАН				XKER	
Indonesia	>		×	×							×	×	
Netherlands	\	×		×		×		X Private schools				×	
Peru	>	×		×									This covers all public education
Philippines	\	×	×	×								×	
Saint Lucia	\			×		×			×	×	×	×	
Senegal	>	×		×	×	×							
South Africa	>	×		×	×							×	
Spain	>	×		×									
Sri Lanka	>											Free education is applicable to all in the communities	
Tanzania	Υ	×		×								×	
Thailand	>	×		×			×					×	
Uganda	>	×		×	×	×	×					×	
Venezuela	>			×								×	

Country					(i)	Free hea	(i) Free health care/waiving health charges	health charges					
	N/Y	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil	>-	×		×	×	×						×	
Canada	>-			×									
Cambodia	>-	×		×	×	×		×		×			
Costa Rica	>-	×		×								×	
France	>-	×										×	
Ghana	>	×											
India	XAP XKAR XKER XMP XMAH	XKAR XKER XMP	XKER XMP	XKER XMP XMAH	XKER XMP								
Indonesia	>		×	×							×	×	
Netherlands	>	×		×								×	
Peru	>-	×		×									Recently in national public hospitals
Philippines	\	×		×								×	
Saint Lucia													
Senegal													
South Africa	>	×		×								×	
Spain	>	×		×									
Sri Lanka				×									
Tanzania	>-	×											
Thailand	>	×		×			×					×	
Uganda													
Venezuela	>			×								×	

Country							(j) Sanitation						
	N/Y	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil	>-	×			×							×	
Canada													
Cambodia	>	×	×	×	×	×							
Costa Rica	>-	×		×									
France	>	×	×			×							×
Ghana	>	×											
India	XAP XKAR XKER XMP XMAH	XKAR XKER XMP XMAH	XKER XMP		XKER XMAH	XKER							
Indonesia	>		×		×						×	×	
Netherlands	>-	×		×	×	×						×	×
Peru	>	×				×							
Philippines	>	×										×	
Saint Lucia	>	×	×	×	×	×		×	×			×	
Senegal	>-	×		×							×		
South Africa	>-	×		×		×						×	
Spain	>	×		×									
Sri Lanka													
Tanzania	>	×										×	
Thailand	>	×		×	×	×	×		×			×	
Uganda	>						×					×	
Venezuela	>			×									

Country				(k) Reductio	n of water an	d electri	city charges(the	re is a minimum	(k) Reduction of water and electricity charges(there is a minimum charge for the poors)	ors)			
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Brazil													
Canada	>-				×								
Cambodia	>-	×		×	×	×							
Costa Rica													
France	>	×				×						×	
Ghana													
India	XKAR XMAH		XKAR XMAH	XMP	XKAR XMP XMAH			ХМАН					
Indonesia	>		×			×					×	×	
Netherlands													
Peru													
Philippines													
Saint Lucia													
Senegal													
South Africa	>	×		×		×						×	
Spain	>				×								
Sri Lanka													
Tanzania	>	×										×	
Thailand	>	×		×								×	
Uganda													
Venezuela	>								×			×	

Country					(0)	ree train	(I) Free training to acquire alternative skills	Iternative skills					
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil	>-	×	×		×		×		×				×
Canada													
Cambodia	>		×	×	×	×		×	×	×		×	×
Costa Rica													
France	\	×			×							×	
Ghana	>-	×											
India	XAP XKAR XKER XMP	XMP	XKAR XKER XMP	XKAR	XKAR XKER			XKER			XKER		
Indonesia	Υ		×		×						×	×	
Netherlands	>			X Subsidies for unemployme d (not sure if it is all free)		X(for mi- grants and low income groups, but not sure if risall free. Perhaps they pay a wery small fee)		X for members					
Peru													
Philippines	>	×		×								×	×
Saint Lucia	٨		×	×	×	×	×	×	×	×	×	×	×
Senegal	>	×	×			×		×					
South Africa	>			×	×	×	×						×
Spain	>		×		×								

Sri Lanka													
Tanzania	>	×								×			
Thailand	>-	×		×			×		×			×	
Uganda	>						×	×	×				
Venezuela	>			×	×	×	×	×					×
Country				(m) Oversea	s employmen	t service	s to fishers to fir	d work as fishe	(m) Overseas employment services to fishers to find work as fishers/fishworkers abroad	road			
	Y/N	Universal	Targeted		State sponsored or supported	oorted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia	>						×						×
Costa Rica													
France	>		×								×		×
Ghana													
India													
Indonesia													
Netherlands	⋆										×		×
Peru													
Philippines	>	×		×	×	×							
Saint Lucia													
Senegal													
South Africa													
Spain	>		×		×								
Sri Lanka													
Tanzania													
Thailand	\		×								Bus./Com		×
Uganda													
Venezuela													

Country						(n) P	(n) Public information services	n services					
	N/A	Universal	Targeted		State sponsored or supported	oorted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia													
Costa Rica													
France													
Ghana													
India													
Indonesia													
Netherlands	\	×	×	×	×	×				×		×	
Peru													
Philippines													
Saint Lucia													
Senegal													
South Africa													
Spain													
Sri Lanka													
Tanzania													
Thailand													
Uganda													
Venezuela													

Brazil Y/N Universal at Fisheries at Fisheries Brazil Cambodia Targeted Cambodia Costa Rica Trance Ghana India Y X(Income dependent) Indonesia Y X(Income dependent) Peru Philippines Saint Lucia Senegal South Africa Trancania Sri Lanka Tanzania Thailand Thailand Thailand	State sponsored or supp National Provincial			Non-State		Rig		NAl A
a sodia Aica Sia Y X(Income dependent) Africa Africa Adrica Adric	National Provincial							Market
a odia sia sia sia sia sia sia sia Africa ka hia		Local Private Philanthropies	Coops/ I Associations/ Trade Unions	Environmental Organizations	Bilateral Otl donors/ EU	Others bar	based schemes	based schemes
a odia Aica Ilands Arrica Africa ka No								
ssia sia sia sia sia sia sia sia sia sia								
Sica sia lands Y lands v.ucia al Africa ka								
ssia 'lands Y 'lands 'lands Africa Africa ka								
esia Y Ilands Y innes Ilands Africa Ka Inda								
ssia -lands Y sines -ucia al Africa ka								
ssia Y Iands Y ines ucia al Africa ka								
rlands Y sines al Africa ka								
Peru Philippines Saint Lucia Senegal South Africa Spain Sri Lanka Tanzania Thailand	×	×					×	
Philippines Saint Lucia Senegal South Africa Spain Sri Lanka Tanzania Thailand								
Saint Lucia Senegal South Africa Spain Sri Lanka Tanzania								
Senegal South Africa Spain Sri Lanka Tanzania								
South Africa Spain Sri Lanka Tanzania								
Spain Sri Lanka Tanzania Thailand								
Sri Lanka Tanzania Thailand								
Tanzania								
Thailand								
Uganda								
Venezuela								

Country						(p) A	(p) Any other (Please specify)	specify)					
	N/Y	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia													
Costa Rica													
France													
Ghana													
India													
Indonesia													
Netherlands												×	
Peru													
Philippines													
Saint Lucia	>		×			×		×	×	×			
Senegal													
South Africa													
Spain													
Sri Lanka													
Tanzania													
Thailand													
Uganda													
Venezuela													

*Note Name of the states in India: AP - Andhra Pradesh, KAR - Karnataka, KER - Kerala, MAH - Maharashtra, MP - Madhya Pradesh, TN - Tamil Nadu

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Annex 4: Social protection—**preventive measures**

Social insurance schemes	ance sch	emes												
Country						(a	(a) Unemployment insurance	t insurance						
	N/Y	Universal	Targeted	State sponsored or	sored or sup	supported		No	Non-State			Rights	Market	Premium
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes	paid by
Brazil	>	×		×								×		National govem- ment
Canada	>		×	×										
Cambodia														
Costa Rica														
France	>	×		×										Ω
Ghana														
India														
Indonesia	>		×	×							×	×		
Netherlands	>	×		×							×	×	×	Employers and / or (self) employees
Peru														
Philippines														
Saint Lucia			×											
Senegal														
South Africa	>	×		×									×	Both state and employee
Spain	>		×	×										
Sri Lanka														
Tanzania														
Thailand														
Uganda														
Venezuela														

Non-State National Pargeted State sponsored or supported Non-State National Non-State National National	Country							(b) Accident insurance	surance							
Y X X X X X X X X X		N/Y	Universal	Targeted	State spon		oorted		N	in-State			Rights	Market	Premium paid by	
Y X X X X X X X X X				at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes	S	
Y X X X X X X X X X	=	>	×		×								×		National government	
Y X X X X X X X X X	ada	>				×										
Y	bodia	>	×					×						×	Individual	
Y	a Rica	>	×		×								×			
XAP*	ce	>		×	×										Ω	
Sia Y X	na															
Note	ro o	XAP* XKAR XKER XMP XMAH XTN	XKER XMP XMAH	XKAR XKER XMP XTN	XKAR XKER XMP XTN	XKAR XKER XMP XTN			хман							
rlands Y X <td>nesia</td> <td>></td> <td></td> <td>×</td> <td>×</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>×</td> <td>×</td> <td></td> <td>BID</td> <td></td>	nesia	>		×	×							×	×		BID	
Y X X X X X X X X X	herlands	>							X(fisheries)			×		×		
sines Y X X Lucia Y X X al Y X X Africa Y X X Y X X X Ika Y X X Ika Y X X Ika Y X X Ika Y X X Ika X X X	7	>		×	×										It is offered (but not always fulfilled) in Plura, in the North, for the landings of squid. The navy is in charge of providing it.	
Africa Y X X X Africa Y X X X X Nka Y X X X X X Shereficiary Contribution scheme	ppines	>	×		×			×					×	×		
Africa Y X X X X X X X X X X X X X X X X X X	t Lucia	>	×		×								×		Partly by State	
Africa Y X X X Ika Y	egal	>	×				×									
× × ×	th Africa	>													Employer	
>-	L	>	×	×	×											
	anka	>			X Beneficiary contribution scheme									×	Beneficiary	

Tanzania	>	×	×	×								×	×	Fisher
Thailand	\	×									Bus./Com		\	
Uganda														
Venezuela														
Country							(b) Accident insurance	urance						
	N/Y	Universal	Targeted	State sponsored or	sored or supp	supported		N _O	Non-State			Rights	Market	Dramina
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes	paid by
Brazil	>	×		×								×		National government
Canada	>				×									
Cambodia	>	×					×						×	Individual
Costa Rica	>	×		×								×		
France	>		×	×										Ω
Ghana														
India	XAP* XKAR XKER XMP XMAH XTN	XKER XMP XMAH	XKAR XKER XMP XTN	XKAR XKER XMP XTN	XKAR XKER XMP XTN			ХМАН						
Indonesia	>		×	×							×	×		
Netherlands	>							X (Fisheries)			×		×	GIBI
Peru	>		×	×										It is offered (but not always fulfilled) in Plura, in the North, for the landings of squid. The navy is in charge of providing it.
Philippines	>	×		×			×					×	×	
Saint Lucia	>	×		×								×		Partly by State
Senegal	>	×					×							

South Africa	>			×										Employer
Spain	>	×	×	×										
Sri Lanka	>			X Beneficiary contribution scheme									×	Beneficiary
Tanzania	>	×	×	×								×	×	Fisher
Thailand	>	×									Bus./Com		>	
Uganda														
Venezuela														
Country						9	(c) Accidental death insurance	insurance						
	N/Y	Universal	Targeted	State sponsored or	nsored or supp	supported		No	Non-State			Rights	Market	Premium
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based	paid by
Brazil	>	×	×									×		National government
Canada	>												×	
Cambodia	>	×					×						×	Individual
Costa Rica	>	×		×								×		
France	>		×	×										Q
Ghana														
India	XAP* XKAR XKER XMP XMAH XMAH	XKER	XKAR XKER XMP XMAH XTN	XKAR XKER XMP XTN	XKAR XKER XMP XTN			хман						
Indonesia	>			×							×	×		
Netherlands	>							X (Fisheries)			×		×	IBID
Peru														
Philippines	>	×		×			×					×	×	
Saint Lucia	>			×								×		Partly by State

	Employer		Beneficiary	Fisher		Beneficiary				paid by	National government		Individual	X (partly paid for the State)	Ω	BC			IBID the state also pays a part depended on the income of the household	Up to each person. There are no specific programmes.
				×	0	×			Market	based			×						×	
×				×				-	Rights	based schemes	×			×				×	×	
					Bus./Com					Others								×	×	
										Bilateral donors/ EU										
									Non-State	Environmental Organizations										
								ırance	Nor	Coops/ Associations/ Trade Unions		×								
								(d) Health insurance		Private Philanthropies			×							
×									supported	Local										
									sored or sup	Provincial							XKER			
×	×	×	X Beneficiary Contribution						State sponsored or	National	×			×	×	×	XKER		×	
		×							Targeted	at Fisheries					×		XKER	×		
×		×		×	×				Universal		×		×	×			XKAR XKER		×	
>	\	>	>	>	>	>			Y/N		>	>	>	>	>	>	XKAR	>	>	>
Senegal	South Africa	Spain	Sri Lanka	Tanzania	Thailand	Uganda	Venezuela	Country			Brazil	Canada	Cambodia	Costa Rica	France	Ghana	India	Indonesia	Netherlands	Peru

Philippines	>	×		×			×					×	×	
Saint Lucia	>	×		×							×	×		Partly by State
Senegal	>	×					×							
South Africa	>			×										Employer
Spain	>	×	×	×										
Sri Lanka														
Tanzania	>	×										×	×	
Thailand	>	×									Bus./Com		>	Fisher
Uganda	>												×	Beneficiary
Venezuela														
Country							(e) Life insurance	ance						
ı	N/N	Universal	Targeted	State sponsored or		supported		N	Non-State			Rights	Market	Premium
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes	paid by
Brazil														
Canada	>							×						
Cambodia	\	×					×						×	Individual
Costa Rica	>	×		×				×				×	×	
France	>	×												Crew
Ghana														
India	XKAR XKER XMP XMAH	XKAR XKER XMP	ХМАН	XKER XMAH	ХМАН									
Indonesia														
Netherlands	\										×		×	(self) employee
Peru														
Philippines	>	×		×			×					×	×	
Saint Lucia	>					×								Partly by State

دے:۳۴ ۸۴۰۰۰	_	<					×							
south Africa														
Spain	>			×										
Sri Lanka														
Tanzania	>	×										×	×	
Thailand	>	×									Bus./Com		>	Fisher
Uganda	>												×	Beneficiary
Venezuela														
Country						Œ	(f) Maternity health insurance	h insurance						
•	Y/N	Universal	Targeted	State sponsored or	nsored or supp	supported		N _O	Non-State			Rights	Market	Drominm
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes	paid by
Brazil	>	×		×								×		National government
Canada	>	×		×										
Cambodia														
Costa Rica	>	×		×								×		
France	>	×		×								×		Crew and owner
Ghana	>			×										State
India	XKER	XKER		XKER	XTN									
Indonesia	>		×	×							×	×		
Netherlands														
Peru														
Philippines	>	×		×			×					×	×	
Saint Lucia	>	×		×							×	×		Partly by State
Senegal														
South Africa	>			×										

Spain	>			×										
Sri Lanka														
Tanzania	\	×										×	×	
Thailand	>	×									Bus./Com		>	Fisher
Uganda														
Venezuela														
Country							(g) Retirement insurance	nsurance						
	N/A	Universal	Targeted	State sponsored or	nsored or sup	supported		NC	Non-State			Rights	Market	Premium
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based	paid by
Brazil	>	×		×								×		National government
Canada														
Cambodia														
Costa Rica	>	×		×								×		
France	>		×	×								×		Q
Ghana														
India	XKAR	XKAR XKER		XKER										
Indonesia														
Netherlands	>	×		×						×	×	×		Gtizens (state pension and (self) employed (private pension)
Peru														
Philippines	>	×		×			×				×	×		
Saint Lucia	\		×					×			×			Coop
Senegal														
South Africa	>			×										Partly employer
Spain	>			×										

		Fisher		
	×	×		
				×
		Bus./Com		
X Benefi- ciary contribu- tion				×
	×	×		
>	>	>		>
Sri Lanka	Tanzania	Thailand	Uganda	Venezuela

*Note Name of the states in India: AP - Andhra Pradesh, KAR - Karnataka, KER - Kerala, MAH - Maharashtra, MP - Madhya Pradesh, TN - Tamil Nadu

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Annex 5: Seguro defeso pesca, Brazil

Seguro defeso pesca, Brazil

The Atlantic coast of Brazil extends over 7,367 km. Besides the coast, the inland waters—including the mighty Amazon and thousands of lakes and reservoirs—represent an important source and way of life for the Brazilian people. Studies indicate that some marine fishery resources are overexploited (e.g., lobster and red snapper), some are fully exploited (e.g. tuna), and the level of exploitation of some other species is unknown (e.g. shark, sailfish and crab) (Freire, 2003). In addition to overexploitation, marine fisheries resources are also negatively impacted by tourism, aquaculture, pollution, climate change and industrial activities.

Artisanal and small scale fisheries are one of the most traditional of economic activities for the small coastal communities, providing direct income support to nearly one million fishers (MPA, 2015). Traditional fishery is based on family ties and partnership in the coastal communities. The north and northeast Brazil have thousands of small sail and motorized boats and are dependent on tropical reef fisheries resources and biodiversity. In the south and southeast Brazil, there are small-scale fishing boats and a small industrial fishery. Small-scale fisheries have major social and economic impacts and provide over 65 per cent of the total marine fish production (IBAMA, 2008) both for domestic consumption and exports. Figure 1 shows the total fish production over the last fifty years.

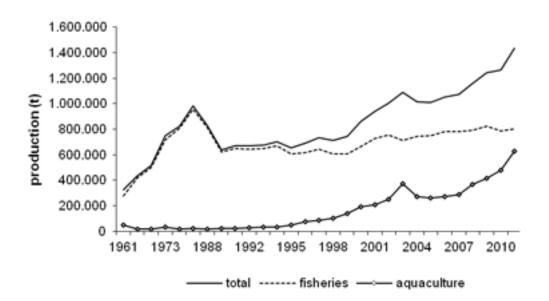


Figure 1 - Brazilian fishery and aquaculture production (1950-2011). (Source: FAO and Brazilian Government's data)

The principal management measure towards reducing fishing effort is the closed fishing season declared during the breeding period of fish stocks threatened with overfishing. A financial allowance is paid under the *seguro defeso* programme since

1991 to compensate fishers who are affected by the closed season. This programme, in response to a social movement of fishers called the "Constituinte da Pesca", was initiated under the national unemployment insurance (Lourenço et al, 2006). The allowance was paid directly to fishers from the *Fundo de Amparo do Trabalhador* (FAT) or the national worker protection fund. For each fisher it amounted to the value of one minimum monthly salary –R\$ 724 in 2014 (US\$ 330). The compensation for a closed season of six months in the lobster fishery, for example, would amount to R\$4,389 (US\$ 2,000) per fisher. This represented a reasonable regular income for affected fishers to help maintain their family.

After the new fishery law of 2009 (Law No. 11959), the closed season allowance was widely accessed by fishers. The 2009 law recognized other fishery workers as well, such as women working in fish processing and sale. It gave opportunities to thousands of fishery-dependent persons in coastal communities to access government benefits. Besides the *defeso* programme, the fishers also have an effective social protection cover, including social security benefits.

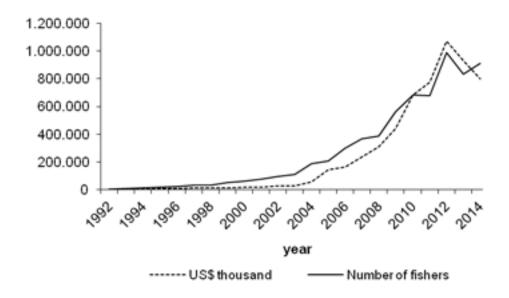


Figure 2 - Unemployment insurance for the closed fishing season in Brazil (Source: http://www.portaltransparencia.gov.br/defeso/)

The implementation of the *seguro defeso pesca* programme ran into several difficulties. The institutional framework for the closed insurance payment permeates several government levels: Ministry of Environment, Ministry of Labor, FAT, the Registrar General of Fishing (Ministry of Agriculture), and the sectoral representative bodies that operate at the local level. This framework made it difficult to implement and monitor the programme.

Although fishers were to satisfy a number of conditions to become eligible for receiving payment, these conditions were neglected for a long time. It went unnoticed that artisanal fishers were now called professional fishers. It was, for example, ignored for 20 years that the legal conditions for receiving the closed season insurance benefit actually limited the rights of fishers to catch other species for sale and prohibited fishers from earning money from non-fishery activities.

The programme was misused by local and national political parties to gain support during elections, by increasing the number of beneficiaries over time. The lawmakers had opened the doors to widespread fraud. The lack of enforcement encouraged fisher representatives to promote the insurance scheme indiscriminately amongst a larger public, irrespective of whether they were fishers or not. In 2004, President Lula

created the Special Secretariat of Fisheries and Aquaculture (SEAP) which became a full-fledged *Ministerio da Pesca e Aquicultura* (MPA) in 2009. During this period, the government enhanced the issue of fisher permits and reduced the time needed to apply for closed season insurance benefit from three years to one year.

The biggest problem was not the amount paid as compensation, but with the increasing number of those claiming to be fishers and wrongly benefiting from the programme (Mendonça & Lucena, 2013). The number of fishers accessing the benefit in 2002 was a modest 95,256, but by 2012 the number had shot up to 990,777. In 2002, the total value of the benefits paid amounted to R\$ 62 million (US\$27 million) and it rose to R\$2 billion (US\$1 billion) in 2012 before dropping due to effective government control (See Figure 2). The amount released to benefit fishers under the defeso programme in 2012 was four times the export revenue of Brazil from fish and fish products the same year (O Estado de S. Paulo, 01/04/2013).

The financial resources for the closed season insurance came from FAT, a fund created from the contributions of Brazilian workers across sectors, to finance the general unemployment compensation scheme that is administered by the Instituto Nacional da Seguridade Social (INSS), the social security agency. Not only has the *defeso pesca* programme led to billions of R\$ being paid to non-fishers and illegal fishers, but it also promoted illegal fishing, as we can see from the lobster fishery example.

In 2010, there were 2,830 boats with 17,122 fishers licensed to harvest lobsters in Brazil and they were paid R\$52 million (US\$ 23.5 million) that year under the *defeso* programme. The estimates made by Instituto Terramar, based on information from ports and communities, revealed that only 4,500 of the 17,122 fishers (26 per cent) were, in fact, bona fide fishers using lobster traps— the only fishing gear permitted under the National Lobster Management Plan, approved in 2008. In all of Brazil, 12,622 fishers were either not fishing or were using diving with compressor, which has been illegal since 1980s, or using gillnets which were prohibited since 2008. The compressor boats also operate in the closed season, which increases fishing effort beyond the legal limit and may lead to the collapse of the lobster fishery.

The *defeso* pesca programme turned controversial in recent years due to investigation of the beneficiaries of the programme for fraud (Campos & Caves, 2014). At the request of bona fide fishers, federal attorneys of labour and environment ordered the government to inspect boats and fishing gear to identify illegal boats and fishers and to cancel lobster permits that did not comply with the law. As a result, in the state of Ceará alone, 300 lobster licenses (50%) were cancelled in 2014 leading to a reduction in fishing effort in 2015. The *Tribunal das Contas da União* (TCU – Court of Federal Accounts) has opened a nationwide study and is investigating the administration of the closed season insurance and fuel subsidies schemes under the now-defunct MPA to detect fraud and to investigate why there was no enforcement of measures to prevent illegal, unreported and unregulated (IUU) fishing operations. As the Ceará lobster fishery demonstrates, the *defeso pesca* cannot, as it is operated, be seen as assisting good fisheries management. It has led to corruption and illegal fishing.

Annex 6: Social protection—promotive measures.

ICSF- FAO: FORMAL AND INFORMAL SOCIAL PROTECTION SCHEMES AND NEEDS FROM A SMALL-SCALE FISHERIES PERSPECTIVE - 2015

(A) Governme	(A) Government/private sector/others non-contributory condition	or/others no	n-contributory	r conditiona	ial cash transfers:	rs:							
					1. Empl	oyment	1. Employment Guarantee Schemes	mes					
Country							a. Roads, etc						
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Brazil													
Canada													
Cambodia													
Costa Rica													
France	>-	×			×								
Ghana	>-											×	
India	XKAR* XKER	XKAR XKER	XKAR XKER	XKAR XKER	XKER								
Indonesia													
Netherlands													
Peru													
Philippines													
Saint Lucia													
Senegal	Y	×		×								×	
South Africa	>			×	×								
Spain	٨	×		×									
Sri Lanka	>					×						X (State provide the facilities)	
Tanzania	\	×		×								×	
Thailand	\	×		×	×	×						×	
Uganda													
Venezuela	>			×	×	×							×

Country					b. Cc	mmunit	b. Community amenities (e.g. cyclone shelter)	cyclone shelter)					
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Brazil													
Canada													
Cambodia													
Costa Rica													
France	>	×										×	
Ghana	>											×	
India	XAP XKAR XKER	XKAR XKER	XKAR XKER	XKAR XKER	XKER	XKER							
Indonesia													
Netherlands													
Peru													
Philippines	>	×	×	×								×	
Saint Lucia	>										>		
Senegal													
South Africa	>	×		×	×	×						×	
Spain													
Sri Lanka													
Tanzania													
Thailand	>	×				×			×			×	
Uganda													
Venezuela	>				×	×						×	

Country						J	c. Mangrove afforestation	station					
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia	>	×	×	×	×	×		×	×	×		×	
Costa Rica													
France	>			×									
Ghana	>											×	
India	XAP XKAR XKER	XKAR XKER	XKER	XKAR XKER	XKAR XKER	XKER							
Indonesia	>		×		×								
Netherlands													
Peru	>						×		×	X Petrolera			X (Applied with an NGO in the mangrove areas of Tumbes on the border with Ecuador)
Philippines	>	×	×	×								×	×
Saint Lucia													
Senegal	>	×				×					×		
South Africa	>			×									
Spain													
Sri Lanka													
Tanzania	>	×		×						×			
Thailand	>	×				×	×						×
Uganda													
Venezuela	>			×	×	×						×	

Country						þ.	d. Protection of the coast	e coast					
	N/Y	Universal	Targeted	State spon:	State sponsored or supported	oorted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia	>	×	×	×	×	×	×	×	×	×		×	
Costa Rica													
France	>	×							×			×	
Ghana	>											×	
India	XAP XKAR XKER	XKAR XKER	XKER	XKAR XKER	XKAR XKER	XKER							
Indonesia	>		×								×	×	
Netherlands													
Peru													
Philippines	٨	×		×			×	×	×	×		×	×
Saint Lucia	>		×	×		×		×	×	×			×
Senegal	>	×				×					×	×	
South Africa	>			×	×	×							
Spain	>	×		×	×								
Sri Lanka	>					×						X State provided	
Tanzania	>	×		×						×			
Thailand	>	×		×					×				×
Uganda													
Venezuela	>			×	×	×			×			×	

Country						e.	e. Fish landing centres, etc	res, etc					
	A/N	Universal	Targeted	State spon:	State sponsored or supported	oorted		N	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia	>-		×	×	×	×	×	×	×	×		×	×
Costa Rica													
France	>-		×	×		×						×	
Ghana	>-											×	
India	XKAR XKER		XKAR XKER	XKAR XKER	XKAR XKER	XKER							
Indonesia	\		×		×								
Netherlands													
Peru	>			X For artisanal use									X (There are around 45 art landing centres in the country built with public funds. Associations (gremios)aris (gremios)aris involved in their management)
Philippines	>-	×		×			×			×		×	×
Saint Lucia	>	×	×	×		×		×	×	×		×	×
Senegal	>	×	×	×								×	
South Africa													
Spain	>		×	×	×								
Sri Lanka	>					×				Some NGOs also provided and also the catholic Church engage on this		X (State provided)	

Tanzania	>-		×	×									
Thailand	\		×	×	×	×			×			×	
Uganda	>		×			×				×			
Venezuela	>		×	×	×	×						×	×
Country							f. Fish ponds, etc	etc					
	N/Y	Universal	Targeted		State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia	>		×	×	×	×	×	×	×	×		×	×
Costa Rica													
France	>		×		×	×					×		×
Ghana	>											×	
India	XKER XMP XMAH	ХМАН	XKER XMP XMAH	XKER	XKER XMAH	XKER							
Indonesia													
Netherlands													
Peru													
Philippines	\		×	×								×	
Saint Lucia	Υ		×	×									×
Senegal	>	×		×							×		
South Africa													
Spain													
Sri Lanka													
Tanzania	>	×											
Thailand	>-		×		×	×			×				×

Uganda	>		×				×	×					
Venezuela	>		×	×	×						×		×
Country							g. Any other						
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Brazil													
Canada													
Cambodia													
Costa Rica													
France													
Ghana													
India	XKER	XKER	XKER	XKER	XKER	XKER							
Indonesia													
Netherlands													
Peru													
Philippines													
Saint Lucia	>		×	×								×	×
Senegal													
South Africa	>			×									
Spain													
Sri Lanka													
Tanzania													
Thailand													
Uganda													
Venezuela													

1					2. (Other non-co	ntributo	Other non-contributory, conditional cash transfers:	sh transfers:					
You Universal Pargeted Parameter Parameter	Country							a. Education						
A		N/A		Targeted	State spon	sored or supp	orted		No	n-State			Rights	Market
Y X X X X X X X X X				at Fisheries	National		Local	Private Philanthropies		Environmental Organizations		Others	based	based schemes
A	Brazil	>	×		×		×						×	
A	Canada													
Y XKAR XKAR XKAR XKAR XKAR XMAH	Cambodia	>-	×	×	×	×	×	×	×	×	×		×	×
Y	Costa Rica													
Y	France	>-	×		×								×	
XKARR XKAR XKAR XKAR XKAR XMAH XKARR XKAR XMAH XKARR XKAR XMAH XKARR XMAH XKARR XMAH XMAH<	Ghana	>-											×	
Note Note	India	XKAR XKER XMAH	XKAR	XKAR XKER XMAH		XKAR XKER			XKAR XMAH					
res Y X	Indonesia	>		×		×								
cs	Netherlands	>	X (income dependent)		×									
es Y X	Peru													
ia Y X X Y (eg JICA) X X rica Y X Y (eg JICA) X X X rica Y X X X X X X rica Y X X X X X X X X X	Philippines	\	×	×	×			×			×		×	
rica	Saint Lucia	>		×	×		×		×	Y (eg JICA)	×		×	×
rica	Senegal	Υ	×										×	
	South Africa													
	Spain													
x x x x p p	Sri Lanka													
× × × × pel	Tanzania													
	Thailand	\	×		×								×	
× × ×	Uganda													
	Venezuela	>-			×	×	×						×	

Country							b. Health						
	N/A	Universal	Targeted	State spons	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia	>-	×		×	×	×	×	×	×	×		×	×
Costa Rica													
France	>	×		×								×	
Ghana	>-											×	
India	XKAR XMAH	XKAR	ХМАН		XKAR			ХМАН					
Indonesia	>		×		×						×	×	
Netherlands	>	X (income dependent)		×								×	×
Peru												×	
Philippines	٨	×	×	×			×			×			
Saint Lucia	>		×	×		×		×		×			
Senegal	>	×											
South Africa													
Spain													
Sri Lanka													
Tanzania													
Thailand	>	×		×								×	
Uganda													
Venezuela	>			×	×	×						×	

Country							c. Housing						
	N/A	Universal	Targeted	State spon:	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia	>	×		×	×	×	×	×	×				×
Costa Rica													
France	>	×		×		×		×				×	
Ghana													
India	XAP XKAR XKER XMP	XKAR	XKAR XKER XMP	XKAR XKER XMP	XKAR XKER XMP	XKER							
Indonesia	>		×		×						×	×	
Netherlands	\	X (income dependent)		×									
Peru													
Philippines	\	×	×	×			×			×		×	
Saint Lucia													
Senegal	>	×		×			×						
South Africa													
Spain													
Sri Lanka													
Tanzania													
Thailand	>	×		×								×	
Uganda													
Venezuela	>			×	×	×						×	

Y/N Universal Targeted State sponsored or supported Private Private Coops/	Country							d. Sanitation						
Higherines Autional Provincial Local Private Coops/		Y/N	Universal	Targeted	State spon	sored or supp	orted		No	n-State			Rights	Market
Y				at Fisheries	National	Provincial		Private Philanthropies		Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
I	Brazil	>	×			×					×		×	
Italy	Canada													
Y	Cambodia	>	×	×	×					×				
Y	Costa Rica	>-	×		×								×	
Y XAP XKAR XKAR XKAR XKER Sia XKER XMP XMP XKER XKER Iands Y Y Y Y Inces Y X X X Inces X X X X	France	>	×				×							×
Ssia XAP XKAR XKAR XKAR XKER	Ghana	>-											×	
ssia Y Urban Y	India	XAP XKAR XKER XMP	XKAR XMP	XKER	XKAR	XKAR XKER	XKER							
Flands	Indonesia													
value Y Wrban X Wrban Y X <	Netherlands													
vicial X <td>Peru</td> <td>></td> <td></td> <td>Urban</td> <td></td> <td></td> <td>></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Peru	>		Urban			>							
ucia Y X X X X Africa Y X X X X Ika Inia Y X X X X X X Inia Y X X X X X X X X	Philippines	>	×		×								×	
Africa Y X X	Saint Lucia													
Africa Y X X Ika Ika X X X nia Y X X X X Italia Y X X X X X	Senegal	>	×											
aka nia red	South Africa	>	×		×								×	
× × × × × × × × × × × × × × × × × × ×	Spain													
× × × × × × × × × × × × × × × × × × ×	Sri Lanka													
× × × × × × × × × × × × × × × × × × ×	Tanzania													
× × × × × × × × × × × × × × × × × × ×	Thailand	>	×		×	×	×			×			×	
× × ×	Uganda	>		×				×			×		×	
::	Venezuela	>		×			×	×		×				×

Country					ö	Fisheries	e. Fisheries management and conservation	nd conservation					
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Brazil	>		×	×					×				×
Canada													
Cambodia	>	×	×	×	×	×	×	×	×	×		×	
Costa Rica													
France	>		×		×			×				×	
Ghana	>											×	
India	XAP XKAR	XKAR			XKAR								
Indonesia	>		×		×				×		×	×	
Netherlands	٨		×	×	×		×	×	×	×			
Peru	>		×	×	×								Ministry of Production, regional govts also participate
Philippines	>	×		×			×		×	×		×	×
Saint Lucia	>	×	×	×		×	×	×	×	×	×	×	×
Senegal	>-		×										
South Africa	>-		×	×			×		×	×			
Spain													
Sri Lanka													
Tanzania	\	×		×					×	×		×	
Thailand													
Uganda	>		×	×	×	×	×	×	×	×			
Venezuela	>		×	×								×	

Country			i. Abst	aining from	destructive fi	shing m	ethods (e.g. dyn	amite, cyanide, s	i. Abstaining from destructive fishing methods (e.g. dynamite, cyanide, small-mesh nets, trawls, etc)	rawls, etc)			
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia	>	×	×	×	×	×	×	×	×	×		×	
Costa Rica													
France	>		×	×				×					
Ghana	>											×	
India	XKAR		XKAR XTN		XKAR								
Indonesia	>-		×	×							×	×	
Netherlands													
Peru	>		×	×	×								Formally this is banned by law on the use of dynamite and of inappropriate equipment, hardly effective in application
Philippines	>	×		×			×	×	×	×		×	
Saint Lucia	>	×	×	×		×		×	×	×	×	×	×
Senegal	٨	×	×			×		×				×	
South Africa													
Spain													
Sri Lanka						X Law enfor- ceme nt is							
Tanzania	>												

Thailand	>		×	×					×			×	
Uganda	>-		×	×	×	×	×	×	×	×			
Venezuela	>		×	×								×	
Country						::	ii. Abstain from fishing	shing					
	N/A	Universal	Targeted		State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia													
Costa Rica													
France	>-		×	×									
Ghana	>											×	
India													
Indonesia													
Netherlands	>		×	×	X (only temporary, like 1-3 years at the start and often EU funds)					×			
Peru	>		×	×									Closed seasons for specific resources, from artisanal catching
Philippines													
Saint Lucia	>-	×	×	×		×		×	×	×	×		×
Senegal	>-	×	×			×						×	
South Africa													
Spain													
Sri Lanka													
Tanzania													

Thailand													
Uganda													
Venezuela													
Country						iii. Tem	iii. Temporary cessation of fishing	n of fishing					
	N/Y	Universal	Targeted		State sponsored or supported	oorted		Nc	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil	>		×	×									×
Canada													
Cambodia													
Costa Rica	>		×	×									×
France	>		×	×									
Ghana	>											×	
India	XKAR XTN		XKAR XTN	NTX	XKAR XTN								
Indonesia													
Netherlands	>		×	X (often EU funds)	X (often EU funds)					×			
Peru	> -		×	×									For determined species and places
Philippines	>	×	×	×								×	
Saint Lucia	>		×			×				×	×		×
Senegal	>	×	×			×						×	
South Africa													
Spain													
Sri Lanka													
Tanzania													
Thailand													

Uganda													
Venezuela	>		×	×								×	
Country						iv. Re	iv. Retirement of fishing vessels	ng vessels					
	N/Y	Universal	Targeted	State spon	State sponsored or supported	orted		N	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia													
Costa Rica													
France	>		×	×								×	
Ghana	>											×	
India													
Indonesia													
Netherlands													
Peru													
Philippines													
Saint Lucia													
Senegal	>	×	×			×						×	
South Africa													
Spain													
Sri Lanka													
Tanzania													
Thailand													
Uganda													
Venezuela	>		×	×								×	

Country					v. Use of sele	ective ge	v. Use of selective gear (e.g. non-trawl, TEDs, circle hooks etc)	νl, TEDs, circle hα	ooks etc)				
	N/Y	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia													
Costa Rica													
France	>		×	×				×					
Ghana	>											×	
India	XKAR XTN		XKAR XTN		XKAR XTN								
Indonesia													
Netherlands	>		×	X (only in experimen tal cases and often with EU funds)						×			
Peru	>		×						Yes, hardly effective, due to various fishery related, social, institutional factors				
Philippines	\	×	×	×					×	×		×	
Saint Lucia	>	×	×	×		×		×	×	×	×		×
Senegal	\	×				×						×	
South Africa													
Spain	>												
Sri Lanka													
Tanzania	>	×	×										
Thailand	>-								×				
Uganda													
Venezuela													

Country					vi. Pro	tecting	vi. Protecting species threatened with extinction	ed with extinction	u.c				
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		N _O	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil	>		×	×									×
Canada													
Cambodia													
Costa Rica													
France	>		×	×									
Ghana	>											×	
India	XKAR		XKAR	XKAR	XKAR								
Indonesia													
Netherlands	>		×		×			×	×	×			
Peru	>		×						X, focused on charismatic species (dolphin, turtle) by small NGOs, locally defined				
Philippines	>	×		×								×	
Saint Lucia	>	×	×	×		×		×	×	×			×
Senegal	>	×	×									×	
South Africa													
Spain	>												
Sri Lanka													
Tanzania	>	×	×						×				
Thailand	>		×	×	×								×
Uganda													
Venezuela													

Country					vii. Use of	smokele	vii. Use of smokeless fish processing techniques (women	ng techniques (w	/omen				
	N/Y	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial Local	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia													
Costa Rica													
France	>		×										
Ghana													
India													
Indonesia													
Netherlands													
Peru													
Philippines													
Saint Lucia													
Senegal	>	×	×			×							
South Africa													
Spain													
Sri Lanka													
Tanzania	\	×	×							×			
Thailand													
Uganda	Y		×			×	×						
Venezuela	>		×			×						×	

Country					viii. Bel	onging	viii. Belonging to fishers' coops/assns/trade unions	/assns/trade unio	Suc				
	N/Y	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil	>		×	×									×
Canada													
Cambodia	>	×	×	×	×	×	×	×	×	×		×	×
Costa Rica													
France	>	×		×								×	
Ghana	>											×	
India	XKAR		XKAR		XKAR								
Indonesia													
Netherlands													
Peru	>			×	×					×			Even when a large number of fishers are not associated
Philippines													
Saint Lucia	>	×	×	×		×		×			×	×	×
Senegal	>	×	×	×			×	×				×	
South Africa													
Spain	>												
Sri Lanka													
Tanzania													
Thailand													
Uganda	>		×					×					
Venezuela													

Principal Province of State sponsored of supported at Pickeries According to the polyment of the polyment	Country					χ̈	ix. Others (please specify)	pecify)					
A		N/A	Targeted		sored or supp	orted		No	n-State			Rights	Market
a and the control of			at Fisheries				Private Philanthropies		Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
S S S S S S S S S S	Brazil												
Sa Sa Sa Sa Sa Sa Sa Sa	Canada												
es and the control of	Cambodia												
a a nds es	Costa Rica												
a	France												
A	Ghana												
A	India												
Note	Indonesia												
es	Netherlands												
State Stat	Peru												
ida Y X	Philippines												
x x x	Saint Lucia	>	×			×		×	×	×	×	×	×
South Africa South Africa County Africa County Africa County Coun	Senegal	>	×	×			×		×		X (univer- sity research schemes)		
Spain Spain <th< td=""><td>South Africa</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	South Africa												
Sri Lanka Sri Lanka Company	Spain												
Tanzania Tanzania Tanzania Taniland	Sri Lanka												
Thailand Uganda Company Company <t< td=""><td>Tanzania</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Tanzania												
Uganda Venezuela	Thailand												
Venezuela	Uganda												
	Venezuela												

Coding				f. Habi	tat protection	(e.g. sa	nd dunes, mang	roves, seagrass	f. Habitat protection (e.g. sand dunes, mangroves, seagrass beds, corals, etc)				
	N/A	Universal	Targeted	State spons	sored or supported	orted		N	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Brazil	>	×	×	×	×				×			×	
Canada													
Cambodia	>	×	×	×	×	×	×	×	×	×		×	
Costa Rica													
France	>-	×		×					×			×	
Ghana	>												
India	XAP XKAR XTN	XKAR	NTX	XKAR	XKAR								
Indonesia	>		×		×				×			×	
Netherlands	>	×	×	×	×		×	X (fisheries)	×	×			×
Peru													
Philippines	>	×		×			×	×	×	×		×	×
Saint Lucia	>	×	×	×		×		×	×	×			×
Senegal	>	×				×					×		
South Africa	>			×	×	×			X Eg WWF sponsors some of the MPAs	×			
Spain	>			×	×				×				
Sri Lanka	>			×		×							
Tanzania	>	×											
Thailand	>		×		×	×			×				×
Uganda													
Venezuela	>			×					×			×	

Country				g. Post-h	arvest operati	ions (e.g	J. improved post	-harvest practice	g. Post-harvest operations (e.g. improved post-harvest practices, reducing waste)	(a)			
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial Local	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil	>		×			×			×			×	
Canada													
Cambodia	>-	×	×	×	×	×	×	×	×	×		×	×
Costa Rica													
France	>-		×					×					
Ghana	>												
India	XAP XKAR		XKAR	XKAR	XKAR								
Indonesia													
Netherlands	>-		×	X (EU funds)	X (EU funds)			X (EU funds)		×			×
Peru													
Philippines	>	×		×			×			×		×	×
Saint Lucia	>		×	×		×		×		×	×		×
Senegal	>		×			×		×					
South Africa	\		×	×		×	×		×				×
Spain													
Sri Lanka	>			×		×							
Tanzania	\	×											
Thailand													
Uganda	>		×				×	×	×				×
Venezuela	>		×			×					×		×

Country			h. D	isaster prep	aredness (e.g.	. flood-p	roof housing, ve	ssel safety, train	h. Disaster preparedness (e.g. flood-proof housing, vessel safety, training, sanitation on board)	ι board)			
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia	>-		×			×		×	×	×		×	
Costa Rica													
France	>		×	×									
Ghana	>											×	
India	XAP XKAR XTN		XKAR XTN	XKAR	XKAR								
Indonesia													
Netherlands	>	×	×		X (often EU funds)	X (often EU funds)		X (fisheries)		×			×
Peru	>		×										There were partial and late programes for damage caused by strong waves and quakes. Currently resources have been set aside for ENSO but they are more froused on urban issues, lines of communication, and in agriculture
Philippines	>	×		×			×	×	×	×		×	
Saint Lucia	>	×	×	×		×	×	×	×	×	×	×	×
Senegal													
South Africa	>-		×	×					×				

							Market	based schemes														
							Rights	based schemes														
								Others														X academic institution s using research funds
								Bilateral donors/ EU														
							Non-State	Environmental Organizations														×
						specify)	Nor	Coops/ Associations/ Trade Unions														
						i. Any other (Please specify)		Private Philanthropies														
	×					i. A	oorted	Local														×
							ored or sup	Provincial Local														
	×						State sponsored or supported	National														×
							Targeted	at Fisheries														×
							Universal															
	>						N/Y															>
Spain	Sri Lanka	Tanzania	Thailand	Uganda	Venezuela	Country			Brazil	Canada	Cambodia	Costa Rica	France	Ghana	India	Indonesia	Netherlands	Peru	Philippines	Saint Lucia	Senegal	South Africa

Spain													
Sri Lanka													
Tanzania													
Thailand													
Uganda													
Venezuela													
Country					(B) Facilitati	on of Int	(B) Facilitation of Intra-regional trade(for women fish traders)	(for women fish	ו traders)				
	N/A	Universal	Targeted		State sponsored or supported	ported		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia	\		×			×	×	×	×			×	×
Costa Rica													
France													
Ghana	>												×
India	XKER		XKER		XKER								
Indonesia	٨		×	×							×	×	×
Netherlands	>	×	×					X (fisheries)		×			×
Peru													
Philippines													
Saint Lucia													
Senegal	>	×		×									
South Africa													
Spain													
Sri Lanka													
Tanzania													

Thailand													
Uganda	>						×						
Venezuela	>		×			×		×					×
Country					(C) Pur	chase of	(C) Purchase of access rights (land, fishing grounds)	nd, fishing grou	nds)				
	Y/N	Universal	Targeted		State sponsored or supported	oorted		ž	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia													
Costa Rica													
France	>-		×			×							
Ghana	>-												×
India	XKAR		XKAR		XKAR								
Indonesia	>		×	×							×	×	
Netherlands	>		×	×				X (fisheries)		×			×
Peru													
Philippines													
Saint Lucia													
Senegal													
South Africa													
Spain													
Sri Lanka													
Tanzania													
Thailand													
Uganda													
Venezuela													

Country					(<u>a</u>)	Retrainir	(D) Retraining/reskilling programme(Specify)	yramme(Specify)					
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based	based schemes
Brazil													
Canada													
Cambodia	>-	×	×	×	×	×	×	×	×	×		×	×
Costa Rica													
France	>-		×	×								×	
Ghana	>											×	×
India	XAP XKER		XKER	XKER		XKER		XKER					XKER
Indonesia	>		×		×						×	×	
Netherlands	>		×	×				×		EU funds			×
Peru													
Philippines	\	×		×									
Saint Lucia	>	×	×	×		×		×		×	×		
Senegal	>	×	×	×				×			×	×	×
South Africa													
Spain	>		×		×								
Sri Lanka													
Tanzania													
Thailand	>		×	×					×				×
Uganda	>		×				×	×	×				
Venezuela													

Country					(E) Pro	moting	(E) Promoting labour-intensive activities (Specify)	activities(Specif	γ				
	N/X	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial Local	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil													
Canada													
Cambodia	>	×	×	×	×	×	×	×	×	×		×	×
Costa Rica													
France													
Ghana	>											×	×
India	XKER		XKER		XKER			XKER					XKER
Indonesia	>		×	×							×	×	×
Netherlands			×	×				X (fisheries)		×			×
Peru													
Philippines	>	×		×								×	
Saint Lucia	>-		×	×		×		×		×		×	×
Senegal	>	×		×		×					×		
South Africa													
Spain													
Sri Lanka													
Tanzania													
Thailand													
Uganda													
Venezuela	>		×		×		×	×				×	

Country			2	F) Savings, c	redit and mar	rketing (including microfi	nance/mobile b	(F) Savings, credit and marketing (including microfinance/mobile banking)- Please specify	ecify			
	N/A	Universal	Targeted	State spon	State sponsored or supported	orted		No	Non-State			Rights	Market
			at Fisheries	National	Provincial	Local	Private Philanthropies	Coops/ Associations/ Trade Unions	Environmental Organizations	Bilateral donors/ EU	Others	based schemes	based schemes
Brazil	>	×	×	×									×
Canada													
Cambodia	>		×			×		×	×	×		×	×
Costa Rica													
France	>	×		×									×
Ghana	\											×	×
India	XAP XKAR XKER XMP XMAH		XKAR XKER XMP MAH	XMP	XKAR XKER XMP XMAH			XKER XMAH					XKER
Indonesia	>		×		×						×	×	
Netherlands	>	×		X state sometimes facilitates							Private sector		×
Peru													
Philippines	>	×		×			×					×	×
Saint Lucia	>		×	×		×		×		×		×	×
Senegal	>	×	×	×				×					
South Africa	>	×		×	×	×	×	×	×				
Spain													
Sri Lanka						×				×			×
Tanzania	>	×	×	×				×	×			×	×
Thailand	>	×						×	×				×
Uganda	>						×	×	×				×
Venezuela	>		×		×			×				×	

*Note Name of the states in India: AP - Andhra Pradesh, KAR - Karnataka, KER - Kerala, MAH - Maharashtra, MP - Madhya Pradesh, TN - Tamil Nadu

Annex 7: Social protection transformative measures at a glance

ICSF- FAO: FORMAL AND INFORMAL SOCIAL PROTECTION SCHEMES AND NEEDS FROM A SMALL-SCALE FISHERIES PERSPECTIVE — 2015

a). Are there effective legislation/policies to recognize, protect and promote the human rights of all—citizens and others—i ncluding the right to development and the rights of women, consistent with international human rights standards?	b). Are these measures effectively reaching the fishing communities?	c). Is there adoption and application of a human rights-based approach, especially protection of fishers, fishworkers and fishing communities?	d). Are there effective mechanisms, processes and institutions in place for citizens/ persons to benefit from social protection measures at the mational/provincial/district/ local levels?	e). Is the right to food, including fish, and right to clothing and shelter recognized under national law?	f). Is the right to education recognized under national law?	g). Is the right to social security recognized under national law?	h). Are the rights of the child recognized under national law?	i). Are there I egislation to protect the rights of men, women and children against forced labour and slaverylike conditions?	j). Is there legislation to enable trade unions, cooperatives, associations, etc, to function at various levels?
Brazil	Canada	Cambodia	Canada	Brazil	Brazil	Brazil	Brazil	Brazil	Brazil
Canada	Cambodia	Costa Rica	Cambodia	Cambodia	Canada	Cambodia	Canada	Canada	Canada
Cambodia	France	France	Costa Rica	Costa Rica	Cambodia	Costa Rica	Cambodia	Cambodia	Cambodia
France	India - KAR	India - KAR	France	France	Costa Rica	France	Costa Rica	Costa Rica	Costa Rica
Ghana	India - KER	India - KER	India - AP	Ghana	France	Ghana	France	France	France
India - AP	India - MP	India - MP	India - KAR	India - AP	Ghana	India - AP	Ghana	Ghana	Ghana
India - KAR	India - TN	Saint Lucia	India - KER	India - KAR	India - AP	India - MAH	India - AP	India - AP	India - AP
India - KER	Netherlands	Thailand	India - MAH	India - MAH	India - KAR	India - MP	India - KAR	India - KAR	India - KAR
India - MAH	Saint Lucia	Venezuela	India - MP	Netherlands	India - KER	India - TN	India - KER	India - KER	India - KER
India - MP	Spain		India - TN	Philippines	India - MAH	Indonesia	India - MAH	India - MAH	India - MAH
Indonesia	Sri Lanka		Indonesia	Saint Lucia	India - MP	Netherlands	India - MP	India - MP	India - MP
Netherlands, The	Tanzania		Netherlands	Senegal	India - TN	Peru	India - TN	India - TN	India - TN
Philippines, The	Thailand		Philippines	South Africa	Indonesia	Philippines	Indonesia	Indonesia	Indonesia
Saint Lucia	Venezuela		Saint Lucia	Spain	Netherlands	Saint Lucia	Netherlands	Netherlands	Netherlands
South Africa			Spain	Tanzania	Peru	Senegal	Philippines	Peru	Peru
Spain			Sri Lanka	Thailand	Philippines	South Africa	Saint Lucia	Philippines	Philippines
Sri Lanka			Tanzania	Venezuela	Saint Lucia	Spain	Senegal	Saint Lucia	Saint Lucia
Tanzania			Thailand		Senegal	Tanzania	South Africa	Senegal	Senegal
Thailand					South Africa	Thailand	Spain	South Africa	South Africa

Uganda	Spain	Uganda	Sri Lanka	Spain	Spain
Venezuela	Sri Lanka	Venezuela	Tanzania	Tanzania	Sri Lanka
	Tanzania		Thailand	Thailand	Tanzania
	Thailand		Uganda	Uganda	Thailand
	Uganda		Venezuela	Venezuela	Uganda
	Venezuela				Venezuela

k). Is there a provision for living wage, especially in fisheries- related activities?	l). Are there policies/ legislation in support of equitable to land and fishing grounds, for both men and women?	m). Is there recognition of preferential access to fishing grounds (e.g. creation of exclusive fishing zones) for the vulnerable and marginalized fishers and indigenous peoples)?	n). Is there legislation to secure working and living conditions including occupational safety and health of fishers and fishworkers?	o). Are there effective legislation to protect the rights of children and to protect the rights of men, women and children from forced labour?	p). Is there legal protection for women against violence and exploitation?	q). Is there access to clean energy initiatives in the context of climate change?	r). Is there a national climate change adaptation and mitigation policy?	s). Are there HIV/ AIDS awareness initiatives?	t). Is there training of fishers for second professional skill to assist their guided transfer to other sectors and to relieve the pressure of overfishing?
Canada	Brazil	Brazil	Canada	Brazil	Brazil	Cambodia	Brazil	Brazil	Cambodia
Costa Rica	Cambodia	Cambodia	Cambodia	Canada	Canada	France	Cambodia	Canada	France
France	India - MP	France	Costa Rica	Cambodia	Cambodia	India - MAH	Costa Rica	Cambodia	Ghana
India - KER	Netherlands	India - AP	France	Costa Rica	Costa Rica	Netherlands	France	Costa Rica	India - AP
Indonesia	Philippines	India - KAR	Netherlands	France	France	Peru	India - AP	France	India - KER
Netherlands	South Africa	India - KER	Philippines	Ghana	Ghana	Philippines	India - KAR	Ghana	India - TN
Philippines	Spain	India - MAH	South Africa	India - AP	India - AP	Saint Lucia	India - KER	India - AP	Indonesia
Spain	Thailand	India - TN	Spain	India - KAR	India - KAR	Tanzania	India - TN	India - KAR	Netherlands
Thailand	Uganda	Indonesia	Sri Lanka	India - KER	India - KER	Thailand	Indonesia	India - KER	Peru
		Philippines	Thailand	India - MAH	India - MAH	Venezuela	Netherlands	India - MAH	Senegal
		Senegal		India - MP	India - MP		Peru	India - MP	Spain
		Thailand		India - TN	India - TN		Philippines	Indonesia	Thailand
		Venezuela		Indonesia	Indonesia		Saint Lucia	Netherlands	Venezuela
				Netherlands	Netherlands		Senegal	Peru	
				Philippines	Philippines		South Africa	Philippines	
				Saint Lucia	Senegal		Spain	Saint Lucia	
				Senegal	South Africa		Sri Lanka	Senegal	
				South Africa	Spain		Tanzania	South Africa	
				Spain	Sri Lanka		Thailand	Spain	

Tanzania	Tanzania	Uganda Sri Lanka	
Thailand	Thailand	Tanzania	
Uganda	Uganda	Thailand	
Venezuela	Venezuela	Uganda	
		Venezuela	а

Annex 8: Social protection—**transformative**

ICSF- FAO: FORMAL AND INFORMAL SOCIAL PROTECTION SCHEMES AND NEEDS FROM A SMALL-SCALE FISHERIES PERSPECTIVE -2015

Vene- zuela		×	×	×
Ugan- da		×		
Thai land		×	×	×
Tan- zania		×	×	
Sri Lanka		×	×	
Spain		×	×	
South Africa		×		
Sen- egal				
Saint Lucia		×	×	
Philip- pines		×		×
Peru				
Neth- erlands		×	×	
Indo- nesia		×		
	₫	×	×	
	МАН	×		×
India*	KAR	×	×	
드	KER	×	×	×
	Z.		×	×
	ΑP	×		
Ghana		×		
France		×	×	×
Costa Rica				×
Cam- bodia		×	×	×
Can- ada		×	×	
Brazil		×		
Questions (Yes/ No)		a). Are there effective legislation/policies to recognize, protect and promote the human rights of all—citizens and others—including the right to development and the right of women, consistent with international human rights standards?	b). Are these measures effectively reaching the fishing communities?	c). Is there adoption and application of a human rights-based approach, especially to ensure social protection of fishers, fishworkers and fishing communities?

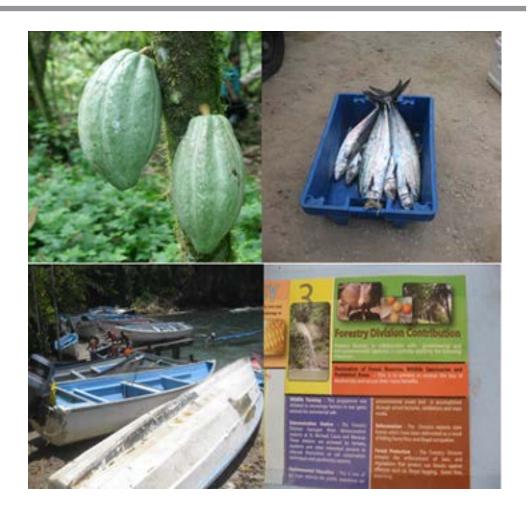
	×	×	×	×
		×	×	×
×	×	×	×	×
×	×	×	×	×
×		×		×
×	×	×	×	×
	×	×	×	×
	×	×	×	×
×	×	×	×	×
×	×	×	×	×
		×	×	
×	×	×	×	×
×		×	×	×
×		×	×	×
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×	×	×		×
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×	×	×	×	×
	×	×	×	×
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×	×	×	×	×
×	×	×	×	×
×		×		×
	×	×	×	×
d). Are there effective mechanisms, processes and institutions in place for citizens/persons to benefit from social protection measures at the national/district/local levels?	e). Is the right to food, including fish, and right to clothing and shelter recognized under national law?	f). Is the right to education recognized under national law?	g). Is the right to social security recognized under national law?	h). Are the rights of the child recognized under national law?

×	×		
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×	×		
×	×	×	×
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×	×		×
×	×		
×	×		
×	×	×	
×	×		
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×	×	×	
×	×		×
×	×	×	
×	×		×
i). Are there legislation to protect the rights of men, women and children against forced labour and slavery-like conditions?	j). Is there legislation to enable trade unions, cooperatives, associations, etc, to function at various levels?	k). Is there a provision for living wage, especially in fisheriesrelated activities?	l). Are there policies/ legislation in support of equitable tenure rights to land and fishing rounds, for both men and women?

×		×	×
		×	×
×	×	×	×
		×	×
	×		×
	×	×	×
	×	×	×
×		×	×
		×	
×	×	×	×
	×	×	×
×		×	×
		×	×
×		×	×
×		×	×
×		×	×
×		×	×
×		×	×
		×	×
×	×	×	×
	×	×	×
×	×	×	×
	×	×	×
×		×	×
m). Is there recognition of preferential access to fishing grounds (e.g. creation of exclusive fishing zones) for the wulnerable and marginalized fishers and indigenous peoples)?	n). Is there legislation to secure working and living conditions including occupational safety and health of fishers and fishworkers?	o). Are there effective I egislation to protect the rights of children and to protect the rights of men, women and children from forced labour?	p). Is there legal protection for women against violence and exploitation?

×		×	×
	×	×	
×	×	×	×
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	×	×	
	×	×	×
	×	×	
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×	×	×	×
×	×	×	×
	×	×	×
		×	
×		×	
	×	×	
	×	×	×
	×	×	×
	×	×	×
		×	×
×	×	×	×
	×	×	
×	×	×	×
		×	
	×	×	
q). Is there access to clean energy initiatives in the context of climate change?	r). Is there a national climate change adaptation and mitigation policy?	s). Are there HIV/AIDS awareness initiatives?	t). Is there training of fishers for second professional skill to assist their guided transfer to other sectors and to relieve the pressure of overfishing?

Research on social protection to foster sustainable management of natural resources and reduce poverty in fisheries and forestry dependent communities in the Caribbean



Caribbean Natural Resources Institute (CANARI)
December, 2015

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List of acronyms and abbreviations

ACS Association of Caribbean States
ADB Agricultural Development Bank
BAICO British American Insurance Company
CALFICO Calliaqua Fisherfolk Cooperative
CANARI Caribbean Natural Resources Institute

CARICOM Caribbean Community

CBO Community Based Organization

CDAP Chronic Disease Assistance Programme

CDB Caribbean Development Bank

CDM Comprehensive Disaster Risk Management

CEPEP Community-based Environmental Protection and Enhancement Programme

CFTDI Caribbean Fisheries Training and Development Institute

CLICO Colonial Life Insurance Company Limited

CORE Communities Organised and Ready for Emergencies

CRFM Caribbean regional Fisheries Mechanism

CSO Civil Society Organisation
CSR Corporate Social Responsibility

DFID Eastern Caribbean Marine Managed Network

ECMMAN Human immunodeficiency virus

EU European Union

FACRP Fondes Amandes Community Reforestation Programme

FAD Fish Aggregating Device

FAO Food and Agriculture Organization of the United Nations

GATE Government Assistance for Tuition Expenses

GEF Global Environment Facility

GoRTT Government of the Republic of Trinidad and Tobago

HACCP Hazard Analysis Critical Control Point IDB Inter-American Development Bank

IICA Inter-American Institute for Cooperation on Agriculture

IMF International Monetary Fund

NEDCO National Entrepreneurship Development Company Limited

NIBTT National Insurance Board of Trinidad and Tobago NIS National Insurance Scheme (Trinidad and Tobago)

NIS National Insurance Services (St. Vincent and the Grenadines)
NRWPTT Network of Rural Women Producers Trinidad and Tobago
NRWRP National Reforestation & Watershed Rehabilitation Programme

ODPM Office of Disaster Preparedness and Management

OECS Organisation of Eastern Caribbean States

PA Protected Area

TTUF Trinidad and Tobago United Fisherfolk URP Unemployment Relief Programme

Executive summary

This report presents the findings of a research study on social protection to foster sustainable development of natural resources and reduce poverty in fisheries and forestry dependent communities in the Caribbean. The study specifically examines social protection programmes and their use among small-scale fish harvesters and forest-users in the communities of Calliaqua and Diamond Village in Saint Vincent and the Grenadines and Blanchisseuse and Caura in Trinidad and Tobago. The report notes the key findings, and makes specific recommendations for the improvement of national social protection measures to benefit small-scale fishers and forest-users in each country.

Social protection includes "all public and private initiatives that provide income or consumption transfers to the poor, protect the vulnerable against livelihood risks, and enhance the social status and rights of the marginalised; with the overall objective of reducing the economic and social vulnerability of poor vulnerable and marginalised groups" (FAO, 2015).

Social protection measures typically include policies and programmes designed to facilitate employment and promote the efficient operation of labour markets (labour interventions, security against life—cycle events and livelihood risks or shocks (social insurance), and income transfers (cash) or consumption transfers (food or vouchers or subsidies) to the poor (social assistance).

In Trinidad and Tobago there is a comprehensive social protection programme aimed at reducing poverty. The paucity of information on the linkages between social protection, natural resource management and poverty alleviation in fisheries and forestry dependent communities in the country, however, makes it difficult to determine whether national and sectoral social protection programmes are contributing to the reduction of poverty in these communities. Findings indicate that while poverty among small scale fishers and forest-users and their communities may be low, vulnerability may be of more concern. They also show that while these smallholders may be benefitting, to some extent, from the broad range of social protection schemes, the direct benefit from sector oriented schemes are limited. It highlights the need for clearly defined fisheries and forestry policies and plans that incorporate social security, climate change adaptation and disaster risk management, and for a more participatory approach to policy development and implementation.

In Saint Vincent and the Grenadines fishing communities depend on each other to cope with shocks rather than using the more formal programmes that are available because of mistrust and lack of awareness of some of the programmes among fisherfolk. Forest-based enterprises and the households that depend on them, use all the programmes that are available to them because there is greater awareness of the programmes and longer history of their use in forest-based enterprises. Private insurance was however, not seen as a viable coping method because of past negative experiences with companies such as Colonial Life Insurance Company [Trinidad] Limited that went bankrupt. Some were unable to recover their monies. The National Insurance Service (NIS) was seen as too expensive for regular payments for the self-employed in both forestry and fisheries. The need for improved trust between fishers and government and fishers and the private sector and awareness building strategies to improve use of national social programmes are key areas to address. Tailoring the National Insurance Service to treat with the varying needs and capacities among self-employed persons should also be explored.

INTRODUCTION

This report is part of an overall study which is aimed at understanding the linkages between social protection, natural resource management and poverty alleviation in fisheries-and forestry- dependent communities in two Caribbean countries – Trinidad and Tobago and Saint Vincent and the Grenadines. The results of this study are intended to contribute to the overall goal and objectives of a United Nations Food and Agriculture Organization (FAO) global project on social protection to foster sustainable development of natural resources and reduce poverty in fisheries and forestry-dependent communities. The project is seeking to enhance national social protection systems to empower rural communities and their organizations so that these can help in the transition towards more sustainable and equitable natural resource management and poverty reduction.

METHODS

The findings for this study were generated from three key activities:

- i. The conduct of a desk study to examine:
 - o key regional policies which may be relevant to social protection and sustainable forestry and fisheries development that may belare being implemented at the national level;
 - policies and social protection schemes relevant to fisheries and forestrydependent communities being provided by government, private sector, civil society and the local community;
 - o risks to, needs of and transitions taking place in small-scale fisheries and forestry sectors;
 - o stakeholders and their roles and responsibilities; and
 - o available information on the need for and access to social protection by rural communities and coverage
- ii. Semi-structured interviews with key informants focused on the community and household level:
 - Semi-structured interviews were conducted with small-scale fishers in the coastal fishing communities of Blanchisseuse in Trinidad and Calliaqua in Saint Vincent, and small-scale forest users in the forest communities of Caura in Trinidad and Diamond Village in Saint Vincent. Potential interviewees were identified based on communication with fisherfolk and community leaders who identified persons that they thought would be willing to participate in the survey.

In addition to questions on the access and use of social protection programmes by the respondent and members of his/her household, the questionnaire used for the interviews (see Appendix 1) included questions on financial capital such as the respondent's main sources of income and average household earnings and regular expenses; human capital including educational level; social capital such as the respondent's participation in community groups; and questions related to vulnerabilities and coping strategies experienced by the respondent and his/her household. Approximately 16 percent of the fishers in the Blanchisseuse community were surveyed and 12 percent in Calliaqua.

Eight households in the Caura community were surveyed. It is uncertain what percentage of the small-scale forest using population the eight households represent as statistics on small-scale forest using populations are generally difficult to locate. One of the community leaders estimated that it could be in the range of 200-250 persons. However, the eight households represent approximately 1 percent of the population (776 persons at 2011 census) of Caura. Efforts were made to interview a variety of forest-users including women. The hunters in the community were reluctant to participate in the survey, as at the time the interviews were being conducted a moratorium on hunting was still

in force. In Diamond Village, there are approximately 100 persons who use the forest as a source of income, ten percent were surveyed.

Validation workshops:

 Validation workshops with key public sector agencies and members from the surveyed communities were undertaken in each of the project countries to verify the accuracy of the information obtained from the desk studies and community surveys.

LIMITATIONS

Due to the exploratory/pilot nature of this study, the sample sizes for the community (1 forest-dependent community, 1 fisheries-dependent community in each country) and household surveys were relatively small. As such, the findings should be viewed as being indicative of common issues faced by some small-scale fishers and forest users in these countries. To gain a better appreciation and be more statistically representative, future studies should be expanded to include more communities and larger household survey samples.

Survey respondents were not selected using a random sampling approach, but rather identified based on communication with community leaders, who identified persons that they thought would be willing to participate in the survey. This method of sampling could have potentially created a bias in the responses garnered from the sample groups.

DESCRIPTION OF PILOT COUNTRIES

Trinidad and Tobago

The twin island Republic of Trinidad and Tobago is a small but high-income country. With a population of 1.3 million people and rich in natural resources, it has one of the highest per capita incomes in Latin America and the Caribbean (US\$15,640 in 2013). The economy is largely based on oil and gas production. ¹

Social protection in Trinidad and Tobago is provided by a mix of actors from the public and private sectors and civil society. However, the Government of the Republic of Trinidad and Tobago (GoRTT) is the main provider of social protection for the citizenry. The main social protection agency in Trinidad and Tobago is the Ministry of Social Development and Family Services which administers many social programmes targeted at social protection and poverty reduction funded by the Government.

Compared to some of its regional counterparts, Trinidad and Tobago is a more economically wealthy nation, due, in large part, to revenues realised from its oil and gas based economy. As such, the country is able to allocate a significant amount of the national budget to provide social protection for its citizens. In its July 2014, quarterly bulletin, the IDB noted that "Trinidad and Tobago has one of the most generous set of labour and social programmes, if measured by amount spent and variety, compared with other Caribbean countries" (IDB, 2014).

According to data available on the Central Bank of Trinidad and Tobago's website, in 2014, the government's expenditure related to "Transfers and Subsidies" was roughly TT\$27 billion (US\$4 billion). To put this in perspective, the total government expenditure for that same period was roughly TT\$62.2 billion (US\$9.4 billion). Expenditure related to transfers and subsidies for 2014 therefore accounted for over forty-percent (40 percent) of total government expenditure. This indicates that the citizenry is provided with a significant level of social protection coverage from various subsidies and other government funded grants, programmes and services aimed at reducing poverty. In spite of this however, 2005 poverty estimates from the national Survey of Living Conditions

¹ http://www.worldbank.org/en/country/trinidadandtobago/overview

² Subsidies, grants, and other social benefits include all unrequited, non-repayable transfers on current account to private and public enterprises; grants to foreign governments, international organizations, and other government units; and social security, social assistance benefits, and employer social benefits in cash and in kind.

found that 16.7 percent of the population were poor³, with 1.2 percent indigent⁴ or severely poor. An additional 9 percent of the population was estimated to be vulnerable to poverty, but not poor⁵.

Information on rural poverty can be seen as being indicative for small-scale fisheries and forest-users in Trinidad and Tobago, as the majority of small scale natural resource users are rurally based.

Compared to urban areas, rural communities in Trinidad and Tobago are typically characterised by lower standards of living and higher poverty rates. The Survey of Living Conditions found that the poorest parts of the country in 2005 were the remote north east and the other extreme end, the south-west of the country. An analysis of the Trinidad and Tobago Survey of Living Conditions found that the counties of St. Andrew (30-40 percent of population below poverty line) and St. Patrick (18-30 percent of population below poverty line), counties have a significant proportion of rural communities, contributed a far larger share of the indigent and the poor (Kairi, 2007).

There is also a perceived bias by the Government for the development of urban areas compared to rural areas. For instance, rural communities often complain that basic infrastructure such as roads, public utilities and amenities such as water and electricity, education and training are often respectively in deteriorated condition, inconsistently supplied (if supplied at all) and of a lower quality or difficult to access. Some of these claims would appear to have been substantiated in the country's National Human Development Atlas survey of 2012 which found that access to clean water and electricity was better in urban areas compared to rural areas of the country (Human Development Atlas, 2012). These claims would appear to have been further substantiated among small-scale fishers in Trinidad and Tobago, in the CRFM's diagnostic study to determine levels in fishing communities, who identified the main concerns related to their community needs as asphalting of roadways (30.59 percent of interviewees); the need to strengthen the drainage network (20.09 percent), running water (9 percent), more health centres (9 percent) and public transport (8.6 percent) (CRFM, 2012).

Livelihood opportunities are considered to be relatively scarce in rural areas. In general, rural dwellers depend to a large extent on the use of the natural resources in their communities for livelihoods and subsistence. However, there is the perception that the Government is not providing adequate support to stimulate the sustainable development of potentially viable sectors, such as tourism, fisheries, agriculture and forestry, that can bring benefits to rural communities.

In addition to government led educational, entrepreneurial and social employment programmes targeted at rural populations to reduce poverty on the ground, efforts at sustainable natural resource management at the national level through the development of various policies (e.g. National Forests Policy, National Protected Area Policy, National Wildlife Policy) have contributed (though the extent of this contribution is not fully known) in reduction of the risks and vulnerability of persons with natural resource based livelihoods. The connection is made when it is considered that natural

³ The poverty line was estimated at TT\$665 per month for the 2005 Survey of Living Conditions. There are two stages involved in the calculation of the poverty line – first food expenditure is estimated, then this expenditure value is inflated for non-food expenditure. Implicit in the food component is the notion that there is a minimum quantum of food below which an individual is likely to suffer ill-health. This is the indigence line: individuals and households who are unable to secure even this minimum level are not only poor, but are extremely poor and are regarded as indigent. Analysis of the Trinidad and Tobago Survey of Living conditions: http://economicswebinstitute.org/data/trinidadliving.pdf

⁴ Is the "Food" share of the Poverty Line.

⁵ Caribbean Development Bank. Country Strategy Paper 2011-14 Trinidad and Tobago http://www.caribank.org/uploads/2014/12/BD74_11_CSP_Trinidad_and_Tobago_2011-14_FINAL.pdf

resource management can contribute to social protection because it would assist in conserving the natural resource base upon which many rural livelihoods depend, thereby reducing vulnerability to resource depletion. Fisheries policies however, are currently in draft form indicating that the development of the sector may largely be occurring in an ad hoc manner. It should also be noted that even in instances where formal management approaches have been established that these are still very top down and do not adequately promote participatory governance and management or fully consider or appreciate the challenges faced by small-scale natural resource users and rural households.

St. Vincent and the Grenadines

St. Vincent and the Grenadines (SVG) is comprised of the main island of St. Vincent and 32 smaller islands and cays representing the northern part of the Grenadines. It is roughly 390 km2 in area with the main island of St. Vincent representing 344 km2. Approximately 67 percent of the mountainous St. Vincent is forested. There are approximately 109,400 inhabitants in the country.⁶

St. Vincent and the Grenadines is heavily dependent upon agriculture (bananas, eddoes, dasheen (taro), arrowroot starch), tourism, light manufacturing, construction activity and some offshore banking for revenue. Banana was the main revenue-generating crop, but in 2007 when the Caribbean lost its preferential arrangements for banana exports with the European Union, the economy of St. Vincent and the Grenadines was severely affected. Tropical storms in 1994, 1995 and 2002 and unseasonal rainfall in 2013 which resulted in US\$12 million in damages negatively impacted the economy. St. Vincent and the Grenadines currently exports agricultural products mainly to its Caribbean neighbours and the United States. The country's ability to respond to external shocks and invest in social protection is hindered by a high public debt burden that was estimated at 67 percent of the approximately US\$1.335 million Gross Domestic Product (GDP)⁷ in 2013. St. Vincent and the Grenadines is a member of the Organisation of Eastern Caribbean States (OECS) and the Caribbean Community (CARICOM).

In St. Vincent and the Grenadines, as in much of the Caribbean, forestry and fisheries related activities are carried out in rural communities where there is access to the natural resources. Fishing in rural communities such as Chateaubelair is mainly small-scale using pirogues. Pot fishing⁸, banking⁹ and trolling¹⁰ are some of the more common fishing practices being used by fishers in fishing communities. In forested communities such as Diamond Village economic activities include using the timber from the trees for craft and drum-making and agroforestry, while hiking is popular with tourists. Forested lands are cleared to make room for agricultural activities such as planting bananas, dasheen and plantains. Marijuana is illegally grown as an economic activity in forested areas.

In his 2015 budget speech, the Prime Minister of St. Vincent and the Grenadines reported that 30.2 percent of the population lived below the poverty line while 2.7 percent lived in extreme poverty. A further 18 percent were vulnerable to economic shocks. Unemployment stood at approximately 21 percent in 2012. Approximately 55.6 percent of the poor are located in the rural north of the country. Agriculture in forested areas, agroforestry and fishing are the main activities in those rural communities suggesting that a significant number of the forestry and fisheries-dependent households in rural communities are poor. A regional study to determine

⁶ http://data.worldbank.org/country/st-vincent-and-the-grenadines

⁷ http://www.indexmundi.com/saint_vincent_and_the_grenadines/economy_profile.html

⁸ http://www.indexmundi.com/saint_vincent_and_the_grenadines/economy_profile.html

⁹ A type of line fishing where a weighted line with one or a few hooks are sunk to capture species such as grouper.

¹⁰ Baited lines are pulled slowly behind a moving vessel (Staskiewicz and Mahon 2007)

the levels of poverty in fishing communities in CARICOM countries, found that for St. Vincent and the Grenadines 5.41 percent were considered poor and 10.81 percent were considered vulnerable. No such study seemed to have been done for forestry in St. Vincent and the Grenadines.

Communities in rural areas in St. Vincent and the Grenadines have limited access to infrastructure such as paved roads, potable water, education and training. The Caribbean Regional Fisheries Mechanism's (CRFM's) Diagnostic Study to Determine Poverty Levels in CARICOM Fishing Communities investigated poverty levels in fishing communities in St. Vincent and the Grenadines and found that the needs of the communities included the asphalting of roadways (31.4 percent of interviewees), strengthening the drainage network (15.12 percent), provision of health centres (13.95 percent) and public transport (9.30 percent).

The recent causes of poverty in St. Vincent and the Grenadines included several factors that impacted the national economy. The loss of preferential treatment in the European markets saw the decline in banana production from 80,000 tonnes in the 1990s to 18,000 tonnes in the 2000s. The global economic crisis in 2008, several tropical storms in 1994, 1995 and 2002 and heavy rainfall in 2013 causing damage estimated at US\$12 million, all affected the national economy.

Literature Review

Social protection in its broadest sense can be thought of as a set of actions that seeks to reduce poverty and vulnerability. Common types of social protection include:

- Labour market interventions policies and programs designed to facilitate employment and promote the efficient operation of labour markets.
- Social Insurance security against life- cycle events and livelihood risks or shocks (e.g. unemployment insurance).
- Social Assistance income transfers (cash) or consumption transfers (food or vouchers or subsidies) to the poor.

While there is no single definition of social protection, a broadly representative definition is "all public and private initiatives that provide income or consumption transfers to the poor, protect the vulnerable against livelihood risks, and enhance the social status and rights of the marginalised, with the overall objective of reducing the economic and social vulnerability of poor, vulnerable and marginalised groups" (FAO, 2015). In line with this definition, social protection instruments are frequently interpreted as being preventive, protective, promotive and transformative ((Devereux and Sabates-Wheeler, 2004):

- Protective measures are narrowly targeted safety nets for income and consumption smoothing in periods of crisis or stress (e.g. social assistance programmes for the chronically poor and coping strategies).
- Preventive measures seek to avert deprivation (e.g. social insurance such as pensions and maternity benefits and diversification mechanisms).
- Promotive measures aim to enhance real incomes and capabilities, and provide springboards and opportunity ladders out of poverty through economic advancement.
- Transformative measures seek to address concerns of social equity and exclusion through social empowerment (e.g. collective action for workers' rights, building voice and authority in decision-making for women).

In this context it is also important to be clear about the definitions of poverty and vulnerability. Further, it is important to understand how poverty and vulnerability are linked with social protection.

DEFINING POVERTY AND VULNERABILITY

Poverty is not merely the absence of financial resources. As studies on poverty continue to emerge, definitions that articulate the multi-dimensional nature of poverty are understood. For example, the UN Committee on Social, Economic and Cultural Rights (2001) defines poverty as:

"...a human condition characterised by the sustained or chronic deprivation of the resources, capabilities, choices, security, and power necessary for the enjoyment of an adequate standard of living and other civil, cultural, economic, political and social rights (UN Committee on Social, Economic and Cultural Rights, 2001, work cited in E.H. Alison et al, 2011)".

By this definition, it is clear that in understanding poverty one must consider, in addition to financial assets, people's ability to access other types of capital including human capital, social capital, physical capital and environmental capital. Access to the aforementioned types of capital are significantly influenced by the institutional environment in which communities and households operate.

In recent years the term vulnerability has become significant in understanding poverty and notably in its relation to the impacts of climate variability and change on natural, man-made and human systems. In regard to the latter, the term vulnerability, according to Allison et. al, (2011), is understood in terms of:

"...people's exposure to risks, the sensitivity of their livelihood systems to these risks and their capacity to use their assets and capabilities to cope with and adapt to these risks"

Vulnerability then can place a household on a sliding scale of poverty so to speak. That is to say, a household not currently exposed to a certain risk may be able to avert poverty, but under exposure to certain risks or hazards may find it difficult not to fall into poverty (or get back out). A household's or individual's ability to avert poverty is therefore linked to their level of vulnerability.

The Department for International Development's (DFID) Sustainable Livelihoods Framework in Figure 3.1 below shows the linkages between the abovementioned factors.

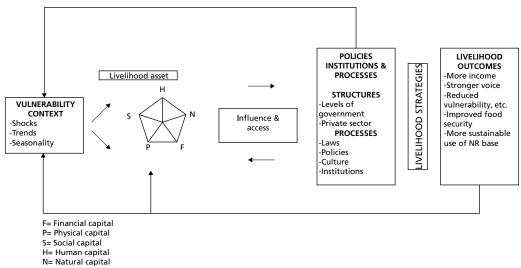


Figure 3.1 DFID's Sustainable Livelihood Framework showing the linkages between livelihood assets, vulnerability and the institutional environment

THE LINK BETWEEN POVERTY, VULNERABILITY AND SOCIAL PROTECTION.

Based on the above definitions, Figure 3.2 below attempts to show the links between poverty, vulnerability and social protection. As the diagram illustrates, poverty can be defined in terms of people's access to certain assets and degree of vulnerability. Social protection actions, can then seek to reduce poverty by either reducing vulnerability, specifically by either reducing exposure (or frequency of exposure) to risks and hazards, reducing livelihood sensitivity to risks and hazards and/or increasing adaptive/coping capacity; and/or by improving access to assets/capital through, for example, a sustainable livelihoods approach.

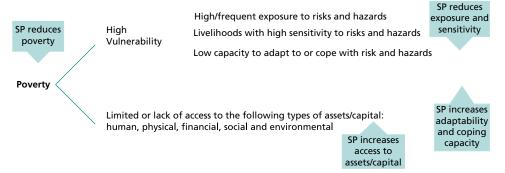


Figure 3.2: The links between poverty, vulnerability and social protection (SP).

Poverty and vulnerability in the Caribbean

At a regional level Caribbean states are exposed to a number of economic and environmental shocks including downturns in the global economy, global trade fluctuations and natural hazards such as hurricanes, earthquakes and volcanic eruptions (Barrientos, 2004). For example, the revocation of the preferential trade agreement between the European Union (EU) and the Caribbean brought about major adverse economic impacts in banana exporting countries such as Saint Lucia and Saint Vincent and the Grenadines. Similarly, natural hazards such as the devastating earthquake that impacted Haiti in 2010 have long-term adverse effects, especially on national Caribbean economies that have low resilience to hazards and shocks.

Poverty rates vary widely in the Caribbean. Estimates for persons living below the poverty line in the Bahamas for example are 9.3 percent (2010 estimate) while in Haiti the estimated percentage of persons living below the poverty line is 80 percent (2003 estimate). The data for the region indicates that poverty levels for the region vary between 14 and 43 percent of the population over the 1995 to 2004 period (Downes, 2010). Country Poverty Assessments (sponsored by the Caribbean Development Bank) undertaken in recent years indicate that levels of poverty are particularly high in the Eastern Caribbean states of St. Kitts and Nevis, St Lucia, Grenada, and Dominica and moderate in Antigua and Barbuda. In countries where several poverty estimates are available the data suggest an increase in poverty amongst individuals in Belize (1996 to 2006), Grenada (1998 to 2008) and St. Lucia (1996 to 2006), while it decreased in Guyana (1993 to 1999), St Kitts and Nevis (2000 to 2007) and Trinidad and Tobago (1992 to 2005) (Downes, 2010).

The incidence of indigent (food) poverty is relatively low in the region, generally under 10 percent of the population. Belize, Guyana, Dominica and St. Vincent and the Grenadines, however, displayed significant levels of indigent poverty (that is, between 13 and 29 percent of the population) (Downes, 2010).

SOCIAL PROTECTION IN THE CARIBBEAN

Social protection includes a wide range of interventions, from macroeconomic policy, social and market insurance, social assistance, labour standards, employment generation, micro-credit and micro-insurance, education and training and disaster prevention and relief. These are all interventions that protect the vulnerable from natural, economic, and social hazards (Barrientos, 2004).

The level of social protection offered at national levels within the Caribbean region varies widely, and depends to some extent on a country's ability to allocate national funding for such measures. Studies show however that, in general, social protection expenditure at the national levels is insufficiently well targeted on poor and vulnerable groups, and that coverage is patchy (Barrientos, 2004).

SOCIAL PROTECTION POLICY IN THE CARIBBEAN

Social protection and related policies, strategies and programmes in the Caribbean are articulated by a number of regional bodies and institutions including the Association of Caribbean States (ACS), CARICOM, OECS and the Caribbean Development Bank (CDB). Policies may be broad-based dealing with poverty and vulnerability at the national level (or across all sectors) or focused on addressing vulnerabilities unique to a particular sector.

The Regional Framework for Achieving Development Resilient to Climate Change and the CARICOM Regional Food and Nutrition Security Policy are examples of broad-based policies that seek to respectively address vulnerabilities across sectors related to climate variability and climate change and food and nutrition security in the region. Similarly, the CARICOM Agreement on Social Security aims to harmonise social security legislation of the Member States of the Caribbean Community to ensure that CARICOM nationals are entitled to benefits and provision of equality of treatment when moving from one country to another. Other broad-based polices include the Declaration on Health for the Caribbean Community (1982) and the CDB's Education and Training Policy and Strategy.

REGIONAL POLICIES RELEVANT TO THE FISHERIES AND FORESTRY SECTORS IN THE CARIBBEAN

Forestry and fisheries resources are very important to the economies of many Caribbean countries. Although, CARICOM and the OECS have no specific forestry policy they do have a number of policies related to the use of forest-based resources and activities. Focused policies that speak (directly or indirectly) to the fisheries and forestry sectors in CARICOM and/or the OECS include the:

- CARICOM Agricultural Policy
- Liliendaal Declaration on Agriculture and Food Security
- Caribbean Community Energy Policy
- Revised OECS Regional Plan of Action for Agriculture 2012-2022
- St. George's Declaration Principles of Environmental Sustainability
- OECS Policy on Protected Areas System
- OECS Environmental Management Strategy
- Liliendaal Declaration on Climate Change Development
- Regional framework for achieving development resilient to climate change
- Caribbean Regional Fisheries Mechanism's (CRFM) Strategic Plan (2013-2021)
- Castries (St. Lucia) Declaration on Illegal, Unreported And
- Unregulated Fishing
- Caribbean Community Common Fisheries Policy

To some extent, each of these policies incorporates either protective, preventive, promotive or transformative social protection measures (See Appendix 2).

SOCIAL PROTECTION FOR SMALL-SCALE FISHERS AND FOREST USERS

Natural resource-based livelihoods, such as fisheries and agriculture contribute significantly to food security, poverty alleviation and employment for rural and coastal communities in the Caribbean. However, natural resource-based livelihoods are vulnerable to a number of risks and shocks including: natural shocks such as climate variability and change and natural disasters and unsustainable resource use; human capital risks such as low literacy rates and inadequate training opportunities; and social exclusion in terms of inadequate participation in the governance and management processes for the fishery and forestry resources. In addition, social protection, in the form of social insurance, labour standards and disaster relief and prevention are considered to be generally tenuous for small-scale natural resource users.

A Diagnostic Study to Determine Poverty Levels in CARICOM Fishing Communities¹¹, undertaken by the Caribbean Regional Fisheries Mechanism (CRFM), found that more than half of the fisherfolk interviewed for the study were not participating in a social security system (CRFM, 2012). The reasons for low participation

¹¹ The Diagnostic Study was conducted in ten selected CARICOM countries: Barbados, Belize, Grenada, Guyana, Jamaica, Montserrat, St. Kitts and Nevis, St. Vincent and the Grenadines, Trinidad and Tobago and The Bahamas

may vary, such as inadequate awareness among fishers about social security systems, insufficient outreach by social security bodies and the attitude of fishers to participate in social protection services (Phillips, 2014). It should also be noted that social security systems, such as social insurance schemes, have not evolved to adequately capture earnings and determine appropriate contributions that would confer benefits to the self-employed. The inadequate inclusion of small-scale fishers and forest-users in social protection systems means that these groups are disproportionately more vulnerable to macro and micro level economic and natural shocks.

Macro-level policies at national levels to address, market access, small-scale enterprise development, climate change adaptation, disaster risk management and other areas that can confer social protection benefits in the fisheries and forest sectors may not be adequately serving small-scale natural resource users at the community level. This is especially the case when these policies are not supported by an enabling environment such as legislation and institutional frameworks and action plans for implementation, with adequate budgetary support.

Fisheries and forestry policies at the national levels

In many instances while fisheries policies have been approved at the regional level, they are yet to be reflected in national fisheries and related food and nutrition security policies. Another common issue with fisheries policies in the region is that in many countries, national fisheries policies and management plans are outdated, or, even though developed, are still in draft form/not approved. Consequently, there is a tendency to address issues in an ad hoc or piecemeal manner without any clearly articulated policy framework (Phillips, 2014).

Conversely, a study on forestry policies in the region found that the low performance in the forestry sectors in the region was not due to an absence of approved forestry policies, but partly due to the inadequate conceptual framework and understanding of what public policy is and the absence of the necessary complementary programmes for policy implementation (FAO, 1998).

GAPS IN REGIONAL POLICY AND INSTITUTIONAL FRAMEWORK FOR SOCIAL PROTECTION POLICIES IN THE CARIBBEAN

- Absence of an overarching policy and strategy on social protection in the CARICOM region
- Inadequate inter-sectoral planning to address issues of poverty and vulnerability at the regional and national levels
- Inadequate monitoring and evaluation of the implementation of regional policies and strategies that relate to the reduction of poverty and vulnerability and the provision of social protection
- Inadequate institutional arrangements to promote participatory governance and management of natural resources at the regional and national levels

Structure of the report

The remainder of this report is structured into two main sections as follows:

Section A: Findings from the national desk study and community-level surveys (fisheries and forestry) conducted in Trinidad and Tobago; and

Section B: Findings from the national desk study and community-levels surveys (fisheries and forestry) conducted in Saint Vincent and the Grenadines.

SECTION A

DESK STUDY AND COMMUNITY SURVEY FINDINGS FOR TRINIDAD AND TOBAGO

Institutional environment for social protection in Trinidad and Tobago

In this section, some of the policies and social protection schemes and measures in Trinidad and Tobago applicable to fisheries and forestry dependent communities being provided by government, private sector, civil society and local communities will be identified and discussed. The measures outlined (which are not exhaustive) can be categorised as either targeted (specifically applicable to fishers and forest-users) or universal (applicable to all persons including fishers and forest-users). Social protection schemes and programmes listed include social assistance initiatives (transfers in cash or in-kind to poor/vulnerable households), social pensions, social insurance and social employment. Policies and strategies aimed at social protection identified include labour market interventions, sustainable natural resource management policies and strategies, poverty reduction strategies and efforts at reducing vulnerability to natural disasters.

NATIONAL POLICY FRAMEWORK FOR POVERTY REDUCTION IN TRINIDAD AND TOBAGO

The Government of the Republic of Trinidad and Tobago (GoRTT) developed a Medium Term Policy Framework for the period 2011-2014. This framework outlined seven interconnected pillars of sustainable development toward the realisation of the GoRTT's commitment of "Prosperity for all". Pillar Two (2) - "Poverty Eradication and Social Justice"- is the most applicable to social protection. In an effort to achieve the GoRTT's goal of a two-percent annual reduction in poverty, a number of social protection programmes were established and are currently being implemented by the public sector. These are reported on annually in the government's Social Sector Investment Programme report¹².

Two key social protection initiatives established under the Social Sector Investment Programme are the National Poverty Reduction and Eradication Programme and the Social Welfare Division. These initiatives are implemented by the Ministry of Social Development and Family Services. The purpose of each are summarised in Table 5.1 below.

¹² Social Sector Investment programme 2015: http://finance.gov.tt/wp-content/uploads/2014/09/SSIP-2015.pdf

Table 5.1: Summary of objectives of the National Poverty Reduction and Eradication Programme and Social Welfare

Initiative	Purpose
National Poverty Reduction and Eradication Programme	 Strengthen the institutional framework for poverty reduction through the establishment of a network of civil society organizations; Decentralise poverty interventions by establishing Regional Social and Human Development Councils; and Deliver key poverty eradication projects that would address poverty, vulnerability and sustainability at individual and community levels
Social Wel- fare Division	 To provide: income support to persons over sixty-five (65) years who satisfy other criteria of income and residence; income support to the disabled financial assistance to the infirm and needy; assistance on behalf of children whose parents have died, deserted, or are ill, or imprisoned; assistance to victims of natural disasters Senior Citizens' Pension; and Grants e.g. Public Assistance Grant; Disability Assistance Grant; General Assistance Grant which provides grant funding for, inter alia, house repair, home help aid, clothing, funeral expenses and education expenses.

PROTECTIVE SOCIAL PROTECTION MEASURES IN TRINIDAD AND TOBAGO

Table 5.2 below shows the protective social protection measures that are available to the general public in the country including those in fisheries and forestry-dependent communities.

Table 5.2: Table showing protective social protection measures in Trinidad and Tobago

Organization type	Examples of social protection programmes	Formal	Informal
Government	 Targeted Conditional Cash Transfer Programme- a short-term food assistance and development programme that provides conditional cash transfers to eligible recipients to assist in meeting nutritional needs of the household. Public Assistance Grants – a monthly subsistence grant designed to provide financial aid to adults who are unable to work because of ill health. Emergency Case Fund/General Assistance Grant -this fund provides several grants designed to assist needy persons as well as persons who have been victims of natural disasters such as hurricane, fire or flood. 	Y	N
Private Sector	 Cash and in-kind transfers as part of Corporate Social Responsibility efforts ¹³ Compensation to fishers by oil companies after seismic surveys are conducted Established programmes by oil companies that offer grants and transfers (cash, equipment etc.) to communities within their range of operation 	Y	N

¹³ Although there is no national CSR policy, a project to map corporate social responsibility in Trinidad and Tobago report found that the private sector played an important role in the provision of social and environmental programmes in the country (Balboni et.al, 2007). According to the report, for the period 2001-2006 the companies sampled for the mapping project spent approximately TT\$54 million on external social and environmental programmes; which at that time represented between 2 percent and 4 percent of the annual expenditure of the Government on social and developmental programmes over the previous few years. While the mapping projectfound that some companies have established CSR programmes with set goals aimed at offering social protection, the majority of others operate on a more ad hoc basis. As such, it was difficult to gain a full appreciation of the level of CSR activity within the private sector.

PROMOTIVE SOCIAL PROTECTION MEASURES IN TRINIDAD AND TOBAGO

The table below shows the promotive social protection measures that are available to the general public in the country including those in fisheries and forestry-dependent communities.

Table 5.3: Table showing promotive social protection measures in Trinidad and Tobago

Organization type	Examples of social protection programmes	Formal	Informal
Government	 Free education up to the tertiary level - education in the country is free up to the secondary level (this refers to tuition only, books uniforms, meals and other school supplies must still be purchased although programmes are available to support lower income households). At the tertiary level, education is highly subsidised through the Government Assistance for Tuition Expenses (GATE) programme. Under the GATE programme tertiary education is free for all eligible citizens of Trinidad and Tobago. Education Grant- a grant of TT\$500 (US\$75.36)/month/child for children from extremely low level income households who are unable to meet basic needs for school attendance. School Nutrition Programme- the programme provides breakfast and lunch for children from low income earning households Free school transport service (in select areas only). Free public health care ¹⁴ - Under the public health system, health care services and some medications (through the Chronic Disease Assistance Programme (CDAP) which provides citizens with free prescription drugs and other pharmaceutical items to combat a variety of chronic health conditions) are provided free of charge. Unemployment Relief Programme (URP)¹⁵ is a social safety net programme that provides short term employment opportunities for participants, but also seeks to build entrepreneurial skills. Community-Based Environmental Protection and Enhancement Programme (CEPEP) provides part-time employment for unemployed persons eighteen (18) years and old to provide environmental protection, enhancement and beautification services. Micro-Enterprise Loan Facility- a community empowerment and poverty reduction initiative, which equips Community Based Organizations (CBOs) to actively engage in promoting sustainable livelihoods among the poor through the provision of micro loans and support to micro entrepreneurs National Entrepreneurship Development Company (NEDCO) Limited is a state agency with a	Y	N

14 Previous livelihood studies undertaken by CANARI have found that residents in rural areas regard the quality of service provided by the public health centres in their regions as poor. For example, in a livelihood survey conducted by CANARI in 2014, residents from the rural areas of Brasso Seco and Blanchisseuse noted that a doctor only visited the health centre that served their communities once per week. In many instances, these centres represent the most immediate access to health care in rural communities, as access to hospitals, due to remoteness or poor access to transport (private and public) may be difficult.

instances, these centres represent the most immediate access to health care in rural communities, as access to hospitals, due to remoteness or poor access to transport (private and public) may be difficult.

15 The unemployment rate in Trinidad and Tobago is estimated at 3.3 percent (2014 estimate), one of the lowest unemployment rates since the country's unemployment rate peaked at 20 percent in 1990. This reduction in unemployment has in part been attributed to the increase in social employment programmes administered by the State such as the aforementioned URP and CEPEP programmes which offer short-term employment tounskilled/semi-skilled labourers at a wage (TT\$17.25/hour or US\$2.60) above the minimum wage (US\$15.00/hour or US\$2.26). In a recent IMF report however, the organization noted, that while government administered social employment programmes may be contributing to a reduction in unemployment figures, the programmes themselves were adding very little value to the labour market. The report also suggested that these programmes may be masking a more serious issue of underemployment (IMF, 2014).

Private Sector	Private sector services that cater to the poor and vulnerable e.g. Private institutions that provide loans and financial services to	N	Υ
	owners of micro-enterprises, specifically targeting entrepreneurs that		
	are unable to secure loans through more formal lending institutions.		

PREVENTIVE SOCIAL PROTECTION MEASURES IN TRINIDAD AND TOBAGO

Contributory social insurance scheme

The National Insurance System (NIS) is a contributory social insurance scheme administered by the National Insurance Board of Trinidad and Tobago (NIBTT). The NIBTT was established by Act of Parliament No. 35 of 1971. Under the System, employed persons between the ages of 16 and 65 years who work in State sponsored or private sector enterprises are required to register with the NIBTT and make contributions based on their earnings. Employers are also required to register and make contributions to the System. Persons who register and pay contributions are entitled to benefits in the following categories: Sickness Benefit, Maternity Benefit, Invalidity, Funeral Grant, Retirement, Employment Injury, Employment Injury(Death) and Survivors' Benefit. Self-employed persons currently do not receive coverage under the System even though coverage for self-employed persons is outlined in the National Insurance Act No. 35 of 1971. This has implications for small-scale fishers and forest-users who may generally be categorised as self-employed. The Eighth Actuarial Review of the National Insurance System (2010) outlines, inter alia, the following reasons in Box 1 for the non-inclusion of self-employed persons in the National Insurance System.

BOX 1 - Excerpt from the Eighth Actuarial Review of the National Insurance Board of Trinidad and Tobago: Challenges with the inclusion of self -employed persons in the National Insurance System

- Earnings basis for the calculation of contributions and benefits. The definition of covered earnings is an issue. Many self-employed persons have irregular earnings over the year and many self-employed jobs are seasonal. There is thus an issue concerningthe equalization of earnings over the year for manyselfemployed persons.
- Definition of self-employed status. The employment status may be difficult to establish in some industries. For example, fishermen may be classified as selfemployed or salaried (and presently few salaried fishers pay NIS contributions).
- Definition of retirement. Retirement is not a clear-cut event for a self-employed person. For example, the owner of a taxi may continue to receive income from the operation of his taxi after he retires. (Centre for the International Promotion of Québec, 2012)

Non-contributory senior citizens pension

The Senior Citizens Pension, commonly referred to as "old age pension", is a noncontributory social pension provided by the State to all citizens and legal residents sixtyfive (65) years or older whose monthly income does not exceed TT\$3000.00 (US\$452.19). Beneficiaries can receive between TT\$1000 (US\$150.73) - TT\$3000 (US\$452.19) per month based on their monthly income. Self-employed persons, currently unable to secure a pension through NIS are reliant on senior citizen pension benefits.

CIVIL SOCIETY'S ROLE IN FACILITATING SOCIAL PROTECTION FOR SMALL-SCALE FISHERS AND FOREST USERS IN TRINIDAD AND TOBAGO

While the Government is the main provider of social protection in Trinidad and Tobago, civil society also plays a key role in this regard. There are a wide range of civil society organizations operating in Trinidad and Tobago. These include community based organizations such as the Caura Valley Farmers' Group and primary fisherfolk organizations such as the Blanchissesue Marine Life Association that operate at the local level, and national level organizations such as the Hunters Association of Trinidad and Tobago and the Trinidad and Tobago Unified Fisherfolk (TTUF). Technical non-governmental environmental organizations such as CANARI with national and regional foci also exist.

CANARI's work in promoting and facilitating participatory natural resource management has fostered relations with national and regional fisherfolk and forest-based organizations.

In terms of providing social protection for rural small-scale fisheries and forestry communities, civil society organizations in Trinidad and Tobago provide support in different ways. These include:

- advocating and negotiating for enhanced social protection measures and inclusion of small-scale fishers and forest-users in decision-making;
- holding government accountable when they fail to implement policies, legislation and direct financing toward social protection efforts;
- developing programmes relevant to the social protection of vulnerable groups in an effort to secure donor funding; and
- implementing projects that contribute to social protection of vulnerable groups

Many civil society initiatives geared toward the social protection of small-scale fisherfolk and forest-users are also aimed at conserving the resource base upon which these groups depend and/or building their capacity, through education and training to sustainably use these resources. Civil society organizations may implement projects under established programmes with specific goals and targeted outcomes or on an ad hoc basis. The Caribbean Natural Resources Institute (CANARI) is an example of the former, as it implements a variety of projects targeted at small scale fishers and forest-users through the organization's Coastal and Marine Livelihoods and Governance¹⁶; Forest, Livelihoods and Governance¹⁷, Climate Change and Disaster Risk Reduction and Rural Livelihoods programmes.

COMMUNITY-BASED SOCIAL PROTECTION INITIATIVES

Community-based social protection can be defined as 'institutional arrangements where people rely upon community and family relationships to meet their security needs' (Browne, 2013). The key features are that institutions are locally developed, that they usually rely on family or community networks, and have a strong element of reciprocity (Browne, 2013).

Livelihood analyses conducted by CANARI have shown that community-based social protection mechanisms mostly include mutual assistance e.g. fund raising in times of need and assistance with labour; and savings groups using a traditional form of saving called sousou (CANARI, 2014). A sou-sou is a rotating savings arrangement where a group of people each contribute an equal amount of money for a pre-determined period of time and then each person gets a chance to all the money. While this form of saving is free from interest and traditional banking procedures, it is based on a high degree of trust and reciprocity.

There appears to be very little documented information on the effectiveness of community-based social protection mechanisms in Trinidad and Tobago.

¹⁶ Strengthening Caribbean Fisher folk to Participate in Governance project: http://www.canari.org/strengtheningcaribbean-fisherfolk-to-participate-in-governance

Support to Improve the Effectiveness and Sustainability of Forest-Based Community Businesses in St. Vincent and The Grenadines: http://www.canari.org/support-to-improve-the-effectiveness-and-sustainability-of-forest-basedcommunity-businesses-in-st-vincent-and-the-grenadines

National climate change and disaster risk reduction policies and strategies

Trinidad and Tobago's Climate Change Policy (2011) specifically acknowledges the potential impacts of climate change on the country's coastal resources and the role of forests in mitigation. The policy further speaks to the implementation of adaptation and mitigation strategies of coastal ecosystems to ensure the continuous provision of food and sustainable livelihoods for communities. One effort toward the realization of this objective has been the appointment, by the Cabinet of Trinidad and Tobago in 2012, of a Multi-Sectoral Steering Committee to develop an Integrated Coastal Zone Management Policy Framework, Strategies and Action Plan for Trinidad and Tobago. One of the outputs of the Committee to date has been a draft Integrated Coastal Zone Management Policy Framework which considers the impacts of natural hazards, including climate change and variability, on the coastal zone.

The National Climate Change policy also highlights the need to integrate adaptation planning into national policy and planning. The mainstreaming of climate adaptation and mitigation considerations into national sectoral policies, programmes and projects however is still tenuous and it is expected that many sectoral policies will need to be revised in order to comply with the 2011 climate change policy.

THE OFFICE FOR DISASTER PREPAREDNESS AND MANAGEMENT

At the national level, comprehensive disaster management is coordinated through the Office for Disaster Preparedness and Management (ODPM), a division of the Ministry of National Security. The ODPM functions as the national coordinating agency that manages all phases of the Disaster Management Cycle; prevention, mitigation, preparedness, response and recovery as well as climate change adaptation programs (ODPM, 2011)¹⁸. The ODPM uses a Comprehensive Disaster Risk Management (CDM) approach, which considers all aspects of the disaster spectrum including risk identification, reduction and transfer. The objectives of the CDM approach are to achieve:

- A national culture of Disaster Risk Management
- Dynamic partnerships between the public and private sectors and among all stakeholders
- A state of preparedness for impacts of all hazards
- Minimal loss in the event of extreme events or emergencies
- Systems for rapid recovery.

At the community level, the ODPM administers the Communities Organised and Ready for Emergencies (CORE) programme which is meant to disseminate disaster risk reduction information and training to communities.

Decision makers in the agriculture, food security and fishery sectors have become increasingly concerned with climate risks to their sectors. However, most are challenged when it comes to integrating and applying available climate related information into their decision making and planning¹⁹.

There is currently no Disaster Risk Management Plan that specifically addresses disaster risks to the fisheries or forestry sectors in Trinidad and Tobago.

ODPM Strategic Plan 2010-2015.

¹⁹ Concept Note for a National Consultation on Climate Services & National Climate Outlook Forum for Trinidad and Tobago

Poverty and vulnerability in small-scale fisheries communities in Trinidad and Tobago

In May 2012, the Caribbean Regional Fisheries Mechanism (CRFM) published the findings of a regional diagnostic study to determine poverty levels in CARICOM small-scale fishing communities, see Table 12.1 below. Based on the findings of this study it was reported that 15.23 percent of the 167 households surveyed in Trinidad and Tobago were vulnerable, in terms of education and economic capacity, but only 1.32 percent could be classified as poor²⁰. In terms of economic vulnerability, the study reported that: "Trinidad and Tobago [fisheries dependent] households have a considerable dependency on fisheries income. Household members do not tend to belong to other sectors so households barely receive economic contributions from other sources of revenue" (CRFM, 2012).

Table 7.1: Percentage of poverty and vulnerability among small-scale fisherfolk in Trinidad and Tobago

Trinidad and Tobago Region	Non-poor	Vulnerable	Poor	Percent Responses per Region
Nariva	6.62%	0%	0%	6.62%
St. Andrew	3.97%	0%	0%	3.97%
St. George / East	2.65%	0%	0%	2.65%
St. John / East	5.30%	0%	0%	5.30%
St. Mary / East	2.65%	0%	0%	2.65%
St. Paul / East	3.31%	0%	0%	3.31%
Mayaro	3.31%	0.66%	0%	3.97%
St. David / South West	10.60%	0.66%	0%	11.26%
St. George	12.58%	0.66%	0%	13.25%
Victoria	6.62%	0.66%	0%	13.25%
St David/ North East	1.32%	1.32%	0%	2.65%
St. Andrews / South West	5.96%	1.32%	0%	7.28%
St. David	1.99%	1.32%	0%	3.31%
Caroni	7.95%	1.99%	0%	9.93%
St. Patrick / South West	1.32%	1.99%	0%	3.31%
St. Mary / North East	1.32%	1.99%	0.66%	3.97%
St. Patrick	5.96%	2.65%	0.66%	9.27%
T& T	83.44%	15.23%	1.32%	100%

It should be noted that the CRFM Study used the Unsatisfied Basic Needs for the quantitative analysis of poverty in CARICOM fishing communities, while Poverty Assessments usually are based on minimum food requirements (indigence lines) and minimum food requirements plus an element of non-food expenditure (poverty lines). It is important then to recognise that the results of studies based in different methodologies cannot be compared as different criteria for poverty assessment are used.

SOCIAL PROTECTION MEASURES RELATED TO THE AGRICULTURE AND FISHERIES SECTOR

Social protection measures related to the small scale fisheries sector in Trinidad and Tobago include measures aimed at reducing input and operational costs as well as those aimed at improving human capital through, for example, sector specific training and skills development.

Seafood Industry Development Company-The Seafood Industry and Development Company (SIDC) is a State entity that was established under the Ministry of Trade and Industry in 2006. Since 2011 the company has been placed under the purview of the Ministry of Agriculture, Lands and Fisheries and serves as a project implementation agency with the mandate to partner with all stakeholders to ensure that the seafood industry of Trinidad and Tobago is modernized and attains viability on a sustainable basis.

The SIDC implements projects related to the sustainable utilization of resources, capacity building, business development and infrastructure development. Some of their recent projects include: establishment of a commercial tank based aquaculture project focused on Tilapia production, hosting financial literacy seminars and computer literacy training, organizational management courses for fishing associations, preparation of technical designs for fish processing facilities and establishment of an ice making facility for the North Eastern Region of the country.

Fisheries training and skills development-The Government of Trinidad and Tobago continues to support the Caribbean Fisheries Training and Development Institute (CFTDI) established with the assistance from FAO, which provides a broad range of courses in both maritime and seafood technologies to meet the training requirements of fishers in the Caribbean (CRFM, 2012). The CRFM's diagnostic poverty study found that Trinidad and Tobago had one of the highest rates of fishermen benefiting from training courses (26.56 percent of respondents). Training courses at CFTDI include: Fishing Gear Technology & Fishing Methods, Outboard Engine Maintenance and Repair, Fibre Glass Reinforced Plastic Technology, Net Mending, Navigation, Basic Safety Training and Boat Master III.

Subsidies for fishers-The Agricultural Incentive Programme²¹ offers social protection targeted at small scale fishers in Trinidad and Tobago. The Programme provides promotive social protection by offering subsidies to farmers and fishers for the purchase of equipment and supplies relevant to their work. Subsidies include for example:

- Subsidy on fishing vessels (pirogue). Registered vessel owners are eligible for a subsidy
 of 25 percent of the purchase of pirogues to a maximum of TT\$5000.00 (US\$753.65)
 for a replacement vessel.
- Ten percent subsidy on purchase of used multipurpose vessel to a maximum of TT\$50,000.00 (US\$7523.78)
- Twenty percent subsidy on purchase of new multipurpose vessel to a maximum of TT\$100,000.00 (US\$15047.55)
- Subsidy on fuel for use in fishing vessels is available to boat owners whose fishing vessel and engine are registered with the Fisheries Division.

To access funds from the Programme fishers must be registered with the implementing line Ministry and apply to the Ministry providing proof of original receipts for goods and services. Once the application is received, a site visit will be conducted by an agricultural county officer and the equipment or completed work inspected. A recommendation is then submitted and upon approval of this recommendation, payment is disbursed. Payments are given as a percentage (between 15-100 percent) of the total cost of the good or service. Incentives are offered in a variety of areas including

²¹ Agricultural Incentive Programme 2011 http://www.agriculture.gov.tt/images/AIP_Brochures/Agricultural%20Incentive%20Programme%202011.pdf Vehicles Guaranteed prices

- · Post-harvest and marketing
- Security
- Marine fisheries
- Aquaculture

In addition to the aforementioned subsidies, fishers benefit from Duty and Value Added Tax (VAT), concessions for new vessels, new engines, engine parts and spares, new fishing tackle, new marine accessories including electronic equipment, other capital equipment and construction material for new boats and imported fishing vessels²².

In the diagnostic poverty study undertaken by the CRFM it was noted that, in both 2008 and 2009, Government subsidized the fishing sector with TT\$ 7,000,000 (US\$ 1,055,106.72). Subsidies were focused primarily on VAT waivers for locally purchased marine accessories and engine parts; fuel rebates and VAT exemptions for imported marine accessories for imported marine accessories, engine parts and new engines (CRFM, 2012).

Access to loans, credit and micro-financing-The Agricultural Development Bank (ADB) is the funding arm of the Ministry of Agriculture, Land and Fisheries. The ADB is mandated "to encourage and foster the development of agriculture, commercial fishing and associated industries, including all segments of the production chain-support services, marketing and agro-processing". The Bank has recently expanded its mandate to include micro-enterprise financing and support for farmers' projects, lifestyle, and community needs. The ADB offers a portfolio of financial products, including concessionary loans and services that are tailored to meet the needs of farmers and other agri-entrepreneurs. According to the Bank's website among its key aims are to contribute to:

- increased employment;
- farmers' and agri-entrepreneurs' standard of living;
- increased sector competitiveness;
- sector sustainability;
- · food and nutrition security; and
- rural development.

Institutional arrangements

NATIONAL FISHERIES POLICIES, PLANS AND LAWS

At present, there is no formal national fisheries policy or plan that guides development and investment in the fisheries sector in Trinidad and Tobago. Though over the years, there have been draft versions of national marine fisheries policies, they have never formally come into being. As such, it would appear that issues related to the fisheries sector have mainly been dealt with in an ad hoc manner, which could be attributed to the low priority assigned to the fisheries sector (National Development Atlas, 2012).

In April 2004, the Government of Trinidad and Tobago under the Standing Committee on Business Development, created an Industry Team comprising stakeholders from both the private and public sectors, to draft a Strategic Plan for the development of the 'Fish and Fish Processing Industry²³'. In that draft Strategic Plan, in addition to the absence of a national policy for the sector, the absence of a social policy for coastal fishing communities, with respect to alternative or new job opportunities was highlighted as a key gap. Almost a decade later, the situation remains true for the sector.

Many of the objectives of the current draft Fisheries Management Policy (2011) speak to the reduction of socio-economic and environmental vulnerabilities in the sector. These include, *inter alia:*

- To ensure through the elaboration of appropriate fishery management plans the sustainable management and conservation of fisheries resources.
- To modernize the legislative and regulatory framework that governs fisheries management (this includes systems for monitoring, surveillance and enforcement).
- To promote transparent decision-making by facilitating the consultative process between Government and industry stakeholders.
- To promote an ethic of human resource development including thorough training
 within the fishing industry and its associated communities and to promote public
 education as a means of ensuring that marine living resources are exploited in a
 sustainable manner.
- To maintain, in good working order, and achieve optimal utilization of assets related to fish and seafood production
- To ensure that the productive capacity of marine habitats is increased or maintained, such that fish may be harvested for the benefit of present and future generations.
- To ensure that the socio-economic implications of policy options are identified, analysed and addressed and an appropriate incentive scheme is implemented with respect to all sectors of the fishing industry.
- To establish procedures for effectively dealing with conflict resolution and compensation issues for the fishing industry.

Risks, needs and transitions of small scale fishers in trinidad and tobago

Outlined below are some of the key risks, needs and transitions that are impacting or will likely impact small-scale fishers in Trinidad and Tobago.

Social security and access to insurance coverage

Small-scale fishers are generally self-employed, and, currently, cannot receive benefits under Trinidad and Tobago's national contributory social insurance scheme which does not provide coverage for self-employed persons. As such, small-scale fishers do not have access to benefits such as sickness benefit, maternity benefit, Invalidity, funeral grant, retirement, employment injury, employment injury (death) and survivors' benefit covered by the National Insurance System. CRFM's diagnostic study on poverty in fisheries in Trinidad and Tobago found that only 14.06 percent of the fishers they interviewed were participating in a social security system (CRFM, 2012).

Insurance coverage for boats and other fishing related equipment and gear is also difficult for small-scale fishers to access from private insurance companies, which is largely attributed to the high risk profile associated with fishing. In a recent newspaper article about the impact of rough seas on fishers, the General Secretary of Fishermen and Friends of the Sea, Gary Aboud, is quoted as follows:

"Fishermen cannot obtain insurance on their vessels, engines and nets. We have lobbied for insurance and no government has done anything to help or support us. Our members are without insurance... How many business people have been operating without insurance?" Aboud contended. He said fisherfolk had never encountered such water before along the north coast, which exceeded storm surges. He said boats and engines had sunk since the rough seas began." (Guardian newspaper, 2015)

In 2011, in another newspaper article about the cost of fishing equipment in Trinidad and Tobago, Krish Mankee, the manager at a boating supplies store was quoted as follows:

"Another major problem which affects fishermen working in Trinidad and Tobago is the problem of insurance coverage for their expensive equipment. In cases of accidents, fires or thefts, fishermen can get no compensation as insurance companies do not offer such coverage." (Newsday newspaper, 2011)

Inadequate fisheries infrastructure and facilities

Fishing facilities at many landing sites in Trinidad and Tobago are considered to be inadequate²⁴. The infrastructural development at these sites vary from a simple jetty to a more elaborate structure with facilities for the storage of fishing gear and equipment, repair of boats and engines, production and storage of ice and wholesale and retail marketing. In general, these sites do not attain the standards for good manufacturing practices for the handling and storage of fish and fish products. They cannot be said to be compliant to the principles of Hazard Analysis Critical Control Points (HACCP)²⁵.

National Spatial Development Strategy for Trinidad and Tobago: Surveying the scene
 FAO Profile of Fisheries- Trinidad and Tobago. 2006. http://www.fao.org/fi/oldsite/FCP/en/TTO/profile.htm

In addition, fishers often complain that, among other issues, the facilities, where they secure their boats, are poorly maintained and offer little security resulting in theft and damage to their costly fishing equipment. In a livelihoods survey conducted by CANARI in 2014, fishers from the north coast community of Blanchisseuse noted that the jetty and ramps at the landing site in their community were in serious disrepair. The fishers further reported that due to the dilapidated condition of the structures there were several instances in which fishers, while moving their vessels from the ramp to the jetty, have fallen through holes in the jetty resulting in serious injuries. The poor condition of the ramp resulted in increased damage to the fishers' boats increasing the frequency with which they have to undertake costly repairs. In the survey, inadequate physical capital was identified as a major livelihood limitation for many fishers, that in some instances precluded income generation. Other fishers identified similar issues along the north coast in a participatory video²⁶ produced by the fishers.

Climate change and natural disasters

According to the country summary for Trinidad and Tobago in the Summary of Country Annexes of the Climate Change Adaptation and Disaster Risk Management in Fisheries and Aquaculture in the Caribbean Region Assessment Study (CRFM, 2013):

- Trinidad and Tobago is exposed to a wide range of geological and hydro-meteorological hazards, including earthquakes and thunderstorms, which can trigger flooding in low lying or poorly drained areas and landslips in hilly regions.
- Coastal and offshore industrial infrastructure and sensitive ecological areas are exposed to marine and coastal threats, including tsunamis and flooding and other effects of sealevel rise.
- Boaters consider the country a relative safe haven, being on the southern edge of the
 Atlantic hurricane belt, but rough seas from Hurricane Iris (1995) and the storm surge
 from Hurricane Lenny (1999) caused problems even though these systems were some
 distance away.
- Flooding and landslides from heavy precipitation and intense rain events are common hazards
- Rough Seas Bulletins are issued by the Trinidad and Tobago Meteorological Service, and, in January 2012, several days of fishing were lost due to particularly rough seas.
- In October 2005, rough seas destroyed several fishing boats along the north coast of Trinidad.
- The vulnerability of coral reefs to the impacts of increased sea-surface temperature, as well as increased siltation in Trinidad and Tobago's rivers and pollution is expected to adversely impact aquatic life.

The fisheries sector in Trinidad and Tobago is not guided by a national fisheries policy and plan, and the sector under which it falls, Ministry of Agriculture, Land and Fisheries, similarly has no current overall guiding policy on climate change and natural disasters. As such, development of the fisheries sector in Trinidad and Tobago is not led by any sectoral policy which requires climate adaptation or mitigation. Therefore, there is no strategic plan/approach to ensure that climate change adaptation is being integrated into the fisheries sector.

Open access fishery and over-fishing

Access to fisheries resources is largely open with few fisheries being currently regulated (Fisheries Division, 2011). The draft fisheries management policy for Trinidad and Tobago notes that the primary contributor to over-fishing and over-capitalisation is the prevailing "Open Access" to harvesting marine fisheries in the country, where limited entry and fishing effort control for local fishermen is not incorporated into the legislative and management regimes. This is compounded by poor enforcement for existing regulations.

Caribbean Natural Resources Institute (CANARI). 2014. Fishing for a living. Accessed July, 2015: https://www.youtube.com/watch?v=Gw4Tffu4tZQ

Impacts of trawling

It is estimated that an annual discard of approximately 7,000 tonnes of bycatch (50 percent of total annual landings for Trinidad and Tobago) results from trawl fishing (Fisheries Division, 2011). In a study that evaluated the needs of the fishing and associated livelihoods in the coastal fishing sector of Trinidad and Tobago, it was reported that many are convinced that the deep-sea trawlers are destroying the seabed. It is opined that the activities of the trawlers would eventually lead to a collapse of the industry. The inadequate legislation and enforcement of the laws was cited as the main cause of the problem (Potts, A. et al., 2011)

The government of Trinidad and Tobago is currently drafting a management plan and supporting legislation to manage the island's artisanal and non-artisanal shrimp trawl fishery. The draft management plan proposes a closed season of two months for artisanal fishers and four months for non-artisanal fishers. To deal with the livelihood implications from the implementation of the closed seasons, Cabinet appointed a Multi-Sectorial Committee to recommend social relief measures, including options for livelihood diversification, for trawl fishers during these periods. The full report of the Committee is still being finalized and not yet available for public review.

Weak fisherfolk organizations and cooperatives

Cooperatives are not extensive in Trinidad and Tobago (CRFM, 2012). There are 34 fishing organizations (9 co-operatives and 25 Associations). Of these, 24 are in Trinidad and 10 in Tobago (Potts, et al., 2011). By providing social capital, strong fishers' organizations play a key role in protecting fishers' livelihoods and reducing poverty and vulnerability. By organising, fishers are better positioned to facilitate the transfer of resources, for example funding and training, from other societal levels (Amarasinghe and Bavinck, 2011). Cooperatives in particular "have the potential to empower small-scale fishers against environmental and socioeconomic shocks such as catch shortfalls, sickness and death in their families, natural disasters and hunger" (FAO, 2012).

In CRFM's diagnostic study on poverty in small-scale fisheries in Trinidad and Tobago only 34.38 percent of respondents in the study claimed to belong to a cooperative, and only 21.88 percent of respondents believed in their proper functioning (CRFM, 2011). The Trinidad and Tobago United Fisherfolk (TTUF), the national umbrella organization for fisherfolk organizations in Trinidad and Tobago was awarded a small grant from the Fisherfolk Strengthening Fund²⁷ for a project to improve participation in TTUF and its member organisations by creating awareness about their roles and the benefits of collective action, and strengthening internal governance in all fisherfolk organisations by building leadership, management and communication capacities.

The Fisherfolk Strengthening Fund is a small grant facility that was established under the EU funded project "Strengthening Caribbean Fisherfolk to Participate in Governance". This project is being implemented by CANARI in partnership with the Centre for Resource management and Environmental Studies of the University of the West Indies, Caribbean Regional Fisheries Mechanism, Panos Caribbean and the Caribbean Network of Fisherfolk Organisations.

Survey Findings - Blanchisseuse

BRIEF DESCRIPTION OF THE COMMUNITY

Blanchisseuse is a coastal village located along the Northern Coast of Trinidad. The village is about twenty-four kilometres from the Borough of Arima with a population of roughly one thousand people. Blanchisseuse's varied coastal and land-based resources, including the ocean, rivers and surrounding forests support the community's two main natural resource-based livelihood activities - fishing and agriculture. The natural beauty of the community also makes it a popular long stay holiday spot for the more affluent in Trinidadian society (a trend that has seen the construction of many large vacation homes along portions of the village's picturesque coast).

Among small-scale fishers, trolling²⁸ and a-la -vive²⁹ are key artisanal fishing methods. There are approximately thirty-two (32) active fishers (15 full-time fishers and 17 part-time fishers) in the community³⁰. Common fish species landed at the depot in Blanchisseuse include Kingfish (S. cavalla), Carite (Scomberomorus brasiliensis), Cavalli (Caranx hippos), Ancho (Pomatomus saltatrix), Lane Snapper (Lutjanus synagris) and shark. Landed fish is typically sold in the domestic market by way of direct sales to wholesale vendors who wait at the depot for the fishers' daily catches.

SURVEY FINDINGS

All the fishers interviewed were male³¹ with an average age of forty-two (42) years (the youngest fisher was 29 and the oldest was 54) and an average of 24.4 years fishing. The average household size consisted of approximately four (4) persons. Forty percent of the fishers interviewed were married and the remaining 60 percent classified themselves as single.

FINANCIAL CAPITAL

Sixty percent of the fishers interviewed stated that fishing was their primary occupation or the livelihood activity that earned them the most amount of money. Each fisher interviewed had at least one additional source of income in addition to fishing. Fishing, whether as a primary or secondary livelihood activity, was generally categorised as regular work by respondents. In terms of their additional income sources, 80 percent of respondents were employed with the government and, as such, entitled to participate in the country's social insurance scheme. Jobs included occupations as labourer, security watchman, water system operator and water truck driver.

Trolling is a method of fishing where one or more fishing lines, baited with lures or bait fish, are drawn through the water. This may be behind a moving boat, or by slowly winding the line in when fishing from a static position, or even sweeping the line from side-to-side, e.g. when fishing from a jetty. Trolling is used to catch pelagic fish such as salmon, mackerel and kingfish. https://en.wikipedia.org/wiki/Trolling_(fishing)

A la vive fishing is hand line fishing with live bait. http://www.ima.gov.tt/home/what-new/183-piloting-theintegration-of-coastal-zone-management-and-climate-change-adaptation-in-tobagoq.html

³⁰ Personal communication with President of Blanchisseuse Marine Life Association

Given the relatively small number of surveys undertaken, the study only targeted one group among fisherfolkharvesters. Fishing (harvesting) in Blanchisseuse is a male dominated activity. No female fishers were identified.

Fishers indicated that they did not have insurance on their boats, engines or other equipment. It was difficult for fishers to get insurance due to the risky nature of their work and the types of vessels being used. Also, based on responses from fishers, insurance may not be viewed as being important until some costly damage is sustained to vessels or equipment. Fishers generally paid "out of pocket" for repairs and damages to their boats and equipment.

Contributions by other household members to the household income were generally low. Only 40 percent of those interviewed said that other household members contributed to the household income. In most cases this was due to many of the household members being below the legal working age and attending school. Low household contributions were also common in instances where there were adults that met the legal working age and who had completed secondary schooling but were not employed or currently pursuing tertiary education.

Of those surveyed, only 20 percent indicated that their households received additional regular inflows of money through the pensions of older family members. While remittances are usually cited as a source of household income in other studies on poverty in the Caribbean, no respondent in this study identified remittances as an additional inflow.

Eighty-percent of respondents indicated that they saved money in either banks or credit unions. When asked if other members of their household saved money, most respondents (80 percent) were either unaware if their household members saved money or indicated that they did not

On average the monthly household income for a month where earnings from fishing were considered to be "good" was reported as TT\$8,400 (US\$ 1,266.13), and for a bad month as TT\$3003 (US\$ 452.64). The lowest reported monthly earning for a bad month was reported as TT\$0 and the highest as TT\$20,000 (US\$ 3,014.59) for a good month. Respondents that reported the highest monthly household incomes were from households with multiple earners in a single household. Respondents that reported the lowest monthly household incomes were generally the only regular income earners in their household.

In terms of household poverty lines, as shown in Table 10.1 below, most households (60 percent) reported monthly incomes that placed their households above the estimated poverty lines for their households. Due to monthly income variability, the remaining households showed significant economic vulnerability to falling below the estimated poverty line for their household. These households (Households 2 ad 3 in Table 10.1 below) had the highest dependence on income earned from fishing.

Table 10.1: Household poverty among small-scale fishers in Blanchisseuse³²

House- hold (HH) Number	Composition of HH (age in years)	Estimated family poverty line based on composition of HH (per month)	Reported estimated household earnings (per month)	Estimated earnings from fishing (per month)
1	Female (60) Female (25) Male (66) Male (34) Male (29)	TT\$3961.98 (US\$597.19)	TT\$15,000 –TT\$20,000 (US\$2,260.94 – US\$3,014.59 (Highest number of income earners in HH)	TT\$10,000-TT\$15,000 (US\$1,507.30 -US\$2,260.94)
2	Female (15) Female (11) Male (42) Male (18)	TT\$3129.39 (US\$471.69)	TT\$1,500 -TT\$7,000 (US\$226.09 -US\$1055.11) (Highest number of dependents; Single income earner)	TT\$1,500 - TT\$7,000 (US\$226.09 -US\$1055.11)

3	Female (23) Male (34)	TT\$1646.04 (US\$248.11)	TT\$1,500 -TT\$2,000 (US\$226.09-US\$301.46) (Not a boat owner)	TT\$1,500 – TT\$2,000 (US\$226.09-US\$301.46
4	Female (22) Male (54) Male (18)	TT\$2440.35 (US\$367.83)	TT\$3,000 – TT\$8,000 (US\$452.19 – US\$1,205.84) (Single HH income earner)	TT\$0 – TT\$5,000 (US\$0-US\$753.65)
5	Female (44) Male (51) Male (21) Male (20)	TT\$3292.08 (US\$496.21)	TT\$9,000 – TT\$10,000 (US\$ 1356.57 – US\$1507.30) (Part-time fisher)	TT\$4,000 – TT\$,5000 (US\$602.92 -US\$753.65)

Four of the five fishers interviewed were boat owners and one worked as a crew member on a fishing vessel. In terms of expenses related to their livelihoods as fishers (refer to Figure 15.1), 75 percent of the boat owners indicated that their start-up capital to purchase such equipment as boats and engines was obtained using money from their personal savings. Twenty percent of respondents stated that they secured bank loans from either traditional banking institutions or concessionary loans from the Agricultural Development Bank, for their start-up capital.

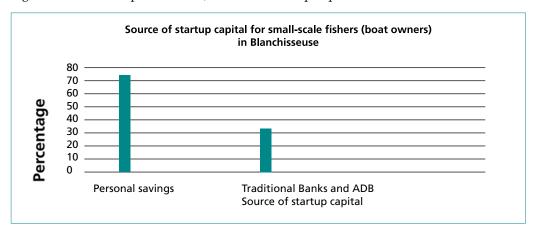


Figure 10.1: Source of start-up capital for small-scale fishers (boat owners) in Blanchisseuse

Regular monthly expenses related to fishing, including the purchase of fuel and boat repairs, ranged between TT\$2,400 to TT\$24,000 (US\$361.75 to US\$3,617.51). In almost every instance (80 percent), the respondents reported that their monthly expenses related to fishing was high relative to what they earned from fishing.

Eighty percent of respondents reported that they were not satisfied with their income from fishing and further indicated that their incomes had shown an overall decline in the last five years.

HUMAN CAPITAL

Eighty-percent of respondents indicated that they terminated their formal schooling at the primary level (Refer to Figure 10.2). Reasons for not moving on to higher levels of education included:

- failure of the Common Entrance Examination (now defunct since 2001) aptitude
 test in English, Mathematics and Comprehension (which determined whether
 primary school students would move on to receive secondary schooling, based on
 marks attained and space available at a then limited number of secondary schools);
- · chronic illness at a young age; and
- inability of parents to afford schooling.

Students who failed the Common Entrance Examination, either remained at the primary level to complete post-primary courses or dropped out of school.

Of those who terminated their schooling at the primary level, most indicated that they started earning a wage through fishing by the ages of 15 -18 years.

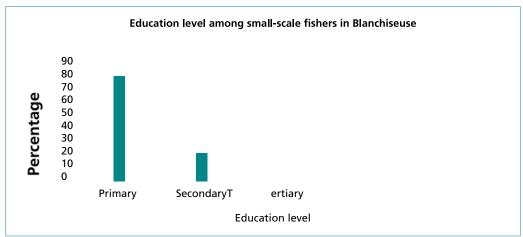


Figure 10.2: Education level among small-scale fishers in Blanchisseuse

All respondents indicated that they had acquired their skills for fishing by learning from older, more experienced, fishers or from their family members who were also fishers. Sixty percent of respondents indicated that they had furthered their fishing skills by making use of free training courses (for example in Engine Maintenance; Navigation; Safety Training; Fish Handling and Quality Control) offered by the Fisheries Division.

In spite of their dissatisfaction with their income earnings, the majority of respondents (80 percent) indicated that they would encourage others in their family to get into fishing. Reasons given included "Fishing is sustainable and profitable", "My father was a fisher and I would like to continue that as a family tradition", "You can make good money fishing. Better to fish than to thief" and "Fishing is an honest living. You can be your own boss". One fisher, who was the sole income earner in his household with the highest number of dependents under the age of 19 (3 dependents) stated that "It is tough to maintain a family with fishing. I also miss a lot of time with my family."

SOCIAL CAPITAL

Social capital refers to the social resources upon which people draw in pursuit of their livelihood objectives. These are developed through:

- networks and connectedness, either vertical (patron/client) or horizontal (between individuals
- with shared interests) that increase people's trust and ability to work together and expand their access to wider institutions, such as political or civic bodies;
- membership of more formalised groups which often entails adherence to mutuallyagreed or commonly accepted rules, norms and sanctions; and
- relationships of trust, reciprocity and exchanges that facilitate co-operation, reduce transaction costs and may provide the basis for informal safety nets amongst the poor (DFID, 1999).

While each respondent demonstrated awareness of social groups in their community, membership and participation in these groups were generally found to be low. Forty percent of respondents stated that they were members of the community's fishing group, the Blanchisseuse Fisherfolk and Marine Life Association. However, very few respondents, even those who were members of the Association, stated that they did not derive any benefits from being a part of the organization, and further noted that it had not been functioning for quite some time.

In a previous livelihood study conducted by CANARI in Blanchisseuse in May 2014, one of the fishers from the community indicated that fishers in the Association were dissatisfied with the progress that the group had made in getting assistance for repairing the community's fishing facilities, and, as such, they felt that it was not worth being a part of the group. This has resulted in members not attending meetings and being inactive in the group (CANARI, 2014). Similar sentiments were expressed during the interviews for this study.

PHYSICAL CAPITAL

At the household level questions on physical capital in the survey mainly focussed on the status of ownership of the respondents' houses, land and boats and at the community level their access to quality fishing facilities. The latter, however, was more of a discussion point during the interviews to determine the adequacy of the facilities used by the fishers and if these enabled them to function more productively or acted as a constraint.

In terms of the ownership of their physical housing structures, all respondents indicated that they owned their homes. However, none of the respondents had homeowners' insurance. None of the respondents indicated that they owned the land upon which their homes were built. In all cases, land was either being leased or rented from private holders, including the Roman Catholic Church.

Fishing facilities in the community were generally described as being inadequate. Box 2 is an excerpt from a previous livelihood study undertaken by CANARI in May, 2014 in the community of Blanchisseuse which describes the condition of the fishing facilities in the community at that time. During the period when surveys for this study were being conducted, repair works were being undertaken on the facilities by the State entity responsible for the maintenance and management of fishing facilities in Trinidad. However, during the interviews, fishers indicated that the repairs being undertaken were not what they would have preferred and that the quality of some of the works was not in line with what they desired. For example, the refurbished locker rooms, in which fishers are to secure their engines, were already showing signs of defects that would make them easy to break into by intruders. The need for fishers to have a secure location for their engines is very important to avoid theft. In fact, fishers alleged that, the day before the interviews for this study were conducted, a fisher's engine had been stolen.

BOX 2 - Fishing facilities in the Blanchisseuse community.

Inadequate physical capital is a major livelihood limitation for the fishers in Blanchisseuse. Each of the fishers interviewed lamented the condition of the ramp and jetty at the Blanchisseuse Fishing Facility. The ramp, shown in Figure 1, is the only point that allows fishers to haul their boats from the ocean onto the jetty at the fishing facility.



Figure 1: Defective ramp at the Blanchisseuse Fishing Facility.

However, the ramp is broken in many sections making it difficult for fishers to push their boats along its surface. As a result, to move the boats from the sea to the jetty, several fishers have to lift the boats in a time consuming and strenuous process.

Moving the boats up the defective ramp damages the bottom of the boats. As such, the fishers at Blanchisseuse have equipped the bottom of their boats with metal strips for protection. Over a short period of time, these strips become worn or damaged and must be replaced, which has become quite costly. One fisher reported that strips had to be changed almost monthly at a cost of five-hundred dollars (TT\$500/US\$75)) per strip. Another reported that it costs about three-thousand dollars (TT\$3000/US\$450)) to have the strips removed and installed and this had to be done about three times per year. The President of the BFMLA noted that the Blanchisseuse Fishing Facility is the only facility in Trinidad where the fishers have to pull their boats in by hand and use steel strips. The increased cost of boat maintenance and the days lost in undertaking repairs result in lost wages for the fishers in Blanchisseuse.

The jetty is another issue for the fishers. Shown in Figure 2, the jetty, on which the fishers secure their boats, is in a serious state of disrepair. Over time, the primarily wooden structure has weakened, and is missing several planks, leaving many gaping holes on its surface. The fishers interviewed reported several instances where, while moving their vessels from the ramp to the jetty, men have fallen through these holes resulting in serious injuries. Sea access to the jetty is limited because the ramp on the western end has been completely blocked by a landslide.

Overcrowding on the jetty compounds the issue of access, as fishers have to manoeuvre their vessels from among the fifty boats on the jetty to get to the ramp on the eastern end.



Prior to this study, repair works had also been completed to replace the broken boards on the jetty (refer to Figure 2 in Box 2 above) and fix the cracks in the ramp. The refurbished ramp is shown in the photograph at Figure 10.3 below.



Figure 10.3 Refurbished ramp at the Blanchisseuse Fishing Facility

VULNERABILITY CONTEXT

In an effort to assess household and community vulnerability, respondents were asked to identify any shocks or adverse events that had impacted their household or individual income (idiosyncratic shocks) in the past twelve (12) months. They were also asked to identify any shocks or adverse events that had ever (no timeframe) affected their household or community (covariate shocks) and to further identify if and how they were able to cope with or recover from these adverse impacts.

The vast majority of shocks experienced by respondents were related to changes in the natural environment, illness/injury and conflicts with other resources users. Economic shocks, namely increases in food prices, were the least commonly identified by respondents, although 40 percent of those interviewed identified food as being their main household expense.

While positive coping strategies to shocks, such as having and using savings, livelihood diversification and depending more on subsistence agriculture for food during periods of low household income were identified by fishers during the study, in some instances, it was discovered that negative coping strategies such as reducing household food intake were utilised. Strategies such as reducing intake of meat and dairy products, which are comparatively more expensive products, were used. Such negative coping strategies, especially if applied over the long-term or with high frequency, can have negative impacts on household nutritional health.

The shocks and coping strategies identified are set out in more detail in Table 10.2 below.

Table 10.2: Idiosyncratic and covariate shocks and coping strategies identified by small-scale fishers in Blanchisseuse

	-		
Shock/risk type	Shocks/risks identified by respondents	Impact on household	Coping strategies identified by respondents
Natural	Rough seas that caused	Reduced fishing days	<u>Positive</u>
	damage to their boats	from illness, injury	Looked for alternative
	 Decline in fish stocks 	and damage to boats	sources of income
	Siltation of ocean water	resulting in reduced	compatible with
	caused by landslides	household income	existing skills e.g. small
	near river	Low catch from stock	construction jobs.
	Reduced rainfall caused	depletion, changes in	Spent less on
	desiccation of river.	water temperature and	entertainment
	River is a source of bait.	fish migration due to	Planted more food
	Changes in water	seismic surveys resulting	(subsistence farming)
	temperature (when	in reduced household	Used savings (one
	water is too cold it is	income.	respondent indicated
	harder to catch fish)	Rising food prices	that he could not always
Health	Injury to knee (chronic)	resulting in more money	use his savings for food
	Chikungunya (acute)	spent on food or not	in times of need as he
Management	Poor enforcement	enough money to	also had to purchase
	resulting in shrimp	spend on food for the	school supplies and books
	trawl fishers illegally	household.	for his children)
	fishing out of zone and		Negative
	depleting fish stock.		<u>ivegative</u>
	Oil companies		Ate less
	conducting seismic		Ate less meat products
	surveys causing fish to		and cut out expensive
	flee from traditional		products such as butter
	fishing grounds		and cheese.
	 Overfishing 		Fished longer hours/more
Economic	Rising food prices		days.

The majority of respondents identified physical barriers due to the inadequacy of the fishing facilities in Blanchisseuse as their main barrier. One part-time fisher explained that it was demotivating to have to go out and expend so much physical energy just to get his boat onto the water and back on to the jetty. He stated that as a result of the physical conditions he did not fish as often. Sixty percent of those interviewed identified natural, social and economic barriers as their main livelihood constraints. Management barriers were the least identified by respondents.

USE OF SOCIAL PROTECTION PROGRAMMES AMONG RESPONDENTS

All respondents indicated that they or their household members had benefitted or were benefitting from different types of social protection programmes including social insurance, social pensions, social assistance cash transfers and promotive programmes such as access to free training and tertiary education. Private insurance, for example health, life and homeowners' insurance, was not common among respondents. Social protection schemes/programmes identified are described in more detail in Table 10.4 below.

Table 10.4: Social protection instruments utilised by small-scale fisherfolk in Blanchisseuse

Instrument	Social protection measure	Programme offered by	Description
Access to training and education	Promotive	Government	 Free training in engine maintenance; navigation; safety training; fish handling and quality control offered by the Fisheries Division Access to tertiary education through subsidization of tuition through the GATE programme.
Social Insurance	Preventive	Government	Fishers were able to benefit from NIS through livelihood diversification that included employment in government jobs. Fishers' households also benefitted from NIS in cases in which household members who were not fishers, were employed by government or private sector companies.
Social Pension	Preventive	Government	Fishers households with family members over 65 years old benefitted from income gained through the non-contributory old age pension programme.
Compensations schemes/cash transfers	Protective	Private Sector	Cash transfers identified included: compensation packages offered by oil companies for losses to fishers resulting from the conduct of seismic surveys by the companies, and secondary school scholarships for students living in the Blanchisseuse community from oil companies.
In-kind transfers	Protective/ Promotive	Government	Free laptops given to students en- tering secondary school through the government's Laptop Pro- gramme
Concessionary loans/Subsidies	Promotive	Government	Fuel subsidy for registered fishers. Concessionary loans provided by the ADB for start-up costs

Discussion and recommendations

Based on the findings from this study it is evident that small-scale fishers in Blanchisseuse are exposed to a variety of shocks such as rough seas, injury and inadequate management of fisheries resources and facilities, which increase their vulnerability. The study also found that fishers are participating and benefitting from universal and targeted social protection programmes. Targeted social programmes may not be fully addressing the vulnerability needs of fishers and in some instances may be contributing to their vulnerability. For example, with respect to the latter, social protection programmes that reduce input costs and thus facilitate entry of more fishers into the fishery sector may be increasing fishing pressure on an otherwise overexploited and ineffectively regulated open access fishery.

While some of the findings from the community surveys may only be specific to the community and households studied, some aspects of the vulnerabilities identified through this research can be extrapolated to other small-scale fishing communities and households, such as the exposure of fishers to natural risks and shocks, non-participation in national insurance schemes and the inability to access insurance for their boats, engines and other equipment through the private sector.

Some of the findings from this study are comparable with the findings of the Diagnostic Study to Determine Poverty Levels in CARICOM Fishing Communities which examined Trinidad and Tobago as a pilot country. While the CRFM study found that poverty rates in fishing communities in Trinidad and Tobago were relatively low (1.32 percent), it found, much like this study, that economic vulnerability (15.23 percent) was a more significant factor. That is, the fishing households depend significantly on income earned from fishing. Therefore, when fishers are unable to fish due to such things as illness, injury or natural disasters, their households are significantly affected.

Coming out of this study, the following issues are highlighted as key areas that if addressed could contribute to social protection and reduced vulnerability in fisheries dependent communities in Trinidad.

The need for a national fisheries policy and management plans - Natural shocks and risks such as resource depletion caused by overfishing and illegal trawling were identified as key contributors to vulnerabilities during the community surveys. Some reports confirm these risks as they indicate that the stocks of key species targeted by fishers in Blanchisseuse such as kingfish and carite are fully exploited³³. Long-term vulnerability to overfishing is compounded when coping strategies such as increased fishing pressure are implemented to deal with low catch or income periods.

In this instance the sustainable management of fisheries resources and enforcement of management measures can contribute to social protection for fishers by ensuring long-term viability of the resource base upon which they depend. Such measures are necessary to avoid the "tragedy of the commons" effect. The enforcement of existing marine fisheries management measures and regulations in Trinidad is currently regarded as poor^{34 35}.

Report on Commercial Fisheries within the Gulf of Paria and the impacts of proposed port development activities on fisheries in the Claxton Bay area.http://www.ema.co.tt/docs/public/comments/NEC_PLSEIP%20SUPPL%20EIA_APP%20XII_090306.pdf

National Development Strategy for Trinidad and Tobago: Surveying the scene

³⁵ Evaluating the Needs of the Fishing and Associated Livelihoods in the Coastal Fishing Sector of Trinidad and Tobago

To mitigate against these risks, efforts must be made to improve the management of fisheries, specifically in terms of developing and implementing management plans for the various fisheries and improving enforcement. Management should be guided by an approved policy for the sector that reflects the outcomes which include reduced vulnerability of fishers and economic and environmental sustainability of the sector.

The need to mainstream disaster risk reduction and climate change adaptation in fisheries sector planning and development - Fishing is a high-risk profession, not only because of the inherent safety risks associated with the job, but also because of high exposure of life and collateral to disasters. To mitigate against man-made and natural shocks (e.g. like rough seas that was commonly reported among fishers for this study) which can affect incomes and cause costly damages to boats and engines, there is need to mainstream climate change adaptation and disaster risk management into sectoral planning.

While the issue of lack of insurance on fishing vessels and equipment emerged as a key vulnerability in this study, the idea of insurance for fishers is only one aspect of an overall need for a holistic planning approach to deal with sustainable development of the sector and the reduction of vulnerability of fishers, including actions for climate change adaptation and disaster risk management. Such an approach should consider the full range of strategies related to disaster prevention, mitigation and preparedness.

Strategies such as climate proofing fishing facilities; building the capacity of small scale fishers to adapt to climate change and recover from a disaster, for example by building human capital to increase the likelihood of securing alternative income sources; or by reducing the sensitivity of fisheries-dependent households to income derived from fishing can go a long way in mitigating disaster risks. The latter is especially important in the Trinidad and Tobago context as fisheries' households have a considerable dependency on fisheries income (CRFM, 2012).

One regional project, which includes Trinidad and Tobago as a project country, which is seeking to address the issue of building climate resilience in the fisheries sector is the FAO Global Environment Facility (GEF) funded, Climate Change Adaptation in the Eastern Caribbean Fisheries Sector project (CC4Fish). The goal of CC4Fish is to increase resilience and reduce vulnerability to climate change impacts in the Eastern Caribbean fisheries sector, through introduction of adaptation measures in fisheries management and capacity building of fisherfolk and aquaculturists as well as implementing an ecosystem approach to fisheries management and mainstreaming of climate change.

The need to include self-employed persons in the National Insurance System - Box 1 in section 10.4.1 of this document outlines the reasons why fishers are not included in the national insurance scheme which provides benefits such as Sickness Benefit, Maternity Benefit, Invalidity, Funeral Grant, Retirement, Employment Injury, Employment Injury(Death) and Survivors' Benefit. Efforts must be made to address the non-inclusion of self-employed persons in this system. Alternatively, as recommended by the CRFM, a Fishermen's Pension and Social Security Benefit Scheme, that would cater to the circumstance of small-scale fishers could be established (CRFM, 2012).

The need for stronger fishers' organizations- At the national level, labour interventions provide support for the creation of cooperatives and provide institutional support for the organization of fishers. There are approximately (34) primary fishing organizations in Trinidad and Tobago of which nine (9) are fishing co-operatives and twenty-five (25) are fishing associations. In the Caribbean context, fishers' organizations are challenged by governance and capacity issues including inadequate leadership; inadequate business management skills; lack of strategic focus; low membership and participation; and low levels of trust (Phillips, 2014). Some of these issues were supported by the responses given by fishers during this study.

In terms of providing and contributing to social protection, stronger and resilient

fisherfolk groups would not only put fishers in a better position to advocate for improved policies and management aimed at addressing their challenges, but could also: i) increase fishers' price negotiating power with market intermediaries, improve postharvest practices and facilities, provide marketing logistics and information, and facilitate investment in shared structures such as ice plants and fish processing facilities; ii) use their greater negotiating power to make cost-saving bulk purchases of fishing gear, engines, equipment and fuel; and iii) facilitate microcredit schemes for fishers, to reduce their dependency on intermediaries and give them greater freedom in selecting buyers (FAO, 2012).

Understand that sustainable natural resource management can contribute to social protection - It is important that when designing social protection measures to address vulnerability and poverty among small-scale fishers (and other natural resource based livelihoods) that the root causes of poverty and vulnerability are understood. Addressing all issues of poverty and vulnerability with social protection measures may be financially unsustainable and ineffective if the root of the vulnerability or poverty may be better addressed by improving sustainable management measures.

For example, in the Trinidad and Tobago context, effective management and enforcement of regulations in the fishery may confer significant benefits toward reducing vulnerability of small-scale fishers in the sector by reducing overfishing which can ultimately lead to stock depletion and reduced income earning capacity for fishers.

STAKEHOLDERS' ROLES AND RESPONSIBILITIES

Based on the findings of this study the following recommendations in Table 11.1 for key fisheries stakeholders are outlined as being advantageous to the reduction of poverty and vulnerability among small-scale fishers in Trinidad.

Table 11.1: Recommendations for key fisheries stakeholders to facilitate the reduction of poverty and vulnerability among small-scale fishers in Trinidad

Stakeholder	Role	Recommendation
Government		
Fisheries Division	Management	 Strengthen enforcement of existing measures for the management of marine fisheries Draft national participatory fisheries policy and management plan with input from small-scale fishers and get the policy and plan formally approved. Social protection, climate change adaptation and disaster risk management should be mainstreamed into the sectoral policy and plan. Develop a research agenda to improve on the quality of information for decision-making for sustainable small-scale fisheries development, including information on poverty and vulnerabilities in fishing communities As part of disaster risk management, examine possible means of securing insurance for fishers, potentially through public and private partnerships.
Ministry of Agriculture, Lands and Fisheries and Ministry of Energy	Policy Development	• Integrate the national CSR policy* into the agriculture and fisheries sectors that ensures private sector companies, such as oil companies, working in the coastal and marine space provide compensation and adaptation policies/programmes for small-scale fishers and other natural resource users when their activities disrupt the livelihood actions of natural users in coastal communities' activities.
Cooperatives Division	Training	 Undertake participatory assessment of fishers' cooperatives in Trinidad and Tobago to determine the challenges and likely solutions (e.g. capacities and policies required). Align capacity building strategies and policy interventions based on findings of the needs assessment.

Social Divisions	Monitoring and evaluation	 Undertake participatory monitoring and evaluation exercises to determine the effectiveness of current social protection programmes and schemes. Develop a national policy on corporate social responsibility (CSR)*
National Insurance Board	Social Insurance	Develop a system and programmes to facilitate the inclusion of small-scale fishers (or smallholders) as self-employed persons in the national insurance system
Private Sector		
Insurance companies	Insurance	Examine possible strategies for securing insurance for fishers' assets, through public and private partnerships.
Oil companies and other private sector companies operating in fishing communities	Corporate Social Responsibility	 Based on national CSR policy, promote a culture of CSR that could contribute to improving the livelihoods of small-scale fishers in communities of operation. Align corporate social responsibility efforts with the policy and management objectives for the small-scale fishing sector
Civil Society		
Fisherfolk organizations	Advocacy Social capital	 Build resilient organizations to improve collective voice of fishers and social capital. Advocate for inclusion in social insurance programmes Advocate for the inclusion of targeted social protection measures in fisheries policy and plans that will address needs of vulnerable fishing communities
Civil Society Organizations	Advocacy Capacity Building	 Advocate on behalf of fisherfolk organizations for improved national strategies to reduce poverty and vulnerability among small-scale fishers. Design and implement projects that can help to build the capacity of fisherfolk organizations to function more effectively and influence policy.

Poverty and vulnerability in small-scale forestry dependent communities in Trinidad and Tobago

While there is no official definition for a small-scale forest user in Trinidad and Tobago, the country's National Forestry Policy identifies some of the small-scale extractive and non-extractive uses, shown in Table 12.1 below, of forests in Trinidad and Tobago.

Table 12.1: Small-scale extractive and non-extractive uses of forests in Trinidad and Tobago

Category	Uses
Extractive uses (Timber products)	Small-scale processing, furniture making and use of timber for construction.
Extractive uses (Non-Timber Products)	Forests play a critical role in supporting socio-economic development through the extraction of the following products: • food and food additives (edible nuts, mushrooms, fruits, herbs, spices and condiments, aromatic plants, game animals); • fibres (used in construction, furniture, clothing or utensils); • resins, gums, and plant and animal products used for medicinal, cosmetic or cultural purposes (e.g. beekeeping); • plants for landscaping and horticultural use • wildlife (hunting)
Non-extractive uses	nature tourism

In a country case study report for Trinidad and Tobago on Facilitating Financing for Sustainable Forest Management in Small Island Developing States and Low Forest Cover Countries, it was noted that a high incidence of poverty existed within regions of the country where forest cover and national parks are dominant (Pantin and Ram, 2010). In the report, it was also noted that according to official data, there was little employment related to forests (Pantin and Ram, 2010). It could be inferred from this that a significant number of small-scale forest users operate either on a subsistence level or within the informal economy in the case of commercial users.

Vulnerability of forest resources

Approximately 44.1percent or about 2260.0km² of Trinidad and Tobago is forested (ODPM, 2014). Forests resources in Trinidad and Tobago are highly vulnerable to indiscriminate use, including housing (both formal and informal), farming and quarrying resulting, in part, from poor enforcement and limited management capacities. It has been suggested that sustainable forest management, has the potential to alleviate poverty and provide employment opportunities (Pantin and Ram, 2010).

Targeted social protection measures applicable to forestry dependent communities

Ongoing government -led programmes that offer social protection for small scale forest users in Trinidad and Tobago include the following:

Natural resource protection and employment generating programmes

Forestry Development Programme, which offers preventive social protection by implementing various natural resource management strategies, such as reforestation, wetlands and watershed management and fire protection, that reduce vulnerability of forest based livelihoods to degradation.

Forestry Incentive Programme- the Forestry Incentive Programme assists in reversing the cycle of de-forestation and land degradation on private lands by encouraging the use of reforestation and conservation methods and promoting private forestry. As part of a nationwide effort to preserve and increase forest reserves in Trinidad and Tobago, individuals and businesses are granted rebates for fire tracing, machinery and equipment used in reforestation projects.

National Reforestation and Watershed Rehabilitation Programme (NRWRP) which offers promotive social protection by creating jobs for and offering entrepreneurship training to unemployed persons in rural communities. Through the programme, rural persons are employed to rehabilitate and protect the forests in their communities as well as offered training that would help them to undertake entrepreneurial ventures.

National Nariva Restoration, Carbon Sequestration, Livelihood and Wildlife Project seeks to restore 1339 ha of the Nariva Swamp that has been degraded by illegal rice farming. It also aims to develop sustainable livelihood opportunities for the communities of Biche, Cascadoux, Kernahan and Plum Mitan that depend on the Nariva Swamp's natural resources by providing employment through reforestation activities and training community based organizations within the project area.

Access to subsidies, loans, micro-credit and financing and land

Agricultural Incentive Programme provides a variety of subsidies for small-scale farmers. For example, new farmers are eligible for a subsidy of 50percent of their start-up costs up to a maximum of TT\$30,000 (US\$4,521.89).

Agricultural Land Distribution- Unoccupied State land is made available periodically for lease. State land may be leased on a short, medium or long-term basis. Lease rates vary between 2 percent and 5percent of the free market value of the land, depending on land use and the duration of the lease.

Agricultural Development Bank (ADB) - the ADB is the funding arm of the Ministry of Agriculture, Land and Fisheries. The ADB is mandated "to encourage and foster the development of agriculture, commercial fishing and associated industries, including all segments of the production chain-support services, marketing and agroprocessing". The Bank has recently expanded its mandate to include micro-enterprise financing and support for farmers' projects, lifestyle, and community needs. The ADB offers a portfolio of financial products, including concessionary loans and services that are tailored to meet the needs of farmers and other agri-entrepreneurs. According to the Bank's website among its key aims are to contribute to:

- increased employment;
- farmers' and agri-entrepreneurs' standard of living;
- increased sector competitiveness;
- sector sustainability;
- food and nutrition security; and
- rural development.

TARGETED SOCIAL PROTECTION BY CIVIL SOCIETY

Forest dependent communities have benefited from work undertaken by civil society. These include projects aimed at building the capacity of community based organizations, resource management skills development, adaptation of small-scale forest-based enterprises to climate change and protection of forest based resources. Some of these are listed below.

- Fondes Amandes Community Reforestation Project (FACRP) is an example of
 a community based organization initiative aimed at reforesting and protecting the
 forests in the Fondes Amandes community. The project also promotes sustainable
 livelihoods by providing training for community members in tour guiding, natural
 craft and the preparation of fire trails and reforestation techniques to protect the
 community's forest resources.
- Empowering rural women through improving livelihoods In June 2012, under its Rural Livelihoods Programme, the Caribbean Natural Resources Institute (CANARI), with funding from the United Nations Development Fund for Women (UN Women), initiated an eighteen-month project "Empowering rural women through improving livelihoods". The purpose of the project was to, in part, build the capacity of rural women with natural resource –based enterprises to adapt to the challenges of unsustainable natural resources practices and climate change.
- Network of Rural Women Producers Trinidad and Tobago (NRWPTT) is the national chapter of a regional network of rural women producers that works to provide rural women with access to credit for micro-business projects, contribute to government policies that are sensitive to and supportive of the special needs of rural women producers, contribute to the elimination of the gender bias in the ownership of land, and ensuring that women have the same opportunities as men to own property. The NRWPTT also seeks to provide marketing support for rural women producers and to offer training, research, technical support and outreach services³⁶.
- Implementation of Sustainable Farming Practices in Northern Range Communities³⁷ In 2009, the Cropper Foundation implemented a 30-month project that targeted small-scale farmers from two selected rural farming communities in the Northern Range of Trinidad to improve their use of sustainable farming practices that would assist in improving the returns and sustainability of agriculture for small-scale farmers. The project sought to address the loss of forest cover in the Northern Range brought on by increased cultivation by small-scale farmers using unsustainable agricultural practices such as "slash and burn" resulting in soil erosion, water run-off and aggravation of downstream flooding and siltation of watercourses.

³⁶ http://e-edition.guardian.co.tt/womanwise/2012-07-01/caribbean-network-rural-women-producers-womenagents-change

http://thecropperfoundation.org/Approved_Plan_of_Operations.pdf

Institutional arrangements

MANAGEMENT BODIES, FORESTRY POLICIES, LAWS AND PLANS

The Forestry Division is the primary State agency responsible for the management of the State's forests, wildlife and national park resources in Trinidad. The Department of Natural Resources Environment (DNRE) is responsible for the management of State lands in Tobago. The Forestry Division and DNRE operate under the recently approved 2011 National Forest Policy. This policy replaced the previous (1942) policy which became a limiting factor to efficient operations in a vastly changed and very dynamic and critical island environment³⁸.

In terms of management plans, there appear to be no current long-term management plan for forested areas in Trinidad and Tobago. However, there are a number of laws in Trinidad and Tobago that directly and indirectly relate to the management of forests and their associated resources. The key legislative instruments covering forest management in Trinidad and Tobago are the Forests Act and the Conservation of Wildlife Act. Related legislation includes the Environmental Management Act, Sawmills Act and the Agricultural Fires Act. Enabling legislation for the implementation of the National Forest Policy and the National Protected Areas Policy, including regulations, are currently in draft form (PSIP, 2015).

As previously mentioned, forest resources in Trinidad and Tobago are highly vulnerable to indiscriminate use and enforcement by the Forestry Division is seen as being weak. Constraining factors contributing to the latter include:

- inadequate forest management financing (Pantin and Ram, 2010).;
- insufficient inclusion of civil society and the private sector in forest management (National Forest Policy, 2011);
- low enforcement capacity at the management level;
- inadequate fines to act as disincentives for offenders (Ramlogan, 2013); and
- several policies and laws of relevance to forest management overlap, and provide unclear management direction, or, in extreme cases, are in direct conflict ((National Forest Policy, 2011)

SOCIAL PROTECTION FUNCTION OF NATIONAL FORESTRY AND RELATED POLICIES AND PROGRAMMES

In addition to the National Forest Policy, there are a number of other policies related to the management of natural resources relevant to the forestry sector in Trinidad and Tobago. These include the National Protected Areas Policy, National Wildlife Policy, National Environmental Policy and the National Climate Change Policy. Each of these policies recognises the importance of natural resources to livelihoods while the objectives of the National Forestry Policy, National Wildlife Policy and National Protected Areas Policy speak directly to optimising the contribution of forest, wildlife and protected area resources to livelihoods. The National Forestry Policy notes however that few of the poverty reduction programmes in Trinidad and Tobago consider the linkages between forest resources and livelihoods (National Forestry Policy, 2011).

³⁸ Personal communication between CANARI and Raynaldo Phillips, Forest Officer with the Forestry Division on 21August, 2015

In terms of providing social protection for small-scale forest users, the National Forest Policy specifically outlines a number of strategies to promote livelihood opportunities for both extractive and non-extractive forest resource users. In this regard, the policy, inter alia, outlines the following objectives:

- provide technical and financial support for sustainable forest-based industries and small businesses; and
- ensure equitable access of the population to forest goods and services, recreation, etc.
 More specifically, in terms of extractive non-timber forest resources, the policy
 highlights the following actions to be taken by the State in collaboration with all relevant
 stakeholders:
 - promote the sustainable harvesting and utilisation of wildlife resources, especially hunting of game animals through, development and adoption of a National Wildlife Policy and undertake appropriate revisions to the Conservation of Wildlife Act (Chap. 67:01), as a priority action;
 - promote the sustainable extraction and utilisation of forest resources, especially native plants or plant parts, including orchids and medicinal plants;
 - support traditional (cultural, spiritual/religious), subsistence and small-scale extractive
 uses of forests and cottage industries that are legal, sustainable and compatible with
 the conservation objectives of this Policy, especially those uses that are capable of
 bringing livelihood benefits to local communities;
 - continue to promote forestry's contribution to food security through sustainable agroforestry and wildlife farming practices

In terms of the development and management of non-extractive uses the policy outlines the following:

- promote the sustainable development of nature-based tourism on both private and State lands;
- provide equitable access to, and manage recreational opportunities (e.g. hiking, bird watching) for, all stakeholders;
- support lifestyles that value the livelihood benefits of forests, both in rural communities and through greening of urban spaces

Other strategies, outlined in the policy, aimed at improving management of forest resources such as capacity building to facilitate effective participatory management of forests; development of financial mechanisms for the sustainable financing of forest management and technical support to facilitate sustainable use and conservation of forest resources also contribute indirectly to social protection.

The National Wildlife Policy (2013) also clearly acknowledges the role of wild life resources to sustainable livelihoods. The Policy identifies that the quality and extent of these wildlife resources have deteriorated due to the direct loss of wildlife populations and their associated habitats through multiple factors including forest fires, unsustainable harvesting of game and timber, lack of appropriate regulation of the horticulture and pet trade, increased habitat loss and fragmentation through industrial and infrastructural developments (e.g. roads, bridges, ports etc.) by State and private landowners, quarrying and unsustainable agricultural practices. In addition, the Policy acknowledges that indirect factors such as climate change and pollution have important ramifications for wild species and their habitats (National Wildlife Policy, 2013).

Much like the National Forest Policy there are many aspects of the National Wildlife Policy that directly and indirectly speak to the social protection of resource users. In fact, one of the stated objectives of the Policy is:

"To optimise the contribution of wildlife resources to livelihoods, cultural and spiritual/religious use, while ensuring sustainable use of wildlife resources, including hunting, capture of cage birds, captive breeding, artificial propagation and international trade, and non-destructive uses such as ecotourism, and ecosystem services where possible, feasible and desirable."

The Policy speaks directly to the development of social protection mechanisms in instances where the management of a wildlife species will have adverse effects on livelihoods. In this regard the policy states that it will:

"develop compensation mechanisms in cases where the management of any designated critically endangered, endangered, vulnerable, or near threatened wildlife species or their habitats negatively impacts livelihoods"

In addition, the Policy seeks, in some instances, to enhance conservation efforts by promoting social protection through labour market interventions that would encourage sustainable use of forest resources. For example, as an alternative to the collection of wild species of plants for sale, the policy promotes the use of floriculture/horticulture and seeks to support this by offering market based incentives and low interest loans for the development of wild plant farms.

It should be noted however, that while all the above policies and strategies point to the actions to be taken, there are no approved action plans in place to do so.

Risks, needs and transitions of small scale forest-users in Trinidad and Tobago

INADEQUATE ENFORCEMENT AND MANAGEMENT OF FOREST RESOURCES

The natural resource base upon which small-scale forest users depend is vulnerable to indiscriminate use. Poaching and over-harvesting in forested areas in Trinidad and Tobago are serious issues impacting the sustainability of forest resources. Deforestation is also a serious issue impacting forest resources and forest-based livelihoods. Activities such as housing development (formal and informal), illegal quarrying, illegal logging and unsustainable agricultural practices all contribute to a general trend of declining forest cover³⁹. In addition, forest fires, largely caused by negligent behaviours such as slash and burn agriculture, hunting, smoking and malicious acts contribute to this decline⁴⁰.

Deforestation and the illegal use and taking of forest resources are partially attributed to the inadequate capacity of government to enforce regulations and manage forested areas. Low penalties and fines set out in the Forestry and Conservation of Wildlife Acts that would act as disincentives for offenders' also compound illegal use. For example, hunting outside of the closed season only carries a fine of two-hundred Trinidad and Tobago dollars (TT\$200.00/US\$30.15).

Efforts are however currently underway to improve the management of protected forested areas in Trinidad and Tobago through a FAO/Global Environment Facility (GEF) funded project titled "Improving Forest and Protected Area Management in Trinidad and Tobago". The key outputs of the project are expected to be:

- Draft National legislation for establishing and managing PAs
- Systematic biodiversity monitoring and site-specific interventions to address threats
- Management plans for six new PAs
- User-fee system operating in two PAs

CLIMATE CHANGE IMPACTS ON FORESTS AND LOW ADAPTATION CAPACITY OF SMALL-SCALE FOREST USERS

There are no specific studies which examine the impacts of climate change on forest-based livelihoods in Trinidad and Tobago (FAO, 2010). However, according to a FAO Working Paper on Forests and Climate Change in the Caribbean, the impacts of climate change on forest-based livelihoods and communities are expected to include:

- loss of ecosystem services from degraded forests;
- the loss of subsistence materials (food, wood fuel, medicines, construction material) from forest fires, storms, disease or drought;
- the loss of revenues from tourism, the sale of forest products and recreational services when:
 - o vast areas of dead or dying forests reduce scenic appeal;
 - access into forests is closed off or becomes difficult;
 - o degraded forests are unable to support wildlife attractions; and

³⁹ https://www.cbd.int/doc/world/tt/tt-nr-04-en.pdf

⁴⁰ https://www.cbd.int/doc/world/tt/tt-nr-04-en.pdf

o income opportunities are lost from the sale of forest products due to limited resources or poorer quality of forest products (for example, seeds for jewellery-making being washed away in heavy rains, low plant productivity in drought conditions) (FAO, 2014).

As mentioned above, the current National Forest Policy and Protected Areas Policy both speak to the need to protect and conserve forests so that they will better be able to adapt to climate change but neither policy directly addresses the need to build resilient forest-based livelihoods in the face of a changing climate. The impacts of climate change and other natural disasters on forest based livelihoods could however contribute to increased poverty rates among forest dependent communities.

Survey findings - Caura

BRIEF DESCRIPTION OF THE FORESTED COMMUNITY OF CAURA

Caura is a small rural village located in the Northern Range of Trinidad with a population of approximately seven hundred and seventy-six persons. The area is traditionally associated with agriculture and recreational areas of the Caura River (UNDP, 2005). It is one of the catchment areas south of the Northern Range and supplies settlements downstream of farming areas with a water supply (UNDP, 2005). Key natural resources in Caura include forests, rivers and abundant biodiversity. In addition to agriculture, vending near nature-based recreational sites that attract visitors are major natural-resource based livelihoods.

SURVEY FINDINGS

Fifty percent of forest-users interviewed were female⁴¹, with an average age among all respondents of fifty and a half (50.5) years (the youngest respondent was 30 and the oldest was 70). On average respondents reported using the forest in Caura as a source of livelihood for fifteen (15) years (range: less than one year to 30 years). The average household size consisted of approximately three (3) persons. Fifty percent of respondents reported their marital status as single (of those 75percent were single women). Twenty-five percent (25 percent) of respondents said that they were in common-law relationships and 12.5 percent each reported being either married or widowed. Small-scale forest livelihoods identified in the surveys included farming, ecotour guiding, wine making, floriculture, aquaponics, hunting and handicraft. Farming was the most common livelihood activity among respondents.

FINANCIAL CAPITAL

Approximately 63percent of respondents had at least two sources of income derived from forest-based livelihoods. Income sources were generally categorised as self-employment and regular except for hunting which was described as seasonal.

Seventy-five percent of households reported having other household members above the working age contributing to the household income. The remaining households were either single-occupant households or consisted of household members below the legal working age. Household members contributing to the household income were generally employed in community make-work programmes (CEPEP) or non-forest-based livelihoods e.g. bank teller, office assistant and proof-reader.

Of those surveyed, 38 percent indicated that their households received additional regular inflows of money through the pensions of older family members (old age pension and NIS pension) and child maintenance from one single-mother headed household. Remittances were not identified as an additional inflow.

Seventy-five percent of respondents indicated that they saved money in either banks or credit unions. However, 33 percent of those who saved said that it was sometimes difficult to do so because of the number of regular expenses they had. Fifty percent of respondents reported that other household members saved money.

⁴¹ Forest users were targeted as one group with no distinction in activity. In the case of Caura, the respondents involved in small scale forest activities were mostly women.

Monthly household incomes among respondents ranged from TT\$2,000.00 to TT\$20,000.00 (US\$301.46 to US\$3,014.59). Earnings from forest-based livelihood income sources generally made up between 4 percent to one-hundred percent of the total household income.

In terms of household poverty lines, refer to Table 15.1, most households (75 percent) reported monthly incomes that placed their households above the estimated poverty lines for their households.

Table 15.1: Household poverty among small-scale forest-users in Caura

Household (HH) Number	Composition of HH (age in years)	Estimated family poverty line based on composition of HH (per month)	Reported estimated household earnings (per month)	Estimated earnings from forest- based livelihood activities (per month)
1	Female (34) Female (11) Male (54) Male (12)	TT\$3081.54 (US\$464.48)	TT\$2,000 (US\$301.46)	TT\$600.00 (US\$90.44)
2	Female (63) Female (8) Female (6) Male (39) Male (26)	TT\$3502.62 (US\$527.95)	TT\$2,400 (US\$361.75)	-
3	Female (36) Male (8)	TT\$1445.07 (US\$217.81)	TT\$4,000 (US\$602.92)	TT\$4000 (US\$602.92)
4	Female (52) Female (35) Male (32) Male (5)	TT\$2995.41 (US\$ 451.50)	TT\$2,400 - TT\$3,200 (US\$361.75 -US\$482.33)	-
5	Female (65) Female (21) Male (62)	TT\$2172.39 (US\$ 327.44)	TT\$20,000 (US\$3,014.59)	TT\$800.00 (US\$120.58)
6	Female (33) Female (7) Male (34)	TT\$2258.52 (US\$340.43)	TT\$5,000-TT\$8,000 (US\$753.65 -US\$1,205.84)	Less than TT\$3000.00 (US\$452.19)
7	Male (70)	TT\$699.90 (US\$105.50)	TT\$5,000 (US\$753.65)	TT\$0 - TT\$2,000 (US\$0-301.46)
8	Female (54) Female (3) Male (30)	TT\$2057.55 (US\$310.13)	TT\$3,000 - TT\$7,000 (US\$452.19 -US\$1055.11	TT\$4,800 (US\$723.50)

The economic vulnerability of small-scale forest-using households was relatively lower compared to small-scale fishing households as the number of households depending on income from forest-based livelihood activities was generally lower.

In terms of expenses related to their livelihoods as forest-users (refer to Figure 15.1), seventy-five (75 percent) of respondents indicated that their start-up capital (e.g. to purchase equipment and materials) was obtained using money from their personal savings. Twenty-five percent of respondents (25 percent) stated that they secured bank loans from either traditional banking institutions or concessionary loans from the Agricultural Development Bank for their start-up capital. Twenty-five percent of respondents pointed out that they received financial assistance from their family members when starting up their small operations.

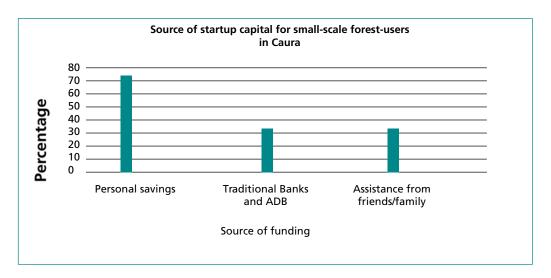


Figure 15.1: Source of start-up capital for small-scale forest-users in Caura

Regular monthly expenses related to small-scale forest activities ranged between TT\$187 – TT\$2000 (US\$28.19 – US\$301.46). For all respondents' monthly expenses related to their livelihoods as forest-users did not exceed their income derived from those activities.

Seventy-five percent of respondents reported that they were not satisfied with the income from their forest-based livelihoods and further indicated that incomes had been fluctuating or declining over the last five years.

HUMAN CAPITAL

Fifty-percent (50percent) of respondents indicated that they terminated their formal schooling at the primary level (refer to Figure 15.2). Twenty-five percent of respondents (females only) reported completing their schooling at the tertiary level. Respondents who terminated their schooling at the primary level cited reasons such as poverty and the need to start working at a young age to help support their families and failure of the Common Entrance Exam (refer to section 10.4 of this document.)

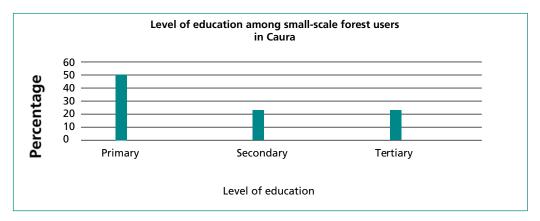


Figure 15.2: level of education among small-scale forest users in Caura

Respondents who did farming indicated that they had acquired their skills by learning from family members who were involved in agriculture. These skills were supplemented with training courses (e.g. small agro-entrepreneurship, small-business training, soil conservation, pest control and preservation of forests) offered by the Inter-American Institute for Cooperation on Agriculture (IICA) and various government Ministries. Skills for other forest-based livelihoods, such as winemaking

and floriculture, were learnt from training courses conducted in the community.

Although 75 percent of respondents indicated that they were not satisfied with their income, all respondents said that they would encourage others in their family to use forests as a source of income for their livelihoods. Reasons for this included, "There are opportunities for making money especially with natural herbs. More people are buying natural herbs"; "I would encourage them to do aquaponics (non-conventional agriculture) as it is more lucrative as a business. The traditional way is labour intensive and you don't make a lot of money"; "Forests can provide resources for you to make a good living"; and "I think it is profitable with the right market".

SOCIAL CAPITAL

Fifty percent of respondents indicated that they were members of and participated in community groups such as the Caura Valley Village Council, Caura Valley Farmers' Group and the Northern Range Hiking Clip Association. Stated benefits of being in the groups included, in the case of the farmers group, better access to training programmes and opportunities to learn from other farmers. In the case of the Village Council one respondent noted that through the Council the community has a louder "voice" to advocate for changes. Those who did not participate in community groups identified issues such as corruption and unfairness within the groups and a desire to be more independent as their reasons for non-participation.

Social protection at the community level was noted among respondents who stated that the community groups would pool funds or provide in-kind services for community members in need. For example, respondents stated that the groups would pool funds to assists members who could not afford school books for their children, or for those who were suffering from ill health. Respondents also indicated that they would raise funds for families who needed assistance to cover funeral costs for deceased family members or for households that had lost their homes due to fire.

PHYSICAL CAPITAL

Questions on physical capital in the survey mainly focussed on the status of ownership of the respondents' houses and land.

In terms of the ownership of their physical housing structures, all respondents indicated that they owned their homes However, only 12 percent reported having homeowners' insurance. Seventy-five percent of respondents were leasing agricultural land through the government's Agricultural Land Distribution Programme. Under this programme, the government ensures that the distribution and regularisation of agricultural state lands in Trinidad and Tobago is carried out in a productive manner, consistent with proper environmental and natural resource conservation practices, and in accordance with government policy.

The remaining 25 percent of respondents stated that they owned the land upon which their homes were constructed.

VULNERABILITY CONTEXT

In an effort to assess household and community vulnerability, respondents were asked to identify any shocks or adverse events that impacted their household or individual income (idiosyncratic shocks) in the past twelve (12) months. They were also asked to identify any shocks or adverse events that had ever (no timeframe) affected their household or community (covariate shocks) and to further identify if and how they were able to cope with or recover from these adverse impacts.

The majority of respondents identified shocks associated with the natural environment such as crop pests and diseases, and impacts related to the rainy season (e.g. landslides and high winds). Illness (asthma, flu [influenza], high blood pressure) and rising food prices were identified by 38 percent of respondents

as shocks experienced within the last 12 months. Some of the female farmers interviewed, indicated that because of their advancing age and gender that they were unable to work on their farms as much as they used to.

Respondents identified positive coping strategies for dealing with shocks, such as having and using savings, planting short-term and long-term crops and depending on income from household members with non-forest-based livelihoods. Negative coping strategies such as reducing food intake were identified by approximately 38 percent of respondents. The shocks and coping strategies identified are set out in more detail in Table 15.2 below.

Table 15.2: Idiosyncratic and Covariate shocks and coping strategies identified by small-scale fishers in

Shock/risk type	Shocks/risks identified by respondents	Impact on household	Coping strategies identi- fied by respondents
Natural	 Crop pests and diseases Landslides (during rainy season, also caused by deforestation during the dry season) Reduced rainfall during the dry season High winds (during Rainy Season) 	Loss of produce due to landslides; reduced rainfall and crop pests and diseases result in lower household income Unable to work (or work for longer periods) due to ill health and advancing age result in lower household income Reduced household income resulting from	Positive Used savings Harvested and stored rainwater Planted short-term and long-term crops Community support in times of need Depended on family
Health	 Asthma Common cold/influenza High blood pressure Age (especially among women) 		members with non-for- est-based livelihoods Negative Ate less Ate less meat products and cut out expensive
• Death of key income earner • Rising food prices	due to rising prices	products such as butter and cheese	

BARRIERS

Respondents were asked to identify key barriers that they believed were affecting their livelihoods as forest-users, with them being requested to identify the barriers (if any) in the following categories: natural, physical, social, financial/economic, and institutional/management. Respondents were also asked to identify any steps, they, their community organizations, civil society, government or private sector agencies had taken to address these barriers. Table 15.3 below outlines the responses given for each category.

Table 15.3: Barriers identified by small-scale forest-users in Caura that are constraining their livelihoods

Barrier Type	Percentage of respondents identifying barrier type	Description of barrier	Intervention taken by individual, forest users association, civil society organizations, government or private sector to address barrier (if any)
Natural	25	DeforestationClimate Change	
Social	38	 Conflict with other resource users (persons doing beekeeping near hiking trails) Need to improve business management skills Need assistance with labour (older women) 	Farmers in the community used to pool work, but this is no longer done Pursuing small-business management courses

Financial/ Economic	38	 High cost of equipment Insufficient access to markets Need better access to loans 	Waiting to use old age pension to start a small business that would improve income.
Management/ Institutional	25	Poor management of na- ture trails by Government	CEPEP workers used to clear trails but this has stopped
Physical	0		

The majority of respondents identified financial and social factors as the main barriers affecting their livelihoods. Natural and management barriers were less frequently identified. No respondents identified physical barriers.

USE OF SOCIAL PROTECTION PROGRAMMES

All respondents indicated that they or their household members had benefitted or were benefitting from different types of social protection programmes including social insurance, social pensions, social assistance cash transfers and programmes such as access to free training and tertiary education. Private insurance, for example health, life and homeowners' insurance, was not common among respondents. In fact, only one of the eight households surveyed reported having homeowner's insurance. Social protection was primarily offered by the government and secondarily by civil society and through community level interventions. Social protection by the private sector was not identified by respondents. Social protection schemes/programmes identified are described in more detail in Table 15.4 below.

Table 15.4: Social protection instruments utilised by small-scale forest users in Caura

Instrument	Social protection measure	Programme offered by	Description
Access to training and education	Promotive	GovernmentCivil Society	 Free training in small business management; agro-business management, forest conservation, soil conservation, tour guiding, floriculture, winemaking, sustainable farming techniques etc. Access to tertiary education through subsidization of tuition under the GATE programme. School feeding programmes Free public transport for school children
Social employment	Protective	Government	Participation in government make-work programme CEPEP was significantly high in Caura. Approximately 63 percent of respondents either worked in CEPEP or had a household family member working in CEPEP. This provided a regular source of income for households.
Social Insurance	Preventive	Government	Small-scale forest-users in Caura were able to benefit from NIS through their participation in government make-work programmes such as CEPEP. Forest-users' households also benefitted from NIS in cases in which employed household members (non-forest based livelihoods) were participating in NIS.

Social Pension	Preventive	Government	Households with family members over 65 years old benefitted from income gained through the non-contributory old age pension programme.
Social assistance	Protective	Government	Widow's grant provided to house- holds that experienced death of key income earner
In-kind/cash transfers	Protective	CommunityGovernment	 Community groups would pool funds to assist community members in need e.g. assistance with funeral costs, purchase of books and uniforms for children and assistance with replacing house supplies after fires destroyed homes. Free laptops given to students entering secondary school through the government's Laptop Programme
Concessionary loans/subsidies	Promotive	Government	Use of concessionary loans and subsidies available through the Agriculture Incentive Programme and Agricultural Development Bank
Grants	Promotive	GovernmentCivil Society	Micro-enterprise development grants

Discussion and recommendations

The findings of this study reveal that small-scale forest users in Caura are exposed to a variety of natural, health and economic shocks which could increase their vulnerability. The study also found that small-scale forest-users are participating and benefitting from universal and targeted social protection programmes. Universal social protection programmes such as the make-work programme CEPEP is a significant source of social protection for forest-using households in Caura. In fact, without it some households may fall into poverty. Targeted social programmes such as reforestation programmes may be successfully reducing risks such as forest fires and deforestation to small-scale forest users as these were less frequently identified as risks. However, the relatively low earnings from forest based activities may be an indication that targeted programmes should be working toward improving factors such as small-business development and market-access that could help improve earnings for small-scale forest users. Adopting such an approach would require improved management of forest resources to ensure sustainability and guard against overexploitation of these resources.

Based on the above and other findings from this particular study, the following issues are highlighted as key areas that if addressed can contribute to improved social protection and reduced vulnerability in forestry dependent communities in Trinidad.

The need for more research on poverty in forestry dependent communities- There is a dearth of research on poverty and vulnerability in forestry-dependent communities making it difficult to get a full appreciation of the root causes of poverty and vulnerabilities among small scale forest users. Undertaking more research on the causes of poverty and vulnerability in forest dependent communities can help tailor social protection measures to address specific needs.

The need to mainstream climate change adaptation and disaster risk management into forestry planning and development- Natural shocks such as crop pests and diseases, landslides during rainy seasons and low water supply during the dry season were key issues identified by small-scale forest users in Caura. Based on projections for climate variability and climate change impacts in the Caribbean these shocks could start to occur with greater frequency and intensity, further increasing the vulnerability of forest-based livelihoods. Including Climate Change Adaptation and Disaster Risk Management in ecosystem approaches to forest management, including livelihood development, is important to reduce current vulnerability and projected increase vulnerability brought on by the impacts of climate variability and climate change in the Caribbean.

The need to include self-employed persons in the National Insurance System - Box 1 in section 5.4.1 of this document outlines the reasons why self-employed persons are not included in the national insurance scheme which provides benefits such as Sickness Benefit, Maternity Benefit, Invalidity, Funeral Grant, Retirement, Employment Injury, Employment Injury(Death) and Survivors' Benefit. Efforts must be made to address the non-inclusion of self-employed persons, like small-scale forest users, in this system to ensure benefits reach to all those that need it.

The need for improved market access for small-scale forest-resource based enterprises- Improving constraints on the sale of products and services due to limited market access were identified as barriers to the livelihoods of small-scale forest users in Caura. Improving market access and climate-proofing small-scale forest resource-based enterprises may improve the economic sustainability of these enterprises and contribute

to improved earnings from small-scale forest enterprises.

The need for stronger community-level forest-user organizations, including cooperatives – social protection at the community level can be greatly enhanced through the formation and strengthening of forest-based community groups. The formation of cooperative enterprises in particular have been highlighted as a way for small-scale forest producers to gain increased economic power⁴². Organised arrangements also facilitate better access to training and funding opportunities such as grants as organizations providing such opportunities typically prefer working with groups rather than individuals. Opportunities for co-management of forest resources would be greatly enhanced through group arrangements.

Understand that sustainable natural resource management can contribute to social Protection-It is important that when designing social protection measures to address vulnerability and poverty among small-scale forest-users (and other natural resource based livelihoods) that the root causes of poverty and vulnerability be understood. Addressing all issues of poverty and vulnerability with social protection measures may be financially unsustainable and ineffective, if the root causes of the poverty or vulnerability could be better addressed by improving sustainable management measures. In the Trinidad and Tobago context improving management of forestry resources and enforcement of forestry regulations may confer significant benefits toward reducing vulnerability of small-scale forest-users. In this regard implementing co-management strategies involving forest communities may be beneficial.

STAKEHOLDERS' ROLES AND RESPONSIBILITIES

Based on the findings of this study the following recommendations, set out in Table 16.1 for key forestry stakeholders are outlined as initiatives that could lead to the reduction of poverty and vulnerability among small-scale forest-users in Trinidad.

Table 16.1: Recommendations for key fisheries stakeholders to facilitate the reduction of poverty and vulnerability among small-scale fishers in Trinidad.

Stakeholder	Role	Recommendation
Government		
Forestry Division	Management	Strengthen enforcement of existing measures for the management of forest resources Draft ecosystem based forestry management plan with input from small-scale forest-users and get plan formally approved. Social protection, climate change adaptation and Disaster Risk Management should be mainstreamed into the sectoral plan Undertake research on the needs of forest-dependent communities in Trinidad and Tobago to address issues related to poverty and vulnerability.
Cooperatives Division	Capacity building and training	 Promote the formation of small-scale user forest cooperatives Undertake an assessment of small-scale forest-users cooperatives in Trinidad and Tobago and determine areas of need. Align training and capacity building strategies based on findings of needs assessment
Social Divisions	Monitoring and evaluation	 Undertake participatory monitoring and evaluation exercises to determine the effectiveness of current social protection programmes and schemes. Develop a national policy on corporate social responsibility
National Insur- ance Board	Social Insurance	Develop a system to facilitate the inclusion of self-em- ployed persons in the national insurance system

Cooperatives for the promotion of forestry in rural development http://www.fao.org/docrep/s4550e/s4550e06.htm

Private Sector		
Private sector companies op erating in forestry- dependent communities	Corporate Social Responsibility	 Promote corporate social responsibility as an ongoing practice to improve the livelihoods of small-scale forest-users in communities of operation. Align corporate social responsibility efforts with the policy objectives for the forestry sector
Civil Society		
Community Forest Organizations	Advocacy Social capital	 Strengthen organizations to improve collective voice of small-scale forest users and social capital. Advocate for inclusion in social insurance programmes Advocate for the inclusion of targeted social protection measures in forestry management plans that will address needs of vulnerable small-scale forestry-dependent communities
Civil Society Organizations	Advocacy Capacity Building	 Advocate on behalf of small-scale forest users for improved national and sectoral strategies and plans to reduce poverty and vulnerability in small-scale forestry communities. Design and implement projects that can help to build the capacity of small-scale forestry organizations to function more effectively and influence policy.

SECTION B

DESK STUDY AND COMMUNITY SURVEY FINDINGS FOR SAINT VINCENT AND THE GRENADINES

Institutional environment for social protection in St. Vincent and the Grenadines

This section highlights the institutional environment for social protection and some of the programmes that are available to all citizens in the country including the forestry and fisheries- dependent households.

The 2015 budget reported that social protection accounted for approximately 0.5% of the 2014 expenditure. The World Bank also reported that St. Vincent and the Grenadines (SVG) spent just over 2% of its GDP on social safety net programmes between 2010 and 2014. While there is no overarching social protection policy, the government developed the National Economic and Social Development Plan for St. Vincent and the Grenadines that covers the period 2013-2025. The main over-arching goals include:

- reduced unemployment and poverty; and,
- high level of human and social development.

The plan also includes "improving physical infrastructure, preserving the environment and building resilience to climate change" as one of the strategic goals demonstrating the importance placed on the environment to economic development. The government also made poverty reduction through education one of its main activities and aggressively pursued improvements in education. It spent approximately 16.8% of its recurrent budget on education between 2000 and 2011 to provide more schools, employ more teachers, conduct curriculum reform and build safety nets for school drop-outs, including the Re-entry of Teen Parents Programme, in an effort to ensure that there was free primary and secondary school access for all children.

As part of an earlier Poverty Reduction Strategy (2002), the government recommended expanding and diversifying income sources including tourism, forestry and fisheries as a way to reduce vulnerability to poverty. It recognised that a large proportion of the poor operated in natural resource based- industries and that supporting those sectors would have a greater impact on poverty reduction. It recommended the strengthening of small and micro enterprises that were constrained by lack of financial resources. The Strategy recommended the further development of institutions that assist enterprises to develop. The Poverty Reduction Strategy also recognised that women and the elderly were particularly prone to poverty.

THE TYPES OF SOCIAL PROTECTION PROGRAMMES

Protective, preventive, promotive and transformative social protection measures can be found in St. Vincent and the Grenadines. Formal and informal measures play important roles in reducing the vulnerability of the general population including those in fisheries and forestry-dependent communities. Both formal and informal policies are protective and preventive, but there were few instances of promotive and transformative measures in informal policies in St. Vincent and the Grenadines.

THE TYPES OF ACTORS IN SOCIAL PROTECTION IN ST. VINCENT AND THE GRENADINES

Many social protection programmes are carried out formally by government institutions. Government's main role in social protection has been to:

- develop and implement policies that target social protection and poverty reduction- e.g. Ministry of Mobilization, Social Development, Family, Gender Affairs, Persons with Disabilities and Youth implements many of the social protection programmes such as Public Assistance that provides a monthly fee for families who have no income;
- manage natural resources such as forest trees and lands, and nearshore fisheries
 that the livelihoods of some households are dependent on as sources of income
 e.g. Forestry Department and Fisheries Division manage the respective natural
 resources; and,
- provide education, training and employment opportunities for the general public.

Private sector and civil society organizations (CSOs) normally play roles in social protection through offering grants, micro-credit and volunteering. They also advocate for changes in policies and practices that will improve social capital in countries.

Communities, community groups and families also offer social protection to reduce the vulnerability of community members. These are normally informal types such as offering food, money and labour when needed.

The following sections show examples of policies and strategies undertaken by St. Vincent and the Grenadines. They aim to improve social capital in the country.

PROTECTIVE SOCIAL PROTECTION MEASURES IN ST. VINCENT AND THE GRENADINES

The table below shows the protective social protection measures that are available to the general public in the country including those in fisheries and forestry- dependent communities. These are designed to provide relief from poverty and deprivation.

Table 17.1: Table showing protective social protection measures in St. Vincent and the Grenadines

Organization type	Examples of social protection programmes	Formal	Informal
Government (e.g. Ministry of National Mobiliza- tion, Social Development, Family, Gender Affairs, Persons with Disabilities and Youth)	 Public Assistance Programme- a monthly grant of EC\$200 for adults who are unable to work. No Child Left Behind' that provides free primary and secondary school education for all Vincentian children. 	Y	N
Community/ families	In-home elderly assistance	N	Υ

PREVENTIVE SOCIAL PROTECTION MEASURES IN ST. VINCENT AND THE GRENADINES

There are several preventive social protection measures in SVG (see 17.2).

Table 17.2: Table showing preventive social protection measures in SVG

Organization type	Examples of social protection programmes	Formal	Informal
Government (e.g. Ministry of National Mobiliza- tion, Social Development, Family, Gender Affairs, Persons with Disabilities and Youth)	 Maternity benefit Public assistance of EC\$200/ month Pension National Insurance Service (including the Self Employed Contributions) Immediate assistance e.g. (Basic Amenities Programme that pays for utility bills) Meals and transportation for children from indigent and poor familie 	Y	N
Private sector	Credit unions (e.g. General Employees Cooperative Credit Union [GECCU]) providing death benefits, life and health insurances	Y	N

Civil society	 Friendly societies (e.g. Mariaqua United Friendly Society [BUNPAN]) providing savings clubs and death benefits Marion House providing assistance to children 	Y	Y
Community/ families	and families who need food and other assistance.Remittances from family members abroad	N	Y
Other (e.g. Basic Needs Trust Fund)	• Infrastructure for primary health care facilities, increasing delivery of potable water	Y	N

PROMOTIVE SOCIAL PROTECTION MEASURES IN ST. VINCENT AND THE GRENADINES

Promotive social protection measures in SVG are shown in the table below.

Table 17.3: Promotive social protection programmes in SVG

Organization type	Examples of social protection programmes	Formal	Informal
Government (e.g. Ministry of National Mobiliza- tion, Social Development, Family, Gender Affairs, Persons with Disabilities and Youth)	 'No Child Left Behind' that provides free primary and secondary education to all children and safety nets for dropouts such as the Re-entry of Teen Parents Programme Subsidies on uniforms and books Free primary health care Micro credit from government programmes such as the Farmers' Support Company Youth Empowerment Service (YES) Policy Re-entry of Teen Parents Programme Community Enterprise Development where the government works in partnership with residents/ communities/groups to develop their leadership abilities to enable them to implement small businesses and other innovative social development projects that have the potential to enhance their livelihoods 	Υ	N
Private sector	Micro credit from organizations such as National Development Foundation and banks that give low interest loans or make credit easy to access	Y	N
Civil society (e.g. YWCA)	 Job opportunities through projects that provide jobs when projects are occurring Training for employment and adult education 		
Community [groups]/ families (e.g. North Lee- ward Tourism Association)	Jobs through at-home or community projects	Y	Y
Other (e.g. Basic Needs Trust Fund)	Entrepreneurship training	Y	N

TRANSFORMATIVE SOCIAL PROTECTION MEASURES IN ST. VINCENT AND THE GRENADINES

Transformative social protection measures in SVG are shown in the table below.

Table 17.4: Transformative social protection programmes in SVG

Organization type	Examples of social protection programmes	Formal	Informal
Government (e.g. Ministry of National Mobiliza- tion, Social Development, Family, Gender Affairs, Persons with Disabilities and Youth)	 Supporting the development of cooperatives and other groups Developing and implementing polices such as the Education Revolution 	Y	N
Civil society (e.g. SVG Public Service Union)	Advocating for worker's rights and holding government accountable	Υ	Y
Community [groups]/ families	Forming community groups/ cooperatives/ associations to be involved in decisions and policies	Υ	Y

Risks to, needs of and transitions taking place in small-scale fisheries and forestry sectors

There are several risks to the small-scale fisheries and forestry sectors in St. Vincent and the Grenadines.

Weather, climate variability and change and natural disasters. Weather, climate variability and change and natural disasters have the potential to cause the loss of lives, damage infrastructure and destroy resources for forestry and fisheries sectors. Managing and recovering from events like tropical storms and floods can also divert funding from social protection schemes/ initiatives. St. Vincent and the Grenadines was affected by tropical storms in 1994, 1995 and 2002 that caused damage to infrastructure. Also, the country was affected by unseasonal rainfall in 2013 that caused damage worth US\$12 million. Forest and fishing communities, including the households within them, were affected by these events. In the 2013 rainfall event for example, three fisherfolk in Calliaqua lost fishing vessels because the river located near the landing site flooded its banks before they could be placed somewhere safe. The unseasonal rainfall affected transportation that impacted communities' abilities to move their goods and services throughout the country. This was particularly true for those located in the rural north of St. Vincent.

Diseases such as chikungunya that are borne by mosquitoes will increase as temperatures become more favourable for their development. This will negatively impact the workforce as happened in the chikungunya outbreak of 2014 in the Caribbean.

Policies to manage natural resources are not in place. Both the forestry and fisheries sectors have drafted policies to manage their respective resources. However, in both cases, the draft policies are awaiting final approval. Forestry Department is revising the draft policy developed in the early 1990s and which had not been approved. Both Departments indicated that they have been using the draft policies to guide the management the resources. However, the failure to put approved policies with the appropriate legal and institutional frameworks and action plans in place could result in inadequate capacities and resources being provided for sustainable development of these sectors.

Unsustainable use of the resource. On the main island of St. Vincent, most people practice some form of agriculture either as their main source of income or to supplement their revenues or diets. Agriculture is one of the main sectors on the island representing 7 percent of the GDP and 26 percent of the land space in 2012. In some cases, people have resorted to cutting down parts of the forest to plant their crops including marijuana. Slash-and-burn agriculture is still routinely practiced in forested and agricultural lands. This is a technique where the land is burned periodically to clear the land for new crops. When the land becomes infertile, the farmers move onto more fertile areas, and repeat the process.

Monitoring and evaluation of programmes. St. Vincent and the Grenadines has several pro-poor programmes that have seen the reduction of the indigent population in the country, e.g. free primary health care, houses for a wide range of individuals at varying income levels, and free primary education, that are accessible to both fisherfolk and forest users. However, some of these programmes have not been properly monitored and evaluated to ensure that they are not being abused.

Fisheries policies and programmes in St. Vincent and the Grenadines

The fishing industry in St. Vincent and the Grenadines is mainly small-scale. Approximately 2,500 persons participate in the industry. The goal of the Fisheries Division is to ensure the sustainable use of the natural resources and to improve the livelihoods of the people involved in the fishing industry.

The Fisheries Act (1986) and Regulation (1987) include conservation measures, licensing of fishers, use of closed seasons and the creation of marine reserves, among other things. In 2012, the Fisheries Division drafted the Fisheries and Aquaculture Policy and Action Plan that included both economic development of the industry and improvement of livelihoods of fisherfolk. It also seeks to contribute to the food and nutrition security of the country. This is still awaiting Cabinet approval.

The Fish Processing Regulations (2001) sets rules for the quality of fish leaving the country. St. Vincent and the Grenadines lost export access to European markets because it did not achieve the European Union's Sanitary and Phytosanitary requirements for export of fish and fish products to the EU. This affected the fishing industry. The High Seas Fishing Act of 2001 regulates registered vessels fishing in the high seas. This is critical for monitoring vessels engaged in fishing offshore for important commercial species such as tunas.

The fishing industry is managed by the Fisheries Division of the Ministry of Agriculture, Industry, Forestry, Fisheries and Rural Transformation. The National Parks Authority also assists with management of marine managed and protected areas.

There are several programmes, specific to the fishing industry, that seek to enhance the livelihoods of fisherfolk in St. Vincent and the Grenadines. These are listed below.

PROTECTIVE MEASURES

The government replaced boats and engines to licenced fishers who lost them in hurricanes/ storms in the past, as a way to protect their income and in direct response to storms. Material was given for the construction of vessels, while the government paid the monetary value of the engine at the time of loss directly to the supplier. The affected fisher was expected to provide the remaining funds.

PREVENTIVE MEASURES

The fisherfolk of St. Vincent and the Grenadines have been benefitting from regional and sub-regional projects that are being implemented in partnership with the government of St. Vincent and the Grenadines and several other types of organizations. These projects provide options for alternative livelihoods for fisherfolk and their households, as part of strategies for income diversification that should prevent the fisherfolk and their households from falling into poverty. Such projects include:

• Caribbean Fisheries Co-Management (CARIFICO) Project, with the objective being to develop a fishery co-management approach suitable for each target country by providing technical assistance for capacity development of stakeholders of target fisheries. The Fisheries Division has been working with the Japan International Cooperation Agency (JICA) to provide training in the use of fish aggregating devices (FADs) to increase the fish catch.

• Eastern Caribbean Marine Managed Area Network (ECMMAN) Project, with one of its objective being "supporting fisher organizations and providing support for new livelihood opportunities". It is being managed by The Nature Conservancy (TNC), an NGO. In Calliaqua, the Calliaqua Fisherfolk Cooperative (CALFICO) is using a grant from this project to provide alternative livelihoods by purchasing equipment to develop a regular fish fry arrangement to attract consumers, and to train fisherfolk to dive as another source of income.

PROMOTIVE MEASURES

- These can assist in improving the real income of fisherfolk. They are mainly programmes offered by the Fisheries Division, including:
- Subsidies on fishing equipment for licenced fishers;
- Duty-free concessions on engines 75 horsepower and below for licenced fishers;
- Training members of fisherfolk households in fish processing to develop value added products; and,
- The National Fleet Expansion Programme aimed at helping fisherfolk to upgrade their boats with better technology and safety equipment so that they can fish further at sea for longer periods and target the higher value species such as tunas.

TRANSFORMATIVE MEASURES

Governments and CSOs in particular have been supporting and advocating for the development of fisherfolk cooperatives to improve equity in decision-making in the fishing industry. Fisheries Division and the Cooperative Division provide advice to cooperatives, and helps to develop fisherfolk's organizational capacities. CSOs like the Caribbean Natural Resources Institute (CANARI) have been providing support to St. Vincent and the Grenadines National Fisherfolk Organization through an EU funded project to build its capacity to influence policy at the national and regional levels. This project, called *Strengthening Caribbean Fisherfolk Organizations to Participate in Governance*, seeks to improve the contribution of the small scale fisheries sector to food security in the Caribbean through building the capacity of regional and national fisherfolk organization networks to participate in governance⁴³. It benefits fisherfolk organizations in 17 Caribbean countries including St. Vincent and the Grenadines.

See the webpage for the project Strengthening Caribbean Fisherfolk Organizations to Participate in Governancev at http://www.canari.org/strengthening-caribbean-fisherfolk-to-participate-in-governance.

Risks, needs and transitions of small scale fishers in St. Vincent and the Grenadines

Social security programmes

Small-scale fishing is considered as a high risk venture. The cost to insure vessels and equipment is correspondingly high, making it less affordable for the small-scale fisher whose income is not always certain. The National Insurance Services has a Self Employed Contributions component, but it is not used often by small-scale fishers because of mistrust of such systems, despite its use being occasionally promoted by the Fisheries Division. This is validated by the CRFM's Diagnostic Study to Determine Poverty Levels in CARICOM Fishing Communities which found that only 27.78 percent of fishers interviewed said that they participated in a social security system, suggesting that a large proportion of fishers is vulnerable, if their equipment/ vessels are lost or damaged or if they are injured. Participation in private insurance schemes is less favoured by small-scale fisherfolk, because of past experiences in which some fisherfolk lost their money in companies like Colonial Life Insurance Company (CLICO) Limited, when a liquidity crisis prevented it from meeting its commitments. This is shown by section 28.1.6 where fisherfolk in Calliaqua were reluctant to use private insurance.

Climate change and disaster risk management

Climate change will have an impact on the fishing industry. It can cause a change in the fish stocks as fish that prefer certain temperatures migrate to areas that are more favourable. Diseases such as those carried by mosquitoes can become more prevalent and prevent people from working to gain an income. The chikungunya outbreak in the Caribbean in 2014 temporarily crippled the workforce in several countries including St. Vincent and the Grenadines. Storms are expected to become more intense in the region causing infrastructural damage and loss of lives. They have already affected St. Vincent and the Grenadines as recently as 2011 and 2013 causing more than EC\$100 million in damages.

Ageing industry

The Diagnostic Study to Determine Poverty Levels in CARICOM Fishing Communities found that the average age of fishers in St. Vincent and the Grenadines was between 36 and 65 years. The ageing industry brings concerns about food security and therefore the vulnerability of the general population.

Given that more than half of the fishers are not participating in social security systems such as NIS, the ageing fishing population may not be eligible for many benefits when they are unable to work, making them more vulnerable to the effects of poverty.

INADEQUATE PARTICIPATION IN COOPERATIVES AND ASSOCIATIONS

The Diagnostic Study to Determine Poverty Levels in CARICOM Fishing Communities found that only 22.22 percent of fishers participate in cooperatives. In a meeting in December 2015 to support this project, participants said that fisherfolk cooperatives in St. Vincent and the Grenadines have not been effective at providing support for their members. However, resilient cooperatives could help to reduce vulnerabilities by providing more affordable equipment, providing in-kind support and financial assistance, and working in partnership with the government to develop and implement policies.

Survey findings - Calliaqua

Calliaqua is small community located near the southernmost point of the island of St. Vincent. It is located approximately 8.1 kilometres away from the capital of Kingstown. Both are located in the parish of St. George, one of the more densely populated areas in the country⁴⁴. Calliaqua is a popular tourist destination because of the beaches and related marine activities such as fishing and diving.

There are 50-70 active fishers that use Calliaqua as a landing site. Most practice banking and trolling. Targeted species include mahi mahi (*Coryphaena hippurus*), red hind (*Epinephelus guttatus*) and red snapper (*Lutjanus campechanus*). An average of 4,000-5,000 pounds of fish are landed in Calliaqua each month that are sold mainly at the local markets in St. Vincent, particularly at Calliaqua and Kingstown.

SURVEY FINDINGS

Eight males and two females participated in the survey representing approximately 13 percent of the fisherfolk population. The average age of respondents was 36 with the oldest respondent at 60 and the youngest at 21. Of the nine respondents, five fell

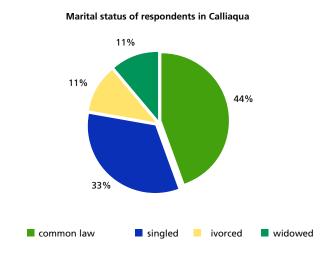


Figure 21.1: Marital status of respondents in Calliaqua

within the youth category of 18-35⁴⁵. Most respondents (44 percent) were in common law relationships while others were single (33 percent) (see Figure 21.1). There was an average of five persons in each respondent's household. One respondent lived alone. Respondents had been fishing for an average of 16 years, reflecting the relative youth of the industry in Calliaqua. The longest recorded years fishing from the survey was 35 years (one respondent) while two respondents fished for three years Figure 21.2 below

⁴⁴ https://en.wikipedia.org/wiki/Saint_George_Parish,_Saint_Vincent_and_the_Grenadines

⁴⁵ Participants in the validation meeting in December 2015 were asked if the high youth population in the surveywas an accurate reflection of the fishing industry in the community. They responded that there were many youth taking part in the fishing industry there.

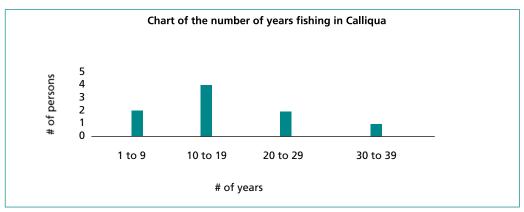


Figure 21.2: Distribution of years fishing in Calliaqua

FINANCIAL CAPITAL

Eighty-nine percent of the respondents said that fishing was the main source of income. One respondent's primary income source was from fish vending, with fishing as a secondary source of income. Fifty-six percent of the respondents had secondary sources of income while 11 percent had tertiary income sources. Only two persons participating in the survey said that they were employed by someone else in their primary sources of income (mainly fishing on someone else's vessel as part of the crew). In all cases secondary and tertiary income sources were self-employed meaning that participation in the country's social insurance scheme was voluntary. All primary income sources provided regular income. Sixty percent of the secondary income sources and 100 percent of the tertiary income sources were seasonal. This demonstrated that most fishers placed most of their livelihood effort in fishing. Secondary and tertiary sources of income were derived mainly from farming, fish vending and diving. One respondent sometimes worked as an electrician while another sometimes practiced carpentry/ masonry.

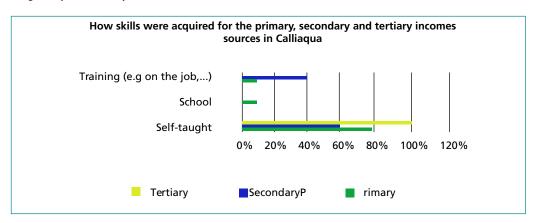


Figure 21.3: How skills were acquired for primary, secondary and tertiary income sources in Calliaqua

Figure 21.3 shows that for the primary, secondary and tertiary income sources, most of the respondents were self-taught. One respondent indicated that he learnt his entrepreneurial skills in particular at high school and deliberately studied subjects that would enhance his future fishing business. Two others had on-the-job training (e.g. in filleting fish and diving) while another reported that his training was provided as part of a government training programme.

Fifty-six percent of respondents reported that other persons in their households contributed to income. Most of the contributors were female (82 percent). The average contribution was EC\$1,120 (US\$ 414.82) per month (the highest was EC\$2,500 [or US\$925.93] from a household with four female contributors). Of those contributors

only 22 percent worked in the fishing industry, with others having varied occupations such as a beautician, an air traffic controller, a domestic worker and a farmer. Most of the contribution to income sources came from regular work. There were no reported cases of remittances or other inflows of income into the households.

Main household expenses in Calliaqua

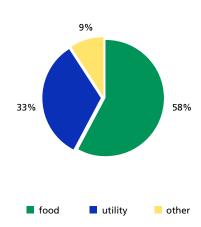


Figure 21.4: Main household expenses in Calliaqua

Seventy-eight percent of the respondents saved money. Of those, 43 percent saved money at credit unions (e.g. General Employees Cooperative Credit Union [GECCU]) while 57 percent saved money in banks. Most contributors to household income also saved money (78 percent). All used banks for their savings. Food was the highest household expense among the respondents while the cost of utilities closely followed (see Figure 21.4). 'Other' included luxury items such as cable television.

Only one respondent did not use savings to purchase equipment related to his/her fishing business. Three respondents used loans or equipment transfers from the private sector.

The average monthly earning from banking is approximately EC\$3,000 (US\$1,111.11) while trolling yields approximately EC\$6,000 (US\$2,222.22) when averaged throughout the year. Expenses from banking are roughly EC\$2,030 (US\$751.85) per month while monthly expenses related to trolling could be EC\$3,200 (US\$1,185.89) or more. Fuel and equipment costs were reportedly high. Sixty-seven percent of respondents said that their income changed over the past five years. Most indicated that income had declined (50 percent). Twelve and a half percent of respondents noted that their income increased. One respondent who was not satisfied with his income (but indicated that his income increased over the past five years) said that he wanted to gain more experience so that he could be better at fishing.

HUMAN CAPITAL

Figure 21.5 shows that highest level attained by many of the respondents in Calliaqua was the primary school level. Most failed to continue with school because there was no money to continue their education⁴⁶ and there was need to work to provide income for their families. One person said that he was tired of school and wanted to be on the water. Their households, however, had most members finishing school at the secondary level (47 percent of respondents). Most respondents said that they learnt fishing from older generations or through their own experiences. Two were trained through government programmes in areas such as FAD fishing. One person was trained on-the-job to learn how to fillet fish while another indicated that he learnt some of his skills in secondary school. 87.5 percent of respondents said that they would encourage others to participate in fishing because there is money to be made from the industry and they can work for themselves.

This was before the implementation of the free education policy and families had to provide their own books, transportation and meals for school.

Highest level of education attained by respondents

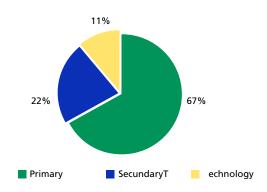


Figure 21.5: Highest level of educaction attained by the respondents in Calliagua

SOCIAL CAPITAL

Most respondents (56 percent) were licenced fishers. Of those that were not licenced, 50 percent said that they were not interested because they did not see the benefits of having one. One person was in the process of getting a license at the time of the interviews in August 2015.

Everyone knew of the fisherfolk organization, Calliaqua Fisherfolk Cooperative (CALFICO), but 33 percent of respondents were not members. All respondents said that they were either not active in CALFICO or were not interested in joining because of the conflicts within the organization on the management of the organization and its finances. Transparency in accounting was one of the conflicts cited. Most also said that there was no cooperation in the area and that neither CALFICO nor the wider fishing community provided any kind of support in times of need. Four respondents, however, said that other fishers had provided in-kind support or cash when they were unable to work or they lost vessels/equipment/ engines.

PHYSICAL CAPITAL

All respondents either owned their own homes or were in a common law relationship with the person who owned the home. Sixty-seven percent of respondents owned the land that the houses were built upon, while 22 percent rented from either the government or the St. Paul's Anglican Church in Calliaqua. Eleven percent of respondents squatted.

While the fishing facility at Calliaqua offered sale of ice and fish, storage facilities and locker rooms for the fisherfolk, some expressed unhappiness with the lack of facilities for on-site boat repair. One major concern was that the facility was located some distance from the main road. Respondents were concerned that consumers were unaware of its location. One person said that he continued to sell fish on the main road despite being warned by the police because he needed to meet his customers.

VULNERABILITIES AND BARRIERS CONSTRAINING LIVELIHOODS IN CALLIAQUA

Respondents were asked to identify any shocks or adverse events that impacted their household or individual income over the past 12 months. They were also asked to identify any shocks or adverse events that had ever (no timeframe) affected their household or community and their coping strategies.

Over the previous 12 months, illness in the form of the mosquito-borne Chikungunya was the most common shock (67 percent) cited. Most said that the impacts on their income were minor, and they were able to recover. Others mentioned theft of engines as a threat. One person said that his engine was stolen, resulting in an estimated loss of

EC\$11,000 to EC\$14,000 over eight months. Damage to engines by the sargassum (S. natans and S. fluitans) was also a threat that impacted a few of the fishers though many said that the sargassum⁴⁷ was welcomed, because they believed that it helped to increase the fish stock in the area since it acted as a fish aggregating device.

Coping strategies included depending on other household members to provide income, fishing on other vessels or having other fishers use their vessels and receiving a portion of the fish sales.

Natural disasters such as hurricanes, storms and flooding were the most commonly cited shocks to ever impact Calliaqua (50 percent of respondents). Respondents said that approximately three fishers lost boats in the 2013 floods while others lost vessels and engines in storms in the past. Theft of equipment, engines and boats were also cited as threats in the fishing community. One person said that theft of engines was increasing partly because of the unavailability of the popular two-stroke Yamaha 75HP engine in the country. Respondents mentioned reduced fish stocks as a cause for concern and partially attributed declining income to this.

In all cases, those affected by the negative impacts were able to cope and recover in less than one month. Coping strategies included fishing with someone else (four respondents mentioned this); fishing for other species with other equipment until they could purchase appropriate fishing gear for their target species; and supplementing income with their secondary and tertiary sources of income.

No one had insurance on his/her equipment, engines or vessels. Insurance was not seen as a viable coping strategy for fisherfolk because of past negative experiences with companies like British American Insurance Company (BAICO) and Colonial Life Insurance Company [Trinidad] Limited (CLICO) that "crashed" during the financial crisis in 2007/2008. They also said that it was expensive. Most said that they preferred to put their money in banks or credit unions as they believed that there was more security. Only one respondent mentioned participating in the government's NIS programme as part of fishing. Two respondent's households had health and life insurance and participated in NIS while only one household had insurance on the home.

Table 21.1 below shows the barriers that are obstructing fishers' livelihoods in Calliaqua.

Barrier type	Description of barrier	% of respondents identifying barrier type	Intervention taken by individual, fishing association, civil society organizations, government or private sector to address barrier (if any)
Natural	Depleting fish stocks	11	Using other fishing techniques to target other species
Social	Competition among fishersConflicts among fishers	22	No real action was taken though all fishers said that they were either not active in CALF- ICO or were not members as a way to reduce negative impacts by conflicts.

Table 21.1: Table of identified barriers to livelihoods in Calliaqua

⁴⁷ Sargassum is a free-floating, brown algae that grows in the Sargassum Sea. It provides habitats for fish and other marine species. Since 2011, there has been massive amounts of the algae washing ashore in the Caribbean posing a threat to tourism and some fishing activities.

Financial/ economic	 High fuel and equipment costs No insurance on equipment and vessel Other (price of fish during some seasons so low that fishers operate at a loss) 	89	 No interventions were taken to address high fuel and equipment costs The cost of insurance on boats and engines is prohibitive. This is compounded by the fact that fishers do not trust insurance companies. No real action was taken to address the low cost of fish in some seasons.
Institutional/ management	 Government policy/ management decisions (leasing the Calliaqua fishing facilities to a private company) 	22	No action taken
Physical	Inadequate fishing facilities (physical markets located far from roads)	11	• Fishers have been discussing placing a sign at the roadside so that people are aware of the location of the market for fish sales. Some have continued selling fish on the roadside despite it being against the law.

Financial barriers had the most impact on the livelihoods of fisherfolk in Calliaqua. The high cost of fuel and equipment in particular was frustrating for many. One respondent who practiced trolling indicated that at the time of the interview in August 2015, fuel cost approximately EC\$13.00 (US\$4.81) per gallon. It took 45 gallons to go to sea each day for a total daily cost of EC\$585 (US\$216.67). There was no guarantee that going to sea would yield a catch so operating at a loss was sometimes expected. Small-scale fisherfolk in St. Vincent and the Grenadines do not have access to fuel subsidies. A representative from the Fisheries Division was of the view that if the cooperatives were fully functional and operating as a cohesive group, that was able to collectively present the impact of expenses on their livelihoods, decision makers would better understand their perspective and take them into consideration when making decisions that impact fisherfolk's livelihoods.

USE OF SOCIAL PROTECTION PROGRAMMES

Only 45.5 percent of respondents initially indicated that either they or their households participated in any social protection programmes. This was because the cost of participating was prohibitive (e.g. NIS), they did not trust the programme (e.g. private insurance) or they believed that they were able to withstand external shocks as demonstrated by their pastexperiences. All have however, benefitted from social protection programmes/ initiatives without realising it. Informal social protection schemes like those practiced by the community of fishers have been important coping strategies in Calliaqua, despite the general belief among respondents that fishers do not cooperate with each other. Table 21.2 below shows the types of programmes that fisherfolk in Calliaqua have participated in.

Table 21.2: Social protection programmes that fisherfolk in which Calliaqua have participated

Type of social protection programme	Programme offered by	Description
Protective	Government	One-time replacement of boats and engines after loss in storms

Preventive	Government Private companies (insurance companies, credit unions) CSOs Communities	 NIS Duty-free concessions on engines up to 75 HP and on fishing equipment as part of the Value Added Tax Act of 2006. Insurance for health, home and life Death benefits from credit unions Development of alternative livelihoods as an income diversification strategy. Cash and in-kind transfers from the fishing community when fishers fall ill.
Promotive	 Government CSOs Private companies Communities 	 Access to free primary education that most (~90%) respondents used. Training programmes (e.g. FAD fishing, older generation of fishers training younger ones) Employment programmes (e.g. Youth Empowerment [YES] programme where people leaving school can work for a period of time for a monthly stipend.) Grants from regional CSOs (e.g. CALFICO is a recipient of a grant from the Eastern Caribbean Marine Managed Areas Network (ECMMAN) project that will help them and their families with alternate livelihoods) Micro-finance and low interest loans
Transformative	GovernmentCSOsPrivate companiesCommunities	Advocating and supporting the development and strengthening of fishing cooperatives so that fisherfolk can have a voice in decision-mak- ing in St. Vincent.

Discussion

The overall study identified vulnerabilities to livelihoods in fisheries-dependent communities in St. Vincent and the Grenadines, including impacts of climate change on fish stocks and human health, natural disasters, economic downturn and rising food prices. The field research in Calliaqua identified risks that mirrored those in the desk study, such as limited use of formal social protection measures e.g. insurances.

Social protection programmes are available to fisherfolk and their households to cope with shocks. They are offered by a wide range of stakeholders including government, private sector, communities and civil society organizations. These include protective measures (e.g. Public Assistance Programme that is open to Vincentians without a source of income and offered by the government to the elderly, chronically poor, etc.), preventive measures (e.g. duty- free concessions on some fishing equipment and engines that is offered by the government), promotive measures (e.g. micro- financing opportunities, livelihood grants, etc. that are offered by the private sector and some civil society organizations) and, transformative measures (e.g. CSOs and governments supporting and advocating for the development of fisherfolk cooperatives and associations so that they can have a voice in decision-making in the fishing industry).

The study in Calliaqua showed that fisherfolk tended not to actively seek to participate in many of the formal social protection measures available to the general public such as those offered by the government (e.g. the Public Assistance Programme), because of mistrust of the formal systems and limited awareness of benefits of programmes, other than those which are specific to the industry (e.g. duty-free concessions on engines and equipment perceived as being more important to their livelihoods). Informal social protection measures were important coping strategies when they are unable to earn an income from fishing (e.g. providing labour or cash to each other when unable to earn income).

CRFM's Diagnostic Study to Determine Poverty Levels in CARICOM Fishing Communities showed that 10.81 percent of fisherfolk in St. Vincent and the Grenadines were vulnerable and 5.41 percent poor, however, it indicated that Calliaqua had no vulnerable and no poor fisherfolk. This suggested that Calliaqua fisherfolk fared better than the country. This may account for Calliaqua's fisherfolk lack of participation in many of the formal social protection schemes that are available to the general public.

The study was not able to draw any conclusions for women in the fishing industry, but it was able to show that women in fisherfolk households were benefitting from social protection programmes including formal ones (e.g. employment and training programmes).

Respondents in Calliaqua also indicated that youth were particularly encouraged to participate in fishing industry there. They are taught fishing methods by the older generation. Traditional coping strategies are also shared/passed on (e.g. fishing other species when preferred targeted species are scarce).

Recommendations

Several recommendations can be made to improve the resilience of fisherfolk and fisheries- dependent households in St. Vincent. These are shared below.

Recommendations for fisherfolk

- Fisherfolk cooperatives and associations offer opportunities for inclusion in decision-making in the fishing industry by having a united voice (i.e. empowerment). They can also help individuals when their sources of income are vulnerable (e.g. when ill and unable to fish), provide assistance to market fish and get subsidies on fuel. When fisherfolk do not participate actively in their organizations, the cooperatives become weak and ineffective. Fisherfolk should seek to become active participants in their organizations. Regular audits and meetings can improve transparency and accountability that may allow fisherfolk to feel included in the cooperatives or associations. It helps to mobilise members.
- Fisherfolk need to build their own awareness of some of the more formal social protection strategies in the country in case there is need for access to them. Not many of the fisherfolk interviewed in Calliagua were aware of some of the initiatives available to them as part of the general public. This can also be attributed to the fact that fisherfolk's coping strategies were effective at that point so there was little need for formal social protection initiatives that are available to the general public.

Recommendations for government

- Supporting the development of fisherfolk cooperatives and associations can help to improve the management of the natural resource as well as to improve the livelihoods of the stakeholders. Cooperative Divisions and Fisheries Divisions can work with the fisherfolk to find a balance in the support that is offered. One of the reasons purported for the lack of transparency in CALFICO is the inadequate enforcement of a cooperative law that says that the organization's finances should be audited. Several persons at this project's validation meeting in December 2015 mentioned that audits were not completed in a while.
- Climate change will have an impact on the fish stock, on human health and therefore ability to work and on infrastructure. Measures to address the projected impacts of climate change and natural disasters should be mainstreamed in fisheries policies and action plans to build resilience.
 - There are a few regional projects, which include St. Vincent and the Grenadines as a project country, that are seeking to address these issues. For example, the FAO GEF funded project, Climate Change Adaptation in the Eastern Caribbean Fisheries Sector project (CC4Fish) is seeking to increase resilience and reduce vulnerability to climate change impacts in the Eastern Caribbean fisheries sector, through introduction of adaptation measures in fisheries management and capacity building of fisherfolk and aquaculturists as well as implementing an ecosystem approach to fisheries management and mainstreaming of climate
- Although the NIS has Self- Employed Contributions, not many fisherfolk contributed partly because they are not aware of all the benefits it offers. For some, NIS contributions appeared to be too expensive to make on a regular basis since their incomes were not always certain. NIS should specifically target those involved in natural resources livelihoods like fishing to devise appropriate

- contribution schemes and build awareness of the benefits.
- Many fisherfolk did not trust insurance companies because of past negative experiences. Fishing vessels, particularly those in the small-scale industry, are seen as high risk so they are expensive to insure. Yet the importance of insurance to the security of their livelihoods was recognised. Lack of insurance was mentioned as one of the key financial barriers that constrained livelihoods in Calliaqua. Governments can work with the private sector and fisherfolk organizations to find ways to provide affordable insurance for the small-scale fishing industry.
- Governments need to make policies and their impacts clear to stakeholders. Confusing policies make it difficult for fisherfolk to understand benefits that are available to them. Fisherfolk should have greater involvement in the development and implementation of policies.
 - A FAO GEF funded project -Developing Organizational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries (StewardFish)- is currently being developed to, *inter alia*, develop organisational capacity of fisherfolk organisations for fisheries governance. St. Vincent and the Grenadines is a project country.
- Create stronger linkages between sustainable use of natural resources and poverty reduction. Programmes should be developed and sustained that promote the wise use of natural resources as viable sources of income and poverty reduction for the populace.
- Recommendations for private sector and civil society organizations
- Form public-private partnerships to strengthen the support offered to fisherfolk and their cooperatives.
- Promote the formation of fisherfolk cooperatives and/or build the capacity of existing fisherfolk organizations.
- Private sector and civil society should have clear policies and should be transparent to build trust with stakeholders such as fisherfolk.

Institutional environment for forestry in St. Vincent and the Grenadines

The Forest Resources Conservation Act (1992) is the main legislation governing the use of forests in St. Vincent and the Grenadines. It recommends the formation of, among others, cooperative forests that recognises private land ownership and use in the forests (i.e. livelihoods). The Wildlife Protection Act (No. 16 of 1987) states that wildlife should be protected through mechanisms such as closed hunting seasons that could affect livelihoods of hunters. In 2002, the National Parks Act was adopted by the government that sought to manage terrestrial and marine parks and protected areas. It recognised the involvement of all stakeholders in the management of parks including those in terrestrial areas. It was a direct response to decline of the banana industry to improve the tourism product.

The Forestry Department has responsibility for the management of the forests in the country. The Forestry Department is housed in the Ministry of Agriculture, Industry, Forestry, Fisheries and Rural Transformation. The National Parks, Rivers and Beaches Authority plays a coordination role for all parks including forest and wildlife reserves. It works through Memoranda of Understanding with relevant stakeholders including the Forestry Department in order to avoid duplication of activities.

Forestry specific social protection programmes in St. Vincent and the Grenadines

Forestry contributed less than EC\$1million (US\$370,370.37) to the GDP in 2013, but there are a few specific programmes and initiatives available to forest users in St. Vincent and the Grenadines. These are addressed in the sections that follow.

Protective measures

No forestry- specific protective measure was found for St. Vincent and the Grenadines.

Preventive measures

The Forestry Department managed the Integrated Forest Management and Development Programme (IFMDP) that began in 2001. It was developed to foster a new participatory approach to forest management in St. Vincent and the Grenadines, incorporating all stakeholders, from resource management agencies (governmental and non-governmental) to individual communities. The IFMDP developed viable alternatives to alleviate poverty and prevent deforestation for the cultivation of illegal crops such as marijuana as an alternative livelihood component. Alternatives included wildlife farming, using non-timber forest resources for craft, production of charcoal and bottling water⁴⁹.

Promotive measures

Timber in St. Vincent and the Grenadines is a cottage industry. The price of local lumber is subsidised to encourage its local purchase.

Organizations like the United Nations Food and Agriculture Organization have provided support for alternative livelihoods for forest users in such areas as basket-weaving, drum-making and ecotourism to support livelihoods components to laws such as the National Parks Act. The Forestry Department is also working along with prisoners to conserve the soil along the new prison site through planting grasses and shrubs and by training them in basket-weaving.

The Forestry Department has an informal policy of hiring people from nearby communities for projects that are undertaken. This is mainly because transportation is very expensive and it is cheaper to hire persons from nearby (Providence, 2015). The indirect benefit is that persons from forest communities obtain employment.

Transformative measures

Organizations like the Caribbean Natural Resources Institute (CANARI) have provided support for the strengthening of forest-based enterprises in St. Vincent and the Grenadines so that there would be equity in decision-making. CSOs and intergovernmental organizations have also supported the growth and development of the Forestry Department through training in participatory natural resource management so that it can better support its stakeholders and include them in decision-making.

⁴⁹ http://www.agriculture.gov.vc/index.php?option=com_content&view=article&id=154:the-integrated-forestmanagement& catid=60:integrated-forestry-mgmt-a-dev-prog

Risks, needs and transitions of forestry in St. Vincent and the Grenadines

There are several risks to, needs of and transitions taking place in forestry in St. Vincent and the Grenadines.

The decline of the banana industry benefitting forestry

When the banana industry on the main island of St. Vincent declined, efforts were made to diversify crops through the use of agroforestry. It stemmed the encroachment on the boundaries of the forest and encouraged planting tree crops. This was mainly in response to the global Fair Trade marketing system. The decline of the banana industry meant that other sources of income had to be found. The National Parks System was developed partly in response to use the forest resources as a tourism product so that those in the rural communities affected could have a sustainable livelihood.

Cooperatives, associations and community groups non-functioning

The study found very few functioning groups associated with forestry in St. Vincent e.g. the Rose Hall Cultural and Development Organization. This seems to suggest that stakeholder groups do not always participate as unified organizations in decision-making. The Georgetown Craft Makers Association that received funding from the FAO to develop bamboo craft had a very small group of people still practicing, but as individuals. Diamond Village has received funding from the FAO twice to develop the ecotourism product, and once from a grant from civil society for the same enterprise, but has been unable to develop a consistent ecotourism product. Most have pointed to insufficient cooperation within the communities to support these enterprises beyond the life of the projects .

Attracting markets and entrepreneurs

Most of the forest resources are located in remote, rural areas such as Georgetown. Attracting tourists, for example, proved difficult for community groups. Local tourists have been uninterested in participating in ecotourism ventures and in purchasing items made locally. Some groups reported that they were told that the items were expensive . So, the groups were forced to abandon the enterprises since they could not get any returns/earnings from them.

In the validation exercise in December 2015, participants said that working with forest resources was hard work and young persons were more interested in earning money quickly from illegal activities. There were very few social programmes that supported the development of forest enterprises in the country.

Economic instability

St. Vincent and the Grenadines has suffered many shocks to its economy. Storms every few years have cost the country more than EC\$100 million (US\$37,037,037.00) in damages. Also, the country is still feeling the impacts of the decline of the banana industry. These were compounded by the global economic crisis in 2008 that has resulted in an economic downturn in SVG.

Survey findings- Diamond Village

Diamond Village is a small farming community located on the eastern coast of the island of St. Vincent. There are approximately 350 persons residing in the community. Approximately 100 persons earn their income from the forest resources. Banana was the main crop planted in the community until the preferential European markets were lost. Banana is still being planted, but many root crops such as yams and sweet potatoes are being planted as well. Many farmers practice agroforesty where trees such as oranges and breadfruit are inter-copped with their main economic crops. Most of these are on the periphery of the farms. The loss of the preferential markets meant that farmers stopped clearing parts of the forest to expand their farms.

Several people in the community used the resources directly in the forest for their livelihoods. A small community group has a small eco-tourism business, while others have been involved in charcoal burning, craft making, bottling spring water and some timber harvesting.

SURVEY FINDINGS

Seven men and one woman participated in the survey representing approximately ten percent of the forest users. The average age of respondents was 55.5, with the oldest respondent at 69 and the youngest at 35 (see Figure 27.1 for age distribution of respondents). Only one respondent was classified as youth. Fifty percent of respondents were single while the other 50 percent were married. There was an average of 3 persons in each respondent's household. Respondents made an income from the forest for an average of 28 years.

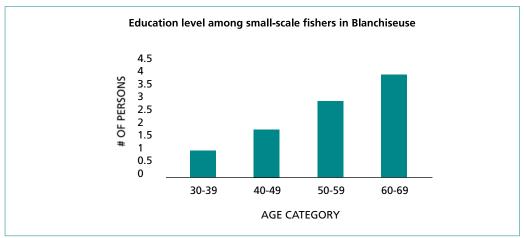


Figure 27.1: Age distribution of forest users in Diamond Village

Financial capital

Eighty percent of the respondents said that farming was their main source of income. Upon further examination, all practiced some form of agroforestry (i.e. planting citrus trees, etc. among their other crops). One respondent's primary income source was as a result of working with the Forestry Department. Only one person participating in the survey acknowledged being employed by someone else as primary sources of income. Everyone else was self-employed. All respondents had secondary sources of income,

while 40 percent had tertiary income sources. Only one person was not self-employed as in a secondary income source, but all were self-employed in the tertiary income sources.

All primary income sources provided regular income, while 86 percent of the secondary income sources and 100 percent of the tertiary income sources were seasonal. Secondary and tertiary sources of income were derived mainly from the forest (e.g. charcoal burning, artisanal craft and ecotourism). Most respondents were self-taught for the primary, secondary and tertiary income sources though 50 percent reported receiving some training in the past.

Primary income source-Diamond Village

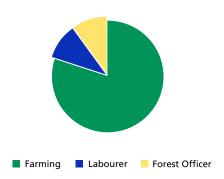


Figure 27.2: Primary income source for respondents in Diamond Village

Eighty percent of respondents reported that at least one other person in their households contributed to income. Most of the contributors were female (75 percent). The average contribution was EC\$610 (US\$225.93) per month, with the average age of contributors being 42. Many worked with the respondents on the family farm. Other sources of income included working with the government as a Research Officer or as a sailor (see Figure 28.3). Most of the contribution to income sources came from regular work (75 percent). The average yearly remittance was EC\$2,000 (US\$740.74) while other inflows averaged EC\$250 (US\$92.59).

Occupation of household contributors in Diamond Village

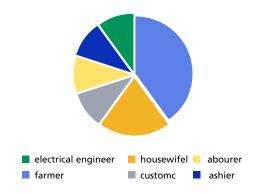


Figure 27.3: Occupation of household contributors in Diamond Village

Seventy percent of the respondents saved money. Of these, 86 percent saved money at credit unions (e.g. General Employees Cooperative Credit Union [GECCU]). No one saved money in banks. One person said the money was being saved "under the bed" as this way it was know where the money was being kept. Most contributors saved money (60 percent), with the credit union being the more popular choice to save money. Utilities was the highest household expense among the respondents while the cost of food was the only other major expense reported. No one reported luxury items such as cable television costs.

Only one person did not use savings to purchase equipment related to his/her forestry business. Three persons used micro-loans from the government and the private sector to finance their income sources. One person received grants as part of a community group to finance eco-tourism.

The average monthly income per household was approximately EC\$980 (US\$362.96). Many of the incomes from agroforestry averaged EC\$400 (US\$148.15) per month. Expenses associated with the livelihood were roughly EC\$185.20 (US\$68.59) per month. Eighty percent indicated that income had declined over the past five years, with the charcoal burner reporting an increase in income. Only forty percent of respondents were satisfied with their income. Many of the dissatisfied were banana farmers who previously reported weekly incomes of EC\$15,000 (US\$5,555.56) before the end of the preferential trade markets with Europe.

Human capital

Figure 28.4 shows that 80 percent of the respondents finished school at the primary level. All said that there was no money to continue school⁵⁰ or that they had to help out in the home. Forty-seven percent of the household members finished school at the primary level while 20 percent went on to secondary school. Few other household members went on to have a tertiary education. Of the 50 percent who received some form of training to support their livelihoods, 80 percent received free training from the government. Thirty percent of respondents said that they would encourage other household members to get into similar livelihoods (agroforestry) because it was better to work for yourself and there would be less stress in the fresh air. A further 30 percent said that they would not encourage others in their livelihoods because there was no money to be made and it was hard work. Forty percent were already working along with the respondents.

10%

■ Primary ■ Secondary ■ Tertiary ■ Technical

Highest level of education attained for respondents in Diamond Village

Figure 27.4: Highest level of education attained for respondents

Social capital

Community groups provide benefits to their members by being sources of financial and in-kind assistance when needed and presented a united front in discussions. Sixty percent of respondents said that there was at least one community organization located in Diamond Village (e.g. Diamond Village Community Heritage Organization which is supporting ecotourism development as an alternative livelihood). Of those respondents, only 50 percent said that they belonged to the group. All who did not belong to a group said that there was no cooperation in the community anymore and that people had lost the "family feeling" (community spirit). Those that belonged said that the group members sometimes helped them by providing labour when needed. Despite the low participation in community groups, 70 percent said that the general community helped out people who needed it in the form of labour.

Persons going to school in the 1960s to 1980s had to provide their own books, transportation and meals and were not beneficiaries of the free education policy.

Physical capital

All respondents owned their own homes and the land the houses were built upon. Physical capital associated with income was minimal. All farmers depended on the 'speculators' or 'traffickers'⁵¹ to purchase the majority of their harvest to then sell in the local or export markets. The vacuum packing plant in Lauders that was established by the government to receive goods from farmers was reportedly not functioning. The charcoal burner reported that there was enough land to meet the demand for this activity, while the hiking trail to the Bubby Stone that constituted a major part of the ecotourism enterprise was cleared through a grant from the FAO and maintained through similar grants and by the Tourism Division.

Vulnerabilities and barriers constraining livelihoods in Diamond Village

Respondents were asked to identify any shocks or adverse events that impacted their household or individual income over the past 12 months. They were also asked to identify any shocks or adverse events that had ever (no timeframe) affected their household or community and their coping strategies.

Type of shock affecting the respondent over the past 12 months

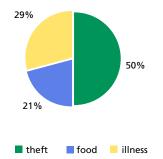


Figure 27.5: Type of shock affecting respondents over the past 12 months in Diamond Village

Over the previous 12 months, theft of farmed crops and equipment affected 50 percent of the respondents. Illnesses such as the mosquito-borne chikungunya chronic diseases were also (29 percent) cited. Most said that the impacts on their income were minor and they were able to recover. Rising food prices affected 21 percent of the households.

Coping strategies included depending on other household members to provide income, selling other farm products, using their secondary and tertiary income sources to supplement the shortfall or reducing the amount of food purchased. Two of the persons who said that they reduced the amount of food purchased said that they supplemented rice for example with the root crops such as yams that they grew themselves. One person reported receiving medicine for chronic diseases worth EC\$55 (US\$20.37) three times each year from the government. Another person received public assistance (EC\$200/ month or US\$74.07).

The most mentioned shock ever impacting the community was the loss of the banana markets. Ninety percent of respondents said that they were negatively impacted when the preferential markets were lost in the mid-2000s. The loss of income was substantial. One person lamented that EC\$15,000 (US\$5,555.56) per week on average was being earned from bananas alone, but now, at an old age, current crops were yielding only EC\$400/ month or US\$148.15 on average.

In more recent times, natural disasters such as hurricanes and storms have impacted the community (62 percent of respondents). Theft, diseases to crops and livestock and, rising food prices also impacted the community.

⁵¹ Speculators and traffickers are persons who transport the product from the farms to the markets including for export.

In all cases, those affected by the negative impacts were able to cope. Banana farmers diversified their crops including the practice of agroforestry. This was mainly in response to the Fair Trade marketing system that says that farms should be managed responsibly. The Fair Trade system also provided money for each box of bananas sold to improve the farmers' capacity and standards of living. This allowed many to remain in the banana industry. Some were also able to access micro loans from the Farmers' Support Company to expand/improve their agribusinesses. Other coping strategies included depending on the secondary and tertiary sources of income while they recovered.

No one had insurance on his/her equipment. All but one believed insurance companies were untrustworthy, and, as such, insurance presented very high risk to them and their livelihoods. The example of CLICO was repeated by 90 percent of the respondents. One person had NIS as a mandatory part of his job, while the same household had NIS, life and house insurance.

Table 27.1 below shows the barriers constraining forest-based livelihoods in Diamond Village.

Table 27.1: Table showing the barriers to forest-based livelihoods in Diamond Village

Barrier type	Description of barrier	% of respondents identifying barrier type	Intervention taken by individual, fishing association, civil society organizations, government or private sector to address barrier (if any)
Natural	Land space to expand farm	10	No action taken
Social	Lack of cooperation	10	Civil society and some governmental organizations supporting the strengthening of CSOs
Financial/ economic	 Access to markets (dependent on traf- fickers to get their goods to markets) No insurance 	60	Government established a processing plant in Lauders to receive primary products, but it was reportedly not functioning
Institutional/ management	Government policy (all respondents believed that there should be some governmental price control and that the prices for produce should not be set by the 'traffickers'.)	50	No action taken
Physical	• None	0	

• Use of social protection programmes

Sixty percent of respondents said that they had benefitted from social protection programmes. These included training to improve their capacity from government, private sector and civil society; and, pensions, NIS and medical benefits from government. Only 20 percent of the respondents' household members benefitted from social protection programmes (e.g. NIS, free primary school and school feeding).

Table 27.2: Types of social protection programmes used by respondents in Diamond Village

Type of social protection programme	Programme offered by	Description
Protective	Government	Public assistance
Preventive	 Government Private companies (insurance companies, credit unions) CSOs Communities 	 NIS Insurance for health, home and life Death benefits from credit unions, friendly societies such as the Marriaqua United Friendly Society [BUNPAN]) Development of alternative livelihood strategies as an income diversification strategy (e.g. ecotourism) Providing labour when needed
Promotive	 Government CSOs Private companies Communities 	 Access to free primary education that some in the households accessed. Training programmes (e.g. use of chemicals on farms, phytosanitary measures, business skills) Grants from regional organizations (e.g. Diamond Village Community Heritage Organization received a grant to develop the Bubby Stone Trail as an alternate livelihoods) Micro-finance from government and private institutions
Transforma- tive	GovernmentCSOsCommunities	Advocating and supporting the development and strengthening of community organiza- tions.

Discussion

The overall study identified vulnerabilities to livelihoods in fisheries-dependent communities in St.Vincent and the Grenadines, including impacts of climate change on fish stocks and human health,natural disasters, economic downturn and rising food prices. The field research in Calliaqua identifiedrisks that mirrored those in the desk study, such as limited use of formal social protection measures e.g.insurances.

Social protection programmes are available to fisherfolk and their households to cope with shocks. They are offered by a wide range of stakeholders including government, private sector, communities and civil society organizations. These include protective measures (e.g. Public Assistance Programme that is open to Vincentians without a source of income and offered by the government to the elderly, chronically poor, etc.), preventive measures (e.g. duty-free concessions on some fishing equipment and engines that is offered by the government), promotive measures (e.g. micro-financing opportunities, livelihood grants, etc. that are offered by the private sector and some civil society organizations) and, transformative measures (e.g. CSOs and governments supporting and advocating for the development of fisherfolk cooperatives and associations so that they can have a voice in decision-making in the fishing industry).

The study in Calliaqua showed that fisherfolk tended not to actively seek to participate in many of the formal social protection measures available to the general public such as those offered by the government (e.g. the Public Assistance Programme), because of mistrust of the formal systems and limited awareness of benefits of programmes, other than those which are specific to the industry (e.g. duty-free concessions on engines and equipment perceived as being more important to their livelihoods). Informal social protection measures were important coping strategies when they are unable to earn an income from fishing (e.g. providing labour or cash to each other when unable to earn income).

CRFM's Diagnostic Study to Determine Poverty Levels in CARICOM Fishing Communities (2012) showed that 10.81 percent of fisherfolk in St. Vincent and the Grenadines were vulnerable and 5.41 percent poor, however, it indicated that Calliaqua had no vulnerable and no poor fisherfolk⁴⁸. This suggested that Calliaqua fisherfolk fared better than the country. This may account for Calliaqua's fisherfolk lack of participation in many of the formal social protection schemes that are available to the general public.

The study was not able to draw any conclusions for women in the fishing industry, but it was able to show that women in fisherfolk households were benefitting from social protection programmes including formal ones (e.g. employment and training programmes).

Respondents in Calliaqua also indicated that youth were particularly encouraged to participate in fishing industry there. They are taught fishing methods by the older generation. Traditional coping strategies are also shared/passed on (e.g. fishing other species when preferred targeted species are scarce).

Recommendations

Several recommendations can be made to improve the resilience of forest users and their households in St. Vincent and the Grenadines. These are shared below.

RECOMMENDATIONS FOR FOREST USERS

- Organisations such as cooperatives and associations offer opportunities for inclusion in decision-making by having a united voice (i.e. empowerment). They can also help individuals when their sources of income are vulnerable (e.g. when ill), provide assistance to market products. When forest-users do not participate actively in their organizations, they become weak and ineffective. Forest-users should seek to become active participants in their organizations. Regular audits and meetings can improve transparency and accountability that may allow forest users to feel included in the cooperatives or organisations. Having regular meetings with the membership and sharing information with all members can improve the organizations. Conducting needs assessments and revitalising forest-based groups and other community- based organizations can also assist.
- Conduct market research for forest products and services. Some forest-based enterprises have failed in the past because of lack of markets for the products and services. Some of these enterprises have started without conducting proper research or real planning for the enterprises. These are important steps that should not be left out.

RECOMMENDATIONS FOR GOVERNMENT

- Creating and enabling environment for sustainable forestry sectordevelopment, including improving livelihoods and social protection by creating the enabling environment (e.g. developing an ecosystem based forest policy, legislation, plan). This can help to improve the management of the forestry resources as well as to improve the livelihoods of the stakeholders.
- Strengthen the capacity of the Forestry Department and related public sector agencies to execute the forestry policy and plan.
- Climate change will have an impact on the forest resource, on human health and therefore ability to work and on infrastructure. *Include climate change adaptation and disaster risk management in forestry policies and action plans to build resilience.*
- Promote the development of public/private sector partnerships to provide credible insurance options for forest users.
- Create stronger linkages between sustainable use of natural resources and poverty reduction. Programmes should be developed and sustained that promote the wise use of natural resources as viable sources of income and poverty reduction for the populace.

RECOMMENDATIONS FOR PRIVATE SECTOR AND CIVIL SOCIETY ORGANIZATIONS

• Create awareness about the benefits of insurance and provide credible insurance options for forest users.

Support the development of forest enterprises and their organizations.

Conclusion

The findings of this study reveal that there are several opportunities for improving social protection policies, legislation, plans and programmes in order to improve on their impacts on the livelihoods of small scale fishers and forest users in St. Vincent and the Grenadines and Trinidad and Tobago. It also highlights the need for a more holistic approach to the management of fisheries and forestry resources in both islands. Though some of the aforementioned recommendations may be specific to each country, some key considerations for policy makers and resource managers in the region include:

- Bring together a responsible fisheries/forestry and social development approach
 to the management of fisheries and forestry resources in the Caribbean.
 Fisheries and forestry policies and plans should incorporate social security,
 climate change adaptation and disaster risk management, and utilise a more
 participatory approach for policy development and implementation.
- Tailor social insurance systems to meet the varying needs and capacities of selfemployed persons. The study highlighted deficiencies in the social insurance
 systems of both countries that prevented or limited the participation of smallscale fishers and forest users, thus increasing the economic vulnerability of these
 groups and their households to illness and death of key income earners
- Invest, through the allocation of resources and capacity building, in the strengthening of fisherfolk and forest user organisations and community groups as these groups can play a critical role in reducing risks and vulnerability associated with the livelihoods of small scale fisherfolk and forest-users.

Given the exploratory nature of this study, the sample sizes were small. It is recommended that future studies of this nature be expanded to include more communities and larger survey samples so as to be more statistically representative and gain a fuller appreciation of the impacts of social protection on poverty reduction at national levels. Future studies should also take into consideration the physical spread of the islands in the Caribbean and the remote locations of fishing and forestry communities and ensure that adequate resources are provided.

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Appendix 1



LIVELIHOOD AND SOCIAL PROTECTION ANALYSIS SEMI-STRUCTURED QUESTIONNAIRE

Caribbean Natural Resources Institute Community assessment survey for small-scale fisherfolk

This semi-structured survey is being used to collect information on the vulnerability of the livelihoods and households of small-scale fishers and forest users in rural communities in Trinidad and Saint Vincent and the coping strategies used by these groups and their households to deal with these vulnerabilities, with a focus on the impacts of social protection programmes and initiatives.

The information being collected is part of a United Nations Food and Agriculture Organization (FAO) funded research study being conducted by the Caribbean Natural Resources Institute (CANARI) to generate diagnostic and actionable knowledge on the linkages between social protection, natural resource management, women and overall people's empowerment and poverty alleviation in fisheries and forestry communities in the two Caribbean countries.

The information collected in this survey is confidential and as such any personal identifying information (e.g. names, addresses) that can link the information provided, especially that of a sensitive nature, to respondents, will not be included in the technical report for which this information will be used. The respondent has the option of providing his/her name and contact information to the interviewer, however this will only be used in cases where clarification of information provided is necessary after the interview has been completed.

Respondent information

•	GenderMale Female
•	Age: years
•	Marital status: Single Married Widowed Divorced Common-law
•	Including yourself, how many people live in your household?
•	How many years have you been fishing?

Financial capital

• What are your sources of earned income (this may be regular or seasonal)?

Source of income	Self-Employed (SE)/ Employed(E)	Regular /Seasonal	How did you acquire the training or skills for this?	Does your job/occupation provide insurance/benefits for employment injury/ death, sickness, retirement, other (list all)?
Primary:				
Secondary:				
Tertiary:				

• Do other members of your household contribute (money or labour) to the household income? __Yes __No

7a. If yes, how do the household members contribute to the household income?

	Age (years)	Relationship to respondent	Contribution (dollar amount) Contributions may also be non-monetary such as labour e.g. housewives	Occupation	Regular/ Seasonal
*HHM 1					
HHM 2					
ннм з					
ннм 4					
ннм 5					
ннм 6					

*HHM – Household Member
 Do any members of your family not living in the household (perhaps working outside of the country) contribute to the household income?YesNo
8a. If yes, how much do they contribute to the household income?
Other than earned income, what are some other regular inflows of money of your household? No other inflows of money
• What is the average total monthly income of your household?
• Do you save money?YesNo
11a. If yes, how?_Bank deposits _Sou-sou _Cash _Jewellery _ Other
11b. If no, why not?

• Do	other me	embers of	your housel	nold save mo	ney?Yes	_NoI do1	1't know
12a. If	yes, ho	ow?B	ank deposit	sSou-sou	ıCash	Jewellery	_Other
Food	Utili	ty bills (e	.g. phone, lig	-	ost amount o	·	
		you acc	quire the cap	oital to purch	nase the equi	oment/mate	erials for
Equipment	Savings	Bank loan	Loan from friends/ family	Government subsidy	Private sector cash/equipment transfer	Money nt lender	Other
Boat							
Nets							
Fish pots							
Engine							
Other:							
• Wha					onthly/weekl		•
Expense				Cost/ day/w	eek/month/year		
Ice				COSU Gay/VV	con monthly car		
Fuel							
Maintenance	e of boat						
Other:							
other.							
• Is ye	our annı	ıal incom	ne as a fisher	fairly consist	ent?Yes _	_No	
17a. If i			years has yo	our annual in	icome:Bee	n declining	Been

18a. If no, how do you think your income could be improved?

_Yes _No

• Are you and members of your family satisfied with your earnings as a fisher?

Human capital – Education, training and health

20. What is the last type of school you attended?

• What is the highest level of education attained by the members of your household?

Age (years)	Relationship to respondent	Educational level

Primary _	_Secondary _	_Post-Secondary _	Technical or	Trade Institute
University	yI have ne	ver received forma	l education	

20a. [If stopped at primary or did not receive formal education] What was the reason for your not receiving formal education/ terminating your formal education at the primary level?

20b. What types of training have you received and how (respond only to those that apply)?

Type of training	How/where did you receive this training?	Did you pay for this training or was it free of charge?
Engine maintenance and repair		
Net mending		
Navigation		
Safety training		
Fish handling		
Quality control		
Sustainable fishing practices		
Entrepreneurship/small and microenterprise development		
Other:		

• Would you encourage any of your household members, not yet of an employable age to establish their livelihood as a fisher? __Yes __No

Please explain:

Social capital

Are you a licensed fisher?_Yes __No

22a. If no, why not?

• Does your community have a community group/association/cooperative for small scale fisherfolk? _Yes _No

23a. If yes, are you or any members of your household a member of this group?

_Yes _No

23b. If no, why not?

23c. If yes, how have you (or members of your family) benefited from being a member of this group?

 Does your community/ community group pool funds to assist members in times of need?__Yes __No

24a. If yes, please explain:

24b. If no, why not?

 Does your community/ community group provide in-kind services to members in times of need? __Yes __No

25a. If yes, please explain:

25b. If no, why not?

Vulnerability context (seasonality, trends, shocks and stresses)

• Which of the following have impacted your household income in the last 12 months (check all that apply):

Impact	Effect of impact on household income	Was your household able to cope or recover from this impact?	How did you cope or recover from this impact?
Illness (e.g. Chronic diseases: diabetes, heart disease, arthritis. Acute diseases: dengue, chikungunya, cholera)			
Death (e.g. key/primary household income con- tributor)			
Conflict among other resource users			
Community conflict			
Crime (e.g theft/vandal- ism of equipment such as boat engines, poaching, piracy)			
Rising food prices			
Crop or livestock diseases			
Fish diseases or die-off			

Coral reef diseases or bleaching		
Climate change/natural disasters (e.g. storms, hurricanes, earthquakes)		
Political/Management decisions		
Decreased fish stocks		
Bad fishing season		
Other		

• During this time did you/your family receive assistance from any:

Government agencies	
Civil Society Groups (NGOs, CBOs)	
Private Sector agencies	
Community Groups	
Others (e.g. middlemen)	

• Has your livelihood/household/community ever been affected by the following risks/hazards? Please state when and how.

Risk/Hazard	Yes/No	How often are you affected by this risk/hazard?	Briefly describe the impacts experienced
Intense storms and hurricanes			
Sea-level rise			
Warmer coastal waters			
Reduced fish stocks			
Illegal/indiscriminate land clearing/ deforestation			
Poaching			
Flooding and landslides			
Destruction of mangroves			
Unsustainable fishing practices e.g. trawling, dynamite fishing			
Fish pests/disease outbreaks			
Drought/reduced rainfall			
Man-made disasters (e.g oil spills)			
Other (1):			
Other (2):			

Coping and resilience

- Has your household recovered from this/these shocks?
- How long did/does it take your household to recover (return to normal) after this/these shocks?
- What strategies do/did you/your household use to overcome these shocks and/ or stresses?
- Do you have insurance coverage on your: _Boat _Engine _Other fishing equipment e.g. nets

32a. If no to any of the above why not?

• What types of insurance coverage do you and members of your household have?

Insurance type	Respondent	HHM 1	HHM 2	ннм з	HHM 4	HHM 5
Health						
Life						
House						
General						
National Insurance (social insurance)						
Other						
Home:Own _Lease from gove _Other: Land:Own _	l you describe the ow MortgageRent rnmentLease from _MortgageRent fr	from gover n private hol om governn	nment _ derInf nentR	Rent from	om priva ousing (s private l	te hold quattin
Lease from squatting)Othe	governmentLeas er:	e from pri	ivate hol	derI	nformal	housi
Natural Barriers	/improving your live pleted fish stocks uction	ainood earn	ings as a	nsner?		
_Unsustainabl _Overfishing _Competition	e fishing grounds e fishing practices with other resource ecessary skills (please					
Insufficient a	fuel					
nstitutional/Mar						

_Other _

Physical Barriers

__Other(s): ____ __There are no barriers

__Inadequate fishing facilities/landing sites

What steps have you taken to address these challenges? Have they been effective?

Barrier	Personal intervention	Effectiveness

• What steps have your community group taken to address these challenges? In your opinion have they been effective?

Barrier	Community group intervention	Effectiveness

• What actions have the government taken to address these barriers/challenges? In your opinion have they been effective?

Barrier	Government intervention	Effectiveness

• What actions have civil society organizations taken to address these barriers? In your opinion have they been effective?

Barrier	Civil society intervention	Effectiveness

Participation in social protection programmes

20	TT	1 (* 1	C	• 1		,	T 7	TA T
19	Have you ever	benefiffed	trom any	V SOCIAL	nrogrammes	'initiatives /	Yes	No
J / .	I Iuve you ever	Deneration	ii Oiii uii	y Journal	programmes	1111t1at1 v Co • _	1 00 _	, ,,

39a. If no, why not?

39b. If yes, what types of programmes/initiatives have you benefitted from?

Type of programme/ initiative	Government	Civil Society	Private Sector	Community	Other
Training programmes					
Grants					
Cash-transfers					
In-kind transfers e.g. equipment					
Public Employment programmes					
Pension					
Social Insurance					
Subsidies					
Other					

• Have any of your household members (list them all) benefitted from any government-led social programmes/initiatives that provide __Yes __No

39a. If yes, please state the types of programmes/initiatives that your household members have benefitted from.

Type of programme/ initiative	Government	Civil Society	Private Sector	Community	Other
Training programmes					
Grants					
Cash-transfers					
In-kind transfers e.g. equipment					
Social Employment Programmes					
Social Pension					
Social Insurance					
Subsidies					
Compensation package					
Other:					

Appendix 1A



LIVELIHOOD AND SOCIAL PROTECTION ANALYSIS SEMI-STRUCTURED QUESTIONNAIRE

Caribbean Natural Resources Institute
Community assessment survey for small-scale forest-users

This semi-structured survey is being used to collect information on the vulnerability of the livelihoods and households of small-scale fishers and forest users in rural communities in Trinidad and Saint Vincent and the coping strategies used by these groups and their households to deal with these vulnerabilities, with a focus on the impacts of social protection programmes and initiatives.

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Respondent information

•	GenderMaleFemale
•	Age: years
•	Marital status:SingleMarriedWidowedDivorcedCommon-law
•	Including yourself, how many people live in your household?
•	In what way (s) do you use the forest for your livelihood?
5a.	How many years have you been doing this?

Financial capital

• What are your sources of earned income (this may be regular or seasonal)?

Source of income	Self-Employed (SE)/ Employed(E)	Regular /Seasonal	How did you acquire the training or skills for this?	Does your job/occupation provide insurance/benefits for employment injury/death, sickness, retirement, other (list all)?
Primary:				
Secondary:				
Tertiary:				

• Do other members of your household contribute (money or labour) to the household income? __Yes __No

7a. If yes, how do the household members contribute to the household income?

	Age (years)	Relationship to respondent	Contribution (dollar amount) Contributions may also be non-monetary such as labour e.g. housewives	Occupation	Regular/ Seasonal
*HHM 1					
HHM 2					
ннм з					
HHM 4					
HHM 5					
ннм 6					

*HHM – Household Member
 Do any members of your family not living in the household (perhaps working outside of the country) contribute to the household income?YesNo
8a. If yes, how much do they contribute to the household income?
Other than earned income, what are some other regular inflows of money of your household?
• What is the average total monthly income of your household?
• Do you save money?YesNo
11a. If yes, how?Bank depositsSou-souCashJewelleryOther
11b. If no, why not?

• Do ot	ther mem	bers of you	ır househol	ld save mone	ey?YesI	No _I d	on't know
•		_Bank dep		ı-souCasl	hJewellery	У	
• What	househo	ld expense	s do you sp	end the mos	st amount of	money	on?
			hone, lights		Household re	pairs/ma	aintenance
for y what	did/do our livel equipme	you acqui ihood? (N nt and mat	ote to the terials the i	interviewe	chase the equence of the control of	first ha	ve to ask
Equipment/ Material	Savings	Bank Ioan	Loan from friends/ family	Government subsidy	Private sector cash/ equipment transfer	Money lender	Other
					nthly/weekly gular expens		·
livelih		timated co	363 01 30111	e or your re	Sular expens	es relace	u to your
Expense				Cost/ day/we	ek/month/year		
• Is you	ur annual	income as	a forest-us	ser fairly con	usistent?Y	es _No	
		ist 5 years l Fluctuat	•	nnual income	e:Been dec	clining	
•	ou and r Yes _		f your fami	ily satisfied	with your ea	ırnings a	s a forest-
18a. If no	, how do	you think	your incor	ne could be	improved?		

Human capital – Education, training and health

• What is the highest level of education attained by the members of your household?

Age (years)	Relationship to respondent	Educational level

20.	What is	the	last type	of sc	hool	you	attend	ed?
-----	---------	-----	-----------	-------	------	-----	--------	-----

__Primary __Secondary __Post-Secondary __Technical or Trade Institute __University __I have never received formal education

20a. [If stopped at primary or did not receive formal education] What was the reason for your not receiving formal education/ terminating your formal education at the primary level?

 What types of training have you received and how (respond only to those that apply)?

Type of training	How/where did you receive this training?	Did you pay for this training or was it free of charge?
Entrepreneurship/small and microenterprise development		

• Would you encourage any of your household members, not yet of an employable age to establish their livelihood as a forest-user? __Yes __No

Please explain:

Social capital

• Does your community have a community group/association/cooperative for small scale forest-users? Yes No

23a. If yes, are you or any members of your household a member of this group? __Yes __No

23b. If no, why not?

23c. If yes, how have you (or members of your family) benefited from being a member of this group?

 Does your community/ community group pool funds to assist members in times of need?
 Yes No

24a. If yes, please explain:

24b. If no, why not?

•	Does your comm	unity/	community	group	provide in	n-kind s	services to	o members
	in times of need?	Yes	No					

25a. If yes, please explain:

25b. If no, why not?

Vulnerability context (seasonality, trends, shocks and stresses)

• Which of the following have impacted your household income in the last 12 months (check all that apply):?

Impact	Effect of impact on household income	Was your household able to cope or recover from this impact?	How did you cope or recover from this impact?
Illness (e.g. Chronic diseases: diabetes, heart disease, arthritis. Acute diseases: dengue, chikungunya, cholera)			
Death (e.g. key/primary household income contributor)			
Conflict among other resource users			
Community conflict			
Crime (e.g theft/vandalism of equipment, illegal hunting)			
Rising food prices			
Crop or livestock diseases			
Reduction in plant yield (seeds, flowers, fruits etc.)			
Climate change/natural disasters (e.g. storms, hurricanes, earthquakes)			
Forest fires			
Political/Management decisions			
Die-out/reduction of key species e.g. birds, bees, plants			
Other			

• During this time did you/your family receive assistance from any:

Government agencies	
Civil Society Groups (NGOs, CBOs)	
Private Sector agencies	
Community Groups	
Others (e.g. middlemen)	

• Has your livelihood/household/community ever been affected by the following

risks/hazards? Please state when and how.

Risk/Hazard	Yes/No	How often are you affected by this risk/hazard?	Briefly describe the impacts experienced
Intense storms and hurricanes			
Forest fires			
Reduced yield in plants e.g. seeds, flowers, fruits			
Illegal/indiscriminate land clearing/ deforestation			
Poaching			
Flooding and landslides			
Destruction of mangroves			
Plant pests/disease outbreaks			
Drought/reduced rainfall			
Man-made disasters			
Other (1):			
Other (2):			

Coping and resilience

- Has your household recovered from this/these shocks?
- How long did/does it take your household to recover (return to normal) after this/these shocks?

What strategies do/did you/your household use to overcome these shocks and/or stresses?

• Do you have insurance coverage on your equipment (refer to equipment in Question 14)? __Yes __No

32a. If no, why not?

• What types of insurance coverage do you and members of your household have?

Insurance type	Respondent	HHM 1	HHM 2	ннм з	HHM 4	ннм 5
Health						
Life						
House						
General						
National Insurance (social insurance)						
Other						

Physical capital

• How would you describe the ownership status of the following assets?

Home:	
_Own	
Mortgage	
Rent from government	
Rent from private holder	
Lease from government	
Lease from private holder	
Informal housing (squatting)	
Other:	
T 1	
Land:	
_Own	
Mortgage	
Rent from government	
Rent from private holder	
Lease from government	
Lease from private holder	
Informal housing (squatting)	
Other:	
Barriers	
• What are some of the important barriers that are prevent/ing you from	П
maintaining/improving your livelihood earnings as a forest-user?	
Natural Barriers	
Habitat destruction	
nabitat destruction	
Social Barriers	
Loss of traditionally used areas	
Unsustainable resource-use practices	
Competition with other resource users	
Lack of the necessary skills (please specify)	
	
Financial Barriers	
High cost of equipment	
No insurance coverage for equipmentInsufficient access to markets	
Other	
Institutional/Management Barriers	
Government policy/management decisions	
Implementation of closed seasons	
Other	
Physical Barriers	
Inadequate community infrastructure	
Other(s):	
There are no barriers	

• What steps have you taken to address these challenges? Have they been effective?

Barrier	Personal intervention	Effectiveness

• What steps have your community group taken to address these challenges? In your opinion have they been effective?

Barrier	Community group intervention	Effectiveness

• What actions have the government taken to address these barriers/challenges? In your opinion have they been effective?

Barrier	Government intervention	Effectiveness	

• What actions have civil society organizations taken to address these barriers? In your opinion have they been effective?

Barrier	Civil society intervention	Effectiveness

Participation in social protection programmes

39. Have you ever benefitted from any social programmes/initiatives? __Yes __No

39a. If no, why not?

39b. If yes, what types of programmes/initiatives have you benefitted from?

Type of programme/initiative	Government	Civil Society	Private Sector	Community	Other
Training programmes					
Grants					
Cash-transfers					
In-kind transfers e.g. equipment					
Public Employment programmes					
Pension					
Social Insurance					
Subsidies					
Other					

• Have any of your household members (list them all) benefitted from any government-led social programmes/initiatives that provide __Yes __No

39a. If yes, please state the types of programmes/initiatives that your household members have benefitted from.

Type of programme/initiative	Government	Civil Society	Private Sector	Community	Other
Training programmes					
Grants					
Cash-transfers					
In-kind transfers e.g. equipment					
Social Employment Programmes					
Social Pension					
Social Insurance					
Subsidies					
Compensation packages					
Other:					

[END]

Appendix 2

Caribbean regional policies, strategies, plans and programmes relevant to social protection to foster sustainable management of natural resources and reduce poverty in fisheries and forestry-dependent communities in Trinidad and Tobago and St. Vincent and the Grenadines

Title of policy/ instrument/ strategy/plan/ programme	Goal/Objective	Potential impacts of policy on forestry/fisheries dependent individuals/households/communities. (Please state briefly the specific impacts for each category selected).		
		Protective	Preventive	
Caribbean Developm	ent Bank (CDB)			
Basic Needs Trust Fund (BNTF)	To reduce poverty by providing access to social and economic infrastructure and skills training, with a focus on gender equality; ensuring the same rights, resources and opportunities to men and women.		Reduced vulnerability to illness/death through the provision of clean water and improved health care.	
Community Disaster Risk Reduction Fund (CDRRF)	To finance community- based disaster risk reduc- tion (DRR) and climate change adaptation (CCA) initiatives at the local level across eligible borrowing member countries of the CDB.		Reduced vulnerability to extreme weather events, natural hazards and climate change	
Disaster Manage- ment Strategy and Operational Guide- lines 2009	To contribute to sustainable development and poverty reduction in the Borrowing Member Countries (BMCs) by reducing the burdens caused by disasters due to natural hazards and climate change through effective DRM.		Reduced vulnerability to natural disasters and climate change	
Climate Resilience Strategy 2012-2017				
Country Poverty Assessment Programme	To provide information on the status of poverty in the BMCs by assessing social and economic conditions			
Education Training Policy and Strategy	The revised policy/strategy focuses CDB's efforts on education and training is- sues in both the formal and informal delivery systems			
Housing Sector Policy and Strategy	Currently being revised to better assist its Borrowing Member Countries (BMC) in the provision of appropriate housing solutions, particularly for low and lower middle-income segments of the population.		Provision of appropriate housing solutions for low and lower middle-income segments of the population.	

Caribbean Communi	ty (CARICOM)		
Regional framework for achieving development resilient to climate change	The Framework defines CARICOM's strategic approach for coping with climate change and is guided by five strategic elements and some twenty goals designed to significantly increase the resilience of the CARICOM Member States' social, economic and environmental systems .		Reduced vulnerability of natural resources and thus natural-resource dependent livelihoods to climate change through the promotion of sound conservation practices in coastal and marine ecosystems.
Liliendaal Declaration on Climate Change Development	Affirms the commitments of the UNFCCC and Kyoto Protocol and declares CARICOM's position in adapting to and mitigating against climate change		Reduced vulnerability to natural disasters by providing more effective preparedness for response to natural disasters through the development of better risk assessment and material coordination along with the streamlining of risk reduction initiatives.
Caribbean Disaster Emergency Management Agency (CDEMA) Strategy	The realization of safer, more resilient and sustainable CDEMA Participating States through Comprehensive Disaster Management		Reduced vulnerability to natural disasters at the community level for vulnerable groups by building/strengthening the capacity of Community-Based-Disaster Management .
Revised Treaty of Chaguaramas	Treaty establishing the Caribbean Community (CARICOM) including the CARICOM Single Market Economy (CSME)		
Declaration on Health for the Caribbean Community (1982)	Health for All in the Caribbean Community by the Year 2000.		• Improve housing and health conditions in human settlements and promote the health and psycho-social aspects of town and country planning • Promote national and regional programmes for disaster prevention, preparedness and
Agreement on Social Security	Harmonisation of the social security legislation of the Member States of the Caribbean Community to promote functional cooperation and regional unity	Protection of CARICOM Nationals' entitlement to benefits and provision of equality of treatment when moving from one country to another.	

Regional Guidelines for Early Childhood Development Services	The Guidelines seek to align and standardise Early Childhood Development Services throughout the Community. They are intended to support the establishment of protective mechanisms and benchmarks at national levels and provide a common methodology and set of principles which can be used by member countries in developing early childhood policy, regulatory and standards regimes.		
Declaration of Labour and Industrial Relations Principles	The Declaration sets out the general Labour Policy to which the Region aspires, consistent with international standards and other international instruments. It provides the basis for the development of national labour policies, and inform the enactment of labour legislation.		
CARICOM Regional Food and Nutrition Security Policy (RFNSP) Adopts a human rights approach to food security	Policy provides a coherent, convergent and comprehensive framework within which national governments, civil society and private sector actors can join forces with regional organizations and development partners in cross-national, multi-sector and synergistic partnerships to identify, finance, implement and monitor an integrated set of concrete actions to achieve the four objectives of a) food availability; b) food access; c) proper food utilisation for good health, nutrition and wellbeing; and d) stable and sustainable food supplies at all times.	• Ability to mobilise appropriate social welfare support and productive safety nets for vulnerable populations with domestic funding (supplemented by external resources), based on constantly updated information generated by efficient and effective systems for poverty and vulnerability mapping and analysis in the framework of an Information System for Food and Nutrition Security (ISFNS) • Promotes mapping and identification of vulnerable groups to identify ways to provide assistance.	Promotes the provision of incentives for agricultural entrepreneurs
CARDI Medium- Term Plan 2013-2016	The Centre of Excellence in the Caribbean conducting research for development that creates wealth and competitiveness in the Region's agriculture. [No social aspects within the MTP]		
Jagdeo Initiative	Relevant goals are More private and public invest- ment in agriculture and increased employment in the sector		

Regional Transfor-			
mation Programme for Agriculture (1996)			
Community Agricultural Policy (Articles 56-61 of the Revised Treaty- agriculture, natural resources management, fisheries and forestry)	Goal b: Improved income and employment opportunities, food and nutrition security, and poverty alleviation in the Community		
Liliendaal Declaration on Agriculture and Food Security (2009)	Affirms CARICOM's commitment to the principles and objectives of the Caribbean Community as embodied in the Revised Treaty of Chaguaramas establishing the Caribbean Community including the CARICOM Single Market and Economy	Recognises vulnerable groups such as rural communities, women, youth, indigenous and tribal peoples	
Strategic Plan for the Caribbean Community 2015- 2019	Strategic Plan to inter alia systematically reduce poverty, unemployment and social exclusion and their impacts; promote optimum sustainable use of the Region's natural resources on land and in the marine environment, and protect and preserve the health and integrity of the environment;	Working towards the development of a regional health insurance system	To reduce vulnerability to disaster risk and the effects of climate change and ensure effective management of the natural resources across Member States
Caribbean Community Energy Policy	Fundamental transformation of the energy sectors of the Member States of the Community through the provision of secure and sustainable supplies of energy in a manner which minimizes energy waste in all sectors, to ensure that all CARICOM citizens have access to modern, clean and reliable energy supplies at affordable and stable prices, and to facilitate the growth of internationally competitive Regional industries towards achieving sustainable development of the Community		Improved access to af- fordable energy by the poor and vulnerable
Plan of Action of Petion Ville	Identifies projects and activities to address regional issues in five main thematic areas: sustainable tourism; trade development and external economic relations; transport; disaster risk reduction; and education, culture, science and technology.		 Plan to reduce vulner- ability to disasters. Prevention of Marine Pollution

CRFM Strategic Plan (2013-2021)	To establish, within the context of the Revised Treaty of Chaguaramas, appropriate measures for: the conservation, management, sustainable utilisation and development of f isheries resources and related ecosystems; the building of capacity amongst fishers and the optimisation of the social and economic returns from their fisheries; and the promotion of competitive trade and stable market conditions.	• The establishment of fisheries and aquaculture insurance schemes is promoted and technically supported by CRFM as part of Strategic Objective F: Adaptation to climate change and disaster risk management in fisheries
Castries (St. Lucia) Declaration on Illegal, Unreported And Unregulated Fishing		• The participating countries resolved to identify, reduce and ultimately eliminate the economic incentives derived from IUU fishing at the national, regional and global levels [these may include subsidies that allow fishers to go further offshore to hunt]
Agreement establishing the Caribbean Community Common Fisheries Policy	The vision of the Caribbean Community Common Fisheries Policy is effective cooperation and collaboration among Participating Parties in the conservation, management and sustainable utilisation of the fisheries resources and related ecosystems in the Caribbean region in order to secure the maximum benefits from those resources for the Caribbean peoples and for the Caribbean region as a whole. Relevant principles: (d) the participatory approach, including consideration of the particular rights and special needs of traditional, subsistence, artisanal and small scale fishers [transformative for social equity] (e) principles of good governance, accountability and transparency, including the equitable allocation of rights, obligations, responsibilities and benefits [transformative for social equity]	

Organization of Eastern Caribbean States (OECS)				
Revised OECS Regional Plan of Action for Agriculture 2012-2022	To transform the agricultural sector of the OECS Member States while reducing poverty and promoting food and nutrition security	Establishment of a food insecurity and poverty monitoring mechanism Under Priority Programme 1 the policy promotes social safety nets for vulnerable population groups	• Priority 2: Alleviate Poverty and Food Insecurity- Alleviate poverty and reduce food insecurity through policy and incentives regimes that encourage transition of rural populations out of poverty and vulnerability to poverty. • Under Priority Programme 1 the policy promotes social insurance	
St. George's Declaration Principles of Environmental Sustainability	Provides courses of action as well as a commitment to manage how human conduct affects the environment		• Guideline 1: Better quality of life for all- improve health and welfare	
OECS Policy on Protected Areas System	Member States cooperating and collaborating in the conservation, management, and sustainable use of marine and land based protected areas, with the overall aim of fostering equitable and sustainable improvement in the quality of life in the OECS region.			
OECS Environmental Management Strategy (2002)	Assumptions and objectives: Governments are seeking mechanisms to reduce poverty and improve quality of life within the context of sustainable and high levels of environmental quality.	• Principle 9 desired result: Reduced vulnerability to natural and man-made disasters in order to diminish loss and social dislocation thereby directing funding to environmental, social and economic improvements rather than to reconstruction and rehabilitation. [This may be preventive]	• Principle 1 desired result: Improved environmental management to enhance the quality of life for all members of society, and based on the sustainable use of resources	
Association of Caribbean States (ACS)				
Agreement between Member States and Associate Members of the Association of Caribbean States for Regional Cooperation on Natural Disasters	Agreement among ACS member states for regional cooperation on natural disasters			

Voluntary Guidelines			
Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) [does not explain how it will be implemented]	Objective (b): to contribute to the equitable development of small-scale fishing communities and poverty eradication and to improve the socio-economic situation of fishers and fish workers within the context of sustainable fisheries management	• 6.3 speaks of promoting social security protection 6.13 promotes the elimination of forced labour	 5: Governance and tenure- protecting the rights of fishers 6.4- promotes the development and implementation of insurance schemes 9: Disaster risks and climate change- noted the potential impact of climate change on food security in SIDS (includes T&T and SVG)
Code of Conduct for Responsible Fisheries (Voluntary) [besides promoting participatory policy development, there are no real social protection measures advocated in the code]	Purpose is to help countries and groups of countries, develop or improve their fisheries and aquaculture, in order to reach their maximum sustainable yields.		

Appendix 3

HOUSEHOLD POVERTY LINE CALCULATION FOR TRINIDAD

The annual poverty line for Trinidad and Tobago is estimated at TT\$11,479 per annum (or \$957 per month) (Survey of Living Conditions (SLC) 2014)

ADULT EQUIVALENCE SCALES

The equivalence scale used is shown below; this scale is the one which was applied in 2005 with the exception of the gender disaggregation. To remove the differences in gender included in the 2005 survey from the gender-neutral scale used in 2014, the adult equivalence for males and females of 2005 was averaged for each age group. This ensured that consistency in the use of the scale of 2005 was maintained while removing the gender disaggregation used in 2005.

Adult Equivalence	Age Group
0.27	Under 1 year
0.45	1 to 3 years
0.58	4 to 6 years
0.66	7 to 9 years
0.76	10 to 14 years
0.83	15 to 18 years
0.87	19 to 29 years
0.85	30 to 60 years
0.70	61 years and over

Example of household poverty line calculation

Poverty line per adult TT\$957

Family Household 1	Adult Equivalence
Female 60 years	0.85
Female 25 years	0.87
Male 66 years	0.70
Male 34 years	0.85
Male 29 years	0.87
Family Adult Equivalence	4.14

Family Household poverty line $(TT\$957 \times 4.14) = TT\$3,961.98$

Social protection to foster sustainable management of natural resources and reduce poverty in fisheries-dependent communities

Report of the FAO Technical Workshop 17–18 November 2015, Rome

Fisheries-dependent communities and in particular small-scale fishers are exposed to different social, political and economic risks and vulnerabilities. They face social and political marginalization, poverty is widespread and coupled with poor working conditions. The livelihoods of coastal and inland fishing communities are further endangered by the depletion of fish stocks caused by overfishing. Other vulnerabilities include degradation of aquatic environments coupled with natural disasters and climate change.

Although social protection policies have the potential to stabilize incomes, create a safety net for fishers and have the potential of increasing resilience of fishers against diverse types of vulnerabilities, small-scale fishers have an unmet need for social protection policies and few social protection programmes are designed to meet the specific needs of fishers and fisheries-related workers.

Since 2014–2015, as part of a wider strategy to promote rural development within the framework of poverty reduction, FAO started analyzing the linkages between social protection and sustainable use of natural resources, through country-specific case studies in Myanmar, Trinidad and Tobago, as well as Saint Vincent and the Grenadines.

The technical workshop "Social protection to foster sustainable management of natural resources and reduce poverty in fisheries dependent communities" gathered 29 participants to discuss available evidence and make recommendations for the work programme of the Fisheries and Aquaculture Department in relation to social protection and poverty reduction in fisheries dependent communities. Among the outcomes, the workshop suggested strengthening the conceptual framework for poverty and natural resources management in fisheries-dependent communities in order to reconcile socio-economic development and natural resources conservation. The workshop also suggested carrying out further country case studies and deepening the understanding of the link between social protection and sustainable use of natural resources, exploring how coherence between social protection and fisheries policies can be promoted at country level.

