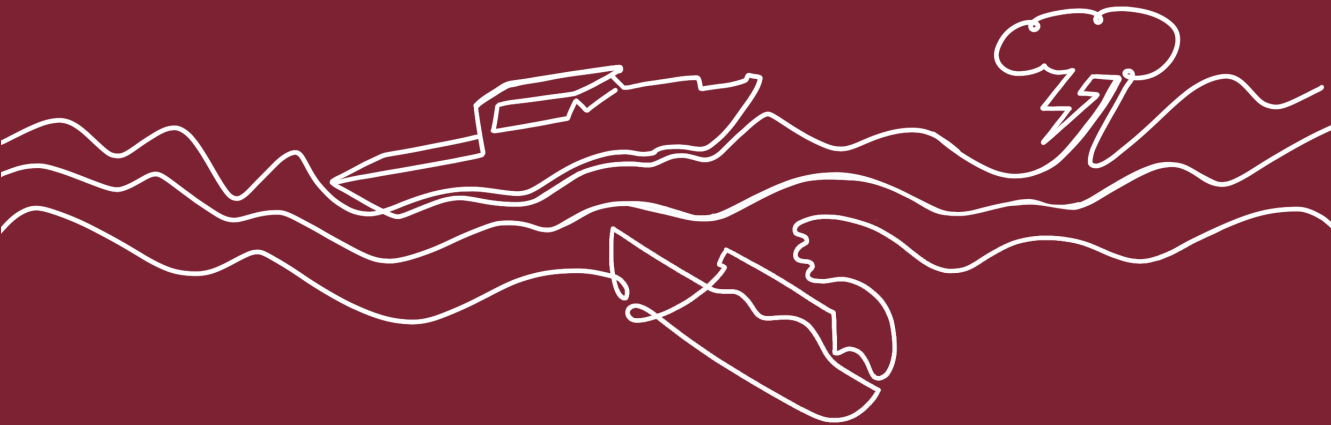




**Food and Agriculture
Organization of the
United Nations**



Guidelines for increasing access of small-scale fisheries to insurance services in Asia

A handbook for finance and fisheries stakeholders

In support of the implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication



**Asia-Pacific Rural and
Agricultural Credit Association**

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Preparation of this document

These Guidelines for increasing access of small-scale fisheries to insurance services, have been developed as a complement of the 2014 Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines). They were developed to provide implementation guidance for increasing access to financial services, particularly insurance, by small-scale fisheries. They also intend to support the implementation of the 1995 FAO Code of Conduct for Responsible Fisheries in terms of promotion and development of measures to facilitate access to insurance coverage in fisheries.

These Guidelines are voluntary, global in scope and focus on the insurance needs of small-scale fisheries in developing countries, particularly in Asia.

A first draft of these Guidelines was reviewed by a group of selected experts and a second draft was reviewed at the Expert Workshop on Guidelines on Microfinance, Credit and Insurance for Small-scale Fisheries in Asia, held in Bangkok, Thailand, 7–9 May 2019. The final draft of the Guidelines was presented for endorsement to the Asia-Pacific Rural and Agricultural Credit Association (APRACA) General Assembly, Small-scale Fisheries Task Force, and Friends of the SSF Guidelines in 2019, and provided for information to the 34th Session of the FAO Committee on Fisheries in 2020.

These Guidelines for increasing access of small-scale fisheries to insurance services provide an important next step in the long-standing cooperation between APRACA and FAO in promoting financial services for small-scale fishing communities in Asia and the Pacific.

FAO. 2019. Guidelines for increasing access of small-scale fisheries to insurance services in Asia A handbook for finance and fisheries stakeholders. In support of the implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication, by Uwe Tietze and Raymon van Anrooy. Rome.

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Abstract

These Guidelines for increasing access of small-scale fisheries to insurance services in Asia have been developed to support the implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines).

The purpose of these Guidelines is fourfold, i.e.

- to increase awareness about the needs of small-scale fishers for better risk management, disaster preparedness and insurance services;
- to guide policy and decision makers to help introduce insurance services to small-scale fishers, with the ultimate objective to strengthen the sustainability and ecological and economic viability of these fisheries;
- to build capacity among insurance providers, fisherfolk organizations, NGOs, and concerned government agencies, to design and implement insurance programmes that suit the needs of small-scale fishing communities and enhance social protection;
- to promote insurance services that incentivize and reward a responsible and sustainable conduct of fishing operations and a better preparedness for natural disasters including climate change related challenges.

These Guidelines commence by elaborating on the context and framework, in which insurance programmes for small-scale fisheries should be conceived. It is explained why most small-scale fishers are presently not insured. Major risks and consequences faced by fishers are identified. Risks include capsizing, grounding, collision and sinking of vessels; fire on board of vessels or in port; injury or death of crew as a result of above, human errors during navigation or fishing operations; oil spills or other pollution caused by fishing vessels; theft and vandalism, when moored in port; piracy and crime; storms, hurricanes, typhoons, and tsunamis.

The Guidelines describe major consequences such as damage or loss of vessel and gear; financial obligations to provide compensation to third parties that have been affected; loss of life or disability; loss of income and/or employment; destruction of parts of the ecosystem, such as fish habitats, reefs and mangroves.

The Guidelines further identify the main components of an enabling environment and different options for the provision of insurance facilities and services. The options presented included community/cooperative based insurance, parametric insurance, traditional insurance companies, the partner-agents models and mutual insurance. Advantages and challenges of these options are discussed in the context of the special characteristics of the small-scale fisheries sector.

Advice is provided on how to design and implement insurance programmes that suit the needs of small-scale fishing communities. This includes practical advice on insurance assessments and surveys; insurance coverage; factors that determine the cost of fishing vessel insurance/insurance premiums; evaluation of insurance applications, as well as on determination of loss settlement and claim adjustment.

Acknowledgements

The authors acknowledge the valuable contributions of the participants of the APRACA/FAO Expert workshop on developing guidelines for micro-finance, credit and insurance for small-scale fisheries in Asia, held in Bangkok, from 7 to 9 May 2019, who reviewed the guidelines and offered their comments and suggestions. Particular thanks go to the members of the working group, tasked with reviewing structure and text of the guidelines i.e. Mr K.G. Ranjit Kumar, Deputy General Manager, Bankers Institute of Rural Development/National Bank for Agriculture and Rural Development (NABARD), India; Mr Darmawan Sidik, Lembaga Pengelola Modal Usaha Kelautan Perikanan (LPMUKP), Indonesia; Mr Masanami Izumi, Special Advisor, Southeast Asian Fisheries Development Center (SEAFDEC); Dr Shelina Afroza, Chairwoman, Jibon Bima Corporation, Bangladesh; Dr Mangi Stephen Chai, Senior economist, Center for Environment, Fisheries & Aquaculture, United Kingdom, Mr Dan Fairweather, Director of Fisheries and Aquaculture, Willis Global Asset Protection, United Kingdom and Ms Suchitra Upare, independent consultant, India. Special thanks go also to Mr Keiichi Fukiage, General Manager, General Affairs Department, Japan Fishing Vessel Insurance Association, who provided additional comments on the design and implementation of fisheries insurance programmes.

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Abbreviations and acronyms

APRACA

Asia-Pacific Rural and Agricultural Credit Association

CCRF

Code of Conduct for Responsible Fisheries

CCRIF

Caribbean Catastrophe Risk Insurance Facility

CMF

Coastal Marine Fund

COFI

FAO Committee on Fisheries

FAO

Food and Agriculture Organization of the United Nations

IUU

Illegal, unreported and unregulated (fishing)

NGO

Non-governmental organization

P&I

Protection and indemnity

SDGs

Sustainable Development Goals

SEAFDEC

Southeast Asian Fisheries Development Centre

SSF

Small-scale fisheries

SIFFS

South Indian Federation of Fishermen Societies

PART

1



Purpose, background
and context



1. Purpose and structure of the guidelines

1.1 Purpose and target audience

FAO estimates that every year more than 32 000 fishermen and women die during fishing operations worldwide and many more get accidents and injured, making capture fisheries one of the most dangerous and risky occupations in the world. Fishers often work long hours under harsh weather conditions, increasing the likelihood of accidents or injury.

Climate change has only increased the hazardous conditions under which small-scale fishers work, as natural disasters become ever more prevalent and destructive. Damage and loss of fishing craft and gear due to accidents and natural disasters threaten the livelihood of small-scale fishing communities. Fishers, their families and communities therefore need the special support and protection that insurance can provide as an instrument to mitigate risks.

The purpose and intended target audience of these Guidelines is fourfold, i.e. to:

1. increase awareness about the needs of small-scale fishers for better risk management, disaster preparedness and insurance services;
2. guide policy and decision makers in the Asia-Pacific region and elsewhere, to help introduce insurance facilities and services to small-scale fishers, with the ultimate objective to strengthen the sustainability and ecological and economic viability of these fisheries;
3. build capacity among insurance providers, fisherfolk organizations¹, NGOs, and concerned government agencies, to design and implement insurance programmes that suit the needs of small-scale fishing communities and enhance social protection;
4. promote insurance services that incentivize and reward a responsible and sustainable conduct of fishing, fish processing and marketing operations and a better preparedness for natural disasters, including climate change related challenges.

The Guidelines also emphasize the need for full stakeholder participation in all stages of the process, including insurance needs identification, formulation of insurance policies, regulations, procedures and monitoring and evaluation of the impact of insurance programmes on the social well-being and protection of small-scale fishing communities and the vitality and sustainability of the small-scale fisheries sector.

These Guidelines recognize the importance of financial inclusion for small-scale fishers, in terms of access to financial services (including insurance, microfinance, credit, savings and payments), as well as the need to provide high quality, affordable and suitable financial products to small-scale fishers and their communities.

The main focus of these Guidelines is on Asia, where 78 percent of all fishers live (FAO, 2018). It is estimated that about 90 percent of all people working in capture fisheries do so in the small-scale fisheries sector.

¹ The term fisherfolk organization includes here also other types of fishers' collaboration, such as cooperatives, associations, groups and unions.

These Guidelines should also be useful for other parts of the world, which have similar insurance needs, constraints, challenges and opportunities as identified in these guidelines.

1.2 Structure and content

The guidelines are divided into three parts.

[Part I](#) of the guidelines lays out the background and context. [Chapter 1](#) explains the purpose, target audience and the structure of the guidelines. [Chapter 2](#) elaborates on the context, in which suitable insurance programmes for small-scale fisheries need to be conceived and operate.

[Part II](#) of the guidelines provides the framework, in which insurance programmes for small-scale fisheries should be conceived. [Chapter 3](#) identifies major risks and consequences faced by fishers, while [Chapter 4](#) explains the reasons why most fishers are presently not insured. [Chapter 5](#) and [6](#) discuss the main components of an enabling environment and different options for the provision of insurance facilities and services.

[Part III](#) of the guidelines provides specific advice on how to design and implement insurance programmes that suit the needs of small-scale fishers and their communities. This includes practical advice on insurance assessments and surveys; insurance coverage; factors that determine the cost of fishing vessel insurance/insurance premiums; on evaluation of insurance applications, as well as on determination of loss settlement and claim adjustment.

2. Contextualizing insurance for small-scale fishing communities

2.1 International instruments: SSF Guidelines and Code of Conduct for Responsible Fisheries

The Global Conference on Small-Scale Fisheries, co-organized and convened by FAO, the Royal Government of Thailand, the Southeast Asian Fisheries Development Centre (SEAFDEC) and the WorldFish Center in Bangkok in 2008 (FAO, 2009) reinforced the claim that small-scale fisheries have yet to fully realize their potential to significantly contribute to sustainable development. On request of the FAO Committee on Fisheries (COFI), the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines)² were developed through a participatory process world-wide (FAO, 2015). The SSF guidelines were internationally endorsed by the Thirty-first Session of COFI in June 2014. The 2018 FAO report on the State of World Fishery and Aquaculture provides an overview of the implementation process of the guidelines (FAO, 2018).

The SSF Guidelines make reference to the importance of credit, insurance, finance and investment for the small-scale fisheries sector. In addition to these provisions of the SSF guidelines, the objectives of the 1995 Code of Conduct for Responsible Fisheries (CCRF) (FAO, 1995a; FAO, 2005) also refer to the important role of financial institutions in the provision of credit, investment and insurance services to the fisheries sector. Table 1 shows the relevant provisions of the CCRF and the SSF guidelines.

² Available at: www.fao.org/3/i4356en/i4356EN.pdf

Table 1: Provisions of SSF guidelines, CCRF and FAO technical guidelines for fishing operations relevant to insurance, financial services and related investments

SSF guidelines	CCRF & Technical guidelines for fishing operations (FAO, 2009a)
<p>States should support the development of and access to other services that are appropriate for small-scale fishing communities with regard to, for example, savings, credit and insurance schemes, with special emphasis on ensuring the access of women to such services (article 6.4). Genre</p>	<p>“facilitate and promote technical, financial and other cooperation in conservation of fisheries resources and fisheries management and development” (objective of CCRF)</p>
<p>States should foster, provide and enable investments in appropriate infrastructures, organizational structures and capacity development to support the small-scale fisheries post-harvest subsector in producing good quality and safe fish and fishery products, for both export and domestic markets, in a responsible and sustainable manner (article 7.3).</p>	<p>States, relevant intergovernmental and non-governmental organizations and financial institutions should work for the adoption of measures to address the needs of developing countries, especially in the areas of financial and technical assistance, technology transfer, training and scientific cooperation and in enhancing their ability to develop their own fisheries as well as to participate in high seas fisheries, including access to such fisheries (article 5.2).</p>
<p>States and other relevant parties should provide support to small-scale fishing communities in particular to indigenous peoples, women and those that rely on fishing for subsistence, including, as appropriate, the technical and financial assistance to organize, maintain, exchange and improve traditional knowledge of aquatic living resources and fishing techniques, and upgrade knowledge on aquatic ecosystems (article 11.7).</p>	<p>Flag States should promote access to insurance coverage by owners and charterers of fishing vessels. Owners or charterers of fishing vessels should carry sufficient insurance cover to protect the crew of such vessels and their interests, to indemnify third parties against loss or damage and to protect their own interests (article 8.2.8).</p>
<p>Flag States should promote access to insurance coverage by owners and charterers of fishing vessels. Owners or charterers of fishing vessels should carry sufficient insurance cover to protect the crew of such vessels and their interests, to indemnify third parties against loss or damage and to protect their own interests. Article 8, paragraph 8.2.8, of the CCRF.</p>	<p>Supplement 2. Best practices to reduce incidental catch of seabirds in capture fisheries. Annex 1: Special requirements of developing countries: (ii) mobilizing resources and ensuring that national and international financial agencies and mechanisms facilitate and contribute to the finances necessary to implement IPOA–Seabirds, NPOA–Seabirds and relevant regional plans.</p>

These guidelines for increasing access of small-scale fisheries to insurance services also aim to contribute to the achievement of the United Nations Sustained Development Goals (SDGs) and particularly **Goal 14**: “Conserve and sustainably use the oceans, seas and marine resources for sustainable development”, and specifically to target **14.B**: Provide access for small-scale artisanal fishers to marine resources and markets.

The guidelines further contribute to other SDGs, including:

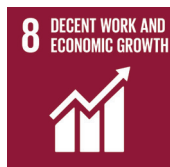
Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all.

Goal 12: Ensure sustainable consumption and production patterns.

Goal 13: Take urgent action to combat climate change and its impacts.

These Guidelines are also in line with the “Principles for Investment in Sustainable Wild-Caught Fisheries” (EDF *et al.*, 2018).

Financial services such as micro-finance, credit, savings, investments and insurance are important also for small-scale fisheries within the global context of climate change and variability. Financial services



including insurance services can help to reduce vulnerability to shocks and mitigate in case of natural disasters.

Providing insurance facilities to small-scale fisheries can further play an important role in enhancing social protection for the small-scale fisheries sector (FAO, 2017; Dercon, 2004).

2.2 Global review of capture fisheries insurance

Guidelines on small-scale fisheries insurance services need to take into account the present status of fisheries insurance, its shortcomings and challenges. The most recent comprehensive status overview is the global review of the current state of world capture fisheries insurance conducted by FAO, which also covered social protection schemes in some developing countries (VanAnrooy *et al.*, 2009). The review included specific reviews of capture fisheries insurance in China, Japan, India, Europe, Africa, Oceania, the United States of America, and the Russian Federation³.

With regard to SSFs in developing countries, the review noted that large composite international insurers' interest in small-scale producers is generally low because of:

- > high costs involved in serving often remote fishing villages;
- > difficulty of dealing with a fishing population, which frequently has no access to other financial services (e.g. bank accounts, credit, or microfinance);
- > relatively small premiums that could be collected from individual fisherfolk;
- > related high administrative and monitoring costs;
- > a generally low level of education of small-scale fishers.

³ An earlier review focused on fisheries insurance programmes in Asia (Hotta, 1999).

The review noted that these characteristics of the SSFs sector do not make it an attractive subsector for international or national insurers. Furthermore, the demand expressed by small-scale fishers for insurance services is often limited. In many cases, small-scale fishers are either not aware of the existence of insurance services, or do not see the need for insurance except perhaps for life and health insurance. Also, small-scale fishers generally have low incomes, which is why purchasing insurance is not a priority for them.

On the other hand though, in countries where small-scale fisherfolk have a high level of organization, e.g. in associations, cooperatives or self-help groups, the demand for fishing-related insurance services is higher. In India and China, as well as in Chile, the review found evidence of a considerable demand for insurance among the organized small-scale producers and observed that part of the fisherfolk are served by insurance.

2.3 Socio-economic and technical characteristics of small-scale fisheries

According to FAO⁴, the small-scale fisheries sector employs approximately fifty million fishers, mostly from developing countries. Nearly half of the world's total fish production originates from small-scale fisheries.

In addition to direct employment in fish capture and aquaculture, small-scale fisheries provides employment for millions more working in fisheries-related activities, such as fish processing and marketing, boat building and net making. Including family members, hundreds of millions of rural people in developing countries depend on fisheries for their livelihoods.

While the fish species involved, vessels and fishing methods, as well as management approaches vary widely around the world, and within particular regions, community impact and policy issues are generally similar. Likewise, the constraints and challenges have strong similarities. Experiences and development approaches can therefore be compared and shared, and local particularities can be linked with the more general best practices, which emerge from this exchange⁵.

For insurance facilities and services to be viable, realistic and to suit the needs of the small-scale fisheries sector, their design and policies need to take into account the socio-economic and technical characteristics of the small-scale fisheries sector.

A recent global review conducted by FAO (FAO, 2016) found that most small-scale fisheries are generally profitable. However, this does not mean that the earnings from fishing alone are sufficient to sustain households at a level above the poverty line or above a country's minimum wage level. Particularly during bad fishing seasons and poor catches, households are dependent on income from non-fishery-related activities and on government assistance. Therefore, small-scale fishing communities generally need to be considered as vulnerable.

The major lesson to be learned from socio-economic studies on SSF and their coastal communities is that insurance of productive assets in the small-scale fisheries sector should preferably be complemented by health and life insurance schemes as well as social security and protection schemes.

Furthermore, small-scale fishing operations often take place in environments where fishery resources are either heavily fished or overfished, and where coastal and riparian ecosystems that serve as

⁴ www.fao.org/fishery/ssf/people/en

⁵ See: www.fao.org/fishery/ssf/world/en

nursery grounds for most fisheries are degrading. The challenges and barriers to poverty alleviation and empowerment of small-scale fishers identified by FAO's recent review are manifold. These challenges are highlighted in [Box 1](#).

Box 1: Challenges of small-scale fisheries

- › Environmental and ecological challenges: overexploitation of resources, degradation of ecosystems, global climate change.
- › Challenges related to effective and sustainable governance, management and conservation of fisheries, aquatic resources and the environment.
- › Challenges inherent in the use of fishery and aquatic resources, such as how they are handled, processed and distributed including marketing and utilization.
- › Low socio-economic and educational status of small-scale fishers.
- › Lack of social security and protection of small-scale fishers.

However, the FAO review also highlights that there are many advantages and opportunities to overcome these challenges⁶. Small-scale fisheries have many advantages, when compared with large-scale industrial fisheries. Advantages and opportunities are shown in [Box 2](#).

Box 2: Advantages and opportunities of small-scale fisheries

- › SSF are typically more selective, use less-destructive fishing gear, and have less bycatch and fewer negative impacts on ecosystems than do industrial fisheries.
- › SSF require less investment and working capital than industrial fisheries.
- › SSF are more environmentally friendly because of lower fossil fuel consumption and emissions.
- › SSF generate more employment than industrial fisheries.
- › SSF have a limited operational range when compared with industrial fisheries. This results in closer cultural and social ties of small-scale fisheries with the coastal and riparian areas, where they operate, which in turn encourages a more responsible relationship with natural resources and local ecosystems.

⁶ A comprehensive overview of challenges and opportunities is provided in FAO (2016), pp. 105 - 114

In order to take advantage of existing opportunities, concerted efforts need to be made by governments and the private sector. These are shown in [Box 3](#).

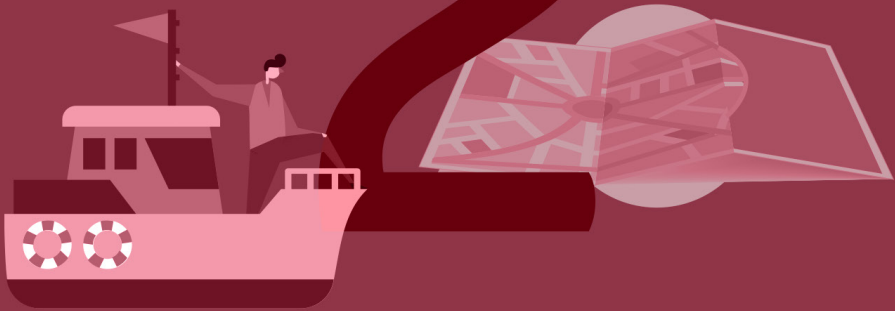
Box 3: Actions needed to take advantage of opportunities for small-scale fisheries

- > SSF need to fully participate in the governance, management and conservation of fisheries and the supporting natural resources.
- > This participation requires the improvement of fisheries management strategies.
- > There is a need for strengthening SSF organizations to enhance their ability to participate in policy and decision-making processes and for capacity building of SSF' representatives.
- > Like any other sector of the economy, SSF need access to credit and microfinance services.
- > Small-scale fishing communities must be included in social protection and security programmes.
- > Literacy and education of small-scale fishing communities must be improved.
- > Infrastructure of fish landing sites and fishing communities must be improved.
- > Small scale fisher's should be offered a bundled product consisting of micro- credit and micro-insurance to ensure compulsory coverage of all loanee fishermen, and also to link payment of premium through bank accounts.

Insurance services for small-scale fisheries can only be successful in the long run, if appropriate action is taken by both the government and the private sector.

PART

2



Framework



3. Major risks and consequences faced by fishers and potential benefits of fisheries insurance

3.1 Risks and consequences

Major risks faced by small-scale fishers include accidents at sea or in port, caused by bad weather conditions (including typhoons, cyclones and storms), equipment failure and human errors in fishing operations. These are shown in [Box 4](#).

Box 4: Risks and consequences

Risks

- › Capsizing, grounding, collision and sinking of vessels
- › Fire on board of vessels or in port
- › Injury or death of crew as a result of above or of human errors during navigation of fishing operations
- › Oil spills or other pollution caused by fishing vessels
- › Theft and vandalism, when moored in port
- › Piracy and crime
- › Storms, hurricanes, typhoons and tsunamis
- › Ecosystem damages

Consequences

- › Damage or loss of vessel and gear
- › Financial obligations to provide compensation to third parties that have been affected
- › Loss of life or disability
- › Loss of income and/or employment
- › Destruction of fish habitats, such as reefs and mangroves

In the absence of appropriate and affordable insurance services, fishers use their limited savings to deal with the consequences of the risks they face or seek support from government, if available. Fishers may also be forced to sell their assets, such as fishing boats, gear, houses and land.

In many cases, however, these individual efforts have limited, if any, success. It is more likely that small-scale fishers will be depleting their financial resources, lose their ability to restart their fishing operations after accidents, become indebted to moneylenders or other credit providers or try to find employment in other sectors. Many small-scale fishing households might ultimately fall into poverty.

3.2 Benefits and potential impacts of insurance

Insurance is a risk-transfer mechanism that provides financial compensation for the loss or damage caused by events beyond the control of the insured. Hence, it provides benefits that include, among other things:

- › Protection against natural hazards.
- › Compensation for loss/damage to fishing assets.
- › Coverage of third-party liability.
- › Compensation in case of crew injury and loss of life.
- › Increased access to institutional credit and investment.

Insurance also plays an important role as a financial service to reduce the risks of creditors and investors to the small-scale fisheries sector. As such, insurance services for the small-scale fisheries sector can help to secure incomes, and bring greater social and economic stability to fishing communities. It is common practice that loans are coupled with life insurance products to ensure that creditors get some part of their loans back in case of death or injury of a fisher, and to avoid households remaining in debt after the main household income earner has lost his life.

Insurance could also play a role to help fishers to better cope with climate change and extreme weather events that have increased in both number and severity. When designed to promote and reward responsible and precautionary practices, insurance can be an important tool for climate change adaptation and mitigation in the fisheries sector, which works in tandem with other strategies including measures to protect ecosystems and the implementation of effective early warning systems for fishers.

Insurance of fisheries assets, such as fishing vessels, should preferably be complemented by health and life insurance schemes as well as social security schemes. This will make insurance programmes viable and sustainable and also assure insurance providers of fisheries assets that their services are supported by other risk management mechanisms.

At present, the large majority of small-scale fishers worldwide do not have health and life insurance nor are they enrolled in social security schemes. Government should make an effort to provide small-scale fishers with access to such schemes, which in most cases would need to be subsidized, in order to provide them with a comprehensive safety net. In some countries, it may be required for the Government to reinsure private sector insurers of fisheries assets through an insurance facility or guarantee fund that will provide additional support in case of sector-wide claims resulting from large scale natural disasters.

4. Reasons why most small-scale fishers are presently not insured and solutions

The reasons, why most small-scale fishers are presently not insured can be seen from the perspective of fishers on the one hand, and from the perspective of insurers on the other hand. As far as respectively fishers and insurers are concerned, the main reasons and possible solutions are presented in [Tables 2](#) and [3](#) below.

Table 2: Reasons for not being insured – fishers’ perspective and solutions

Reasons for not being insured	Possible solutions
Low awareness of insurance needs/advantages	Public relations/information for fishers by means of posters/leaflets, radio/TV, social media, meetings. To be done by insurance providers, local government, fisherfolk organizations, fisheries extension workers and NGOs.
Lack of insurance providers that are active in their community or at their landing site/fishing port.	NGOs can approach insurance providers to advertise services at landing sites.
Currently available insurance policy premiums are considered too high, and coverage is regarded as inadequate. Partial damage insurance cover of assets is generally not possible.	Microfinance agencies and rural banks can promote savings and deposit services in fishing communities facilitated by fisherfolk organizations and NGOs.
Insurance policies and settlement of insurance claims are neither understood nor trusted, partly because of low literacy levels.	Education of fisherfolk by insurance companies in meetings and person- to- person contact facilitated by fisheries administrations and NGOs. Efforts to increase school enrolment in fishing communities.
Most fishers do not have access to other financial services (i.e. checking or savings accounts in banks among others) to facilitate payments of premiums and insurance payouts.	Microfinance agencies and rural banks can promote savings and deposit services in fishing communities facilitated by fisherfolk organizations and NGOs.
In many cases income from fishing varies according to fishing seasons and schedules of payment of premiums are not flexible.	Insurance providers can adjust premium payment schedules to semi-annual or annual terms to allow for flexibility in case earnings during a particular fishing season are less than expected.

Table 3: Reasons for not providing insurance services to SSF – insurers’ perspective and solutions

Reasons for not providing insurance to SSF	Possible solutions
Limited knowledge of fishing operations and related risks also because of lack of communication with fisheries administrations.	Insurance providers can establish a working relationship with fisheries administrations and obtain information on vessel costs and earnings, age of the fishing fleet, frequency of accidents, state of fisheries resources, fishing seasons, management matters etc.
Limited knowledge of demand and needs of SSF in terms of insurance services.	Insurance providers can carry out market and demand assessments in close collaboration with fisheries authorities or fisherfolk organizations.
Low profitability of fishing vessel insurance, because of small pool of those insured and high transaction costs in the case of distant fishing communities.	Acquisition of knowledge on profitability of different fleet segments, cooperation with agents e.g. fisherfolk organizations, microfinance providers, NGOs, fisheries extension officers to reduce transaction costs. Capacity building of agents by insurance providers.
Lack of policies, laws and regulations for providing insurance services to the small-scale fisheries sector.	Fisheries administrations, fisherfolk organizations, NGOs and responsible government agencies to advocate policy makers to initiate policy formulation, insurance legislation and regulation.
Lack of well-functioning fisherfolk organizations or NGOs, which can act as insurance agents.	Capacity building of fisherfolk organizations on insurance matters through training courses and in meetings.
Lack of insurance mandates for fishing vessels.	Government authorities responsible for the registration and licensing of fishing vessels can make insurance coverage mandatory for certain types of vessels starting with larger vessels and certain types of coverage.
Limited interest in the SSF insurance market as there are easier and more profitable sectors for insurance to invest in. Only high risk individuals are buying insurance.	Finance authorities can facilitate the establishment of guarantee funds or facilities to reduce the burden for insurers of investing in perceived high risk-low return sectors.

Opportunities for creating an enabling environment for providing insurance to small-scale fishers and creating a demand for insurance among small-scale fishers are discussed in [Chapter 5](#).

5. Components of an enabling environment for introduction of fisheries insurance services

The key players/constituents in small-scale fisheries insurance programmes are:

- › Private or public sectors insurance companies
- › Insurance brokers/underwriters
- › Risk assessors
- › Loss adjusters and marine surveyors (for companies) and loss assessors (for the policy holders)
- › Meteorological departments/disaster management agencies for providing back-up data required to assess damage and settlement of claims
- › Fisheries departments
- › Re-insurance companies
- › Mutual associations
- › Self-insurance pools/programmes
- › Regulators
- › Agents (NGOs) – policy design, marketing and servicing
- › Fisherfolk organizations, cooperatives and associations
- › Individual fishers of influence

Insurers, governments, investors and fishers themselves all have a role to play in creating an enabling environment for the successful operation of vessel and gear insurance services.

Their respective general roles for creating an enabling environment for small-scale fisheries insurance services are shown in [Table 4](#).

Table 4: Role of stakeholders in creating an enabling environment for small-scale fisheries insurance services

Fishers	Insurers	Governments	Development agencies/ donors/ NGOs and funds
Organize in producer/ marketing organizations.	Conduct needs assessments and identify insurance needs/ demands of SSF.	Provide accurate weather forecast and early warning systems for SSF	Fund and facilitate insurance needs and demand surveys for SSF.
Participate actively in fisheries and resource management.	Raise awareness and promote marine insurance policies suitable for SSF.	Ensure that strict standards are in place, implemented and enforced. Standards must include seaworthiness checks and qualifications of crew as requirements for registration and licensing.	Integrate insurance in credit and investment programmes for SSF.
Initiate contact with insurance providers and financial institutions and credit providers.	Simplify marine insurance policies for SSF, including claims settlement procedures; allow for flexible premium payments in line with the cash flow of SSF.	Integrate insurance in legislative, regulatory and policy frameworks to allow for a phased introduction of a mandatory insurance requirement for the registration and licensing of fishing vessels.	Establish risk/ support funds at regional and national levels to assist SSF insurance providers in case of natural disasters such as hurricanes and cyclones that cause large-scale damages to SSF.
Start savings programmes and mutual self-help and support schemes among members.	Team-up with microfinance and credit providers to SSF.	Provide information to insurance providers, on request, on accidents and risks in fishing and on the economic performance of fleets.	Promote and fund programmes that improve the preparedness of SSF for climate change related natural calamities.
Maintain records and accounts of costs and earnings of fishing, fish marketing and processing operations.	Provide bundled products of various insurance services (e.g. including also life and accident insurance).	Facilitate the introduction of SSF insurance programmes.	
		Providing premium subsidy.	

6. Options for providing insurance

Table 5 shows available options for providing insurance services for small-scale fisheries, which are widely considered by development agencies, funds and others. These options are discussed further below

Table 5: Options for providing insurance to small-scale fisheries

Objects	Insurance arrangements/ mechanisms	Benefits	Challenges	Solutions
Traditional insurance	An insurance company or broker provides a range of insurance coverages often on commission basis.	Insurance companies have full control over insurance policies, claim settlement etc. Re-insurance is easy to obtain.	Transaction costs and insurance premiums can be high when fishing communities reside in remote locations.	Establish linkages with fisheries administrations; use of social networks and agents.
Partner- agent model	A public sector or private insurance company (partner) collaborates with a local institution (agent) such as a fisherfolk organization, NGO or microfinance agency to distribute its insurance services.	Distribution of insurance services is facilitated by the agent who has a network of representations in fishing villages. Information gaps are reduced and risk management is improved. Administrative responsibilities are shared and transaction costs are reduced.	The agent needs to be a legal entity and well established. Training is needed for staff of the agent.	Capacity building of staff of the agent on SSF. Technological infrastructure is needed for communication/ interaction with insurance provider and clients in SSF.

Mutual insurance

<p>A mutual insurance company is owned by the policy holders, i.e. fishers. Its main purpose is to provide insurance coverage for its members plus related activities aimed at reducing or mitigating risks, such as providing assistance in case of emergencies/accidents. Mutual insurance companies can also provide deposit and limited credit facilities.</p>	<p>Information about members and their activities, economic status and risks profiles are high. Transaction costs and premiums can be low. Loss and claim adjustment expertise is often locally available. Established to serve SSF and often have government support.</p>	<p>Mutual insurance companies might lack strong leadership and organizational capacity. In case of major natural disasters affecting SSF, decapitalization of the mutual fund may take place.</p>	<p>Continuous capacity strengthening and training of staff and members are needed. Cooperation with external marine surveyors would improve transparency and credibility. Government supported risk funds might need to be established to safeguard against decapitalization in case of natural disasters</p>
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Community/cooperative based

<p>A community based organization operates an insurance fund on a non-profit basis. Fishers pay insurance premiums and receive benefits.</p>	<p>Low transaction costs and high level of local control. Can work efficiently for relatively small insurance coverage.</p>	<p>In case of major natural disasters affecting SSF, decapitalization of the fund is likely. Administrative capacity and oversight may be weak.</p>	<p>Continuous capacity strengthening and training of staff and members are needed. Government supported risk funds might need to be established to safeguard against decapitalization in case of natural disasters.</p>
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Parametric

<p>A government purchases weather insurance from an international insurer. Payouts are channeled to insured through the Ministry of Finance in case of natural disasters and predetermined triggers regardless of damages suffered.</p>	<p>The insurance product does not require detailed information about the insured. Claim settlement, loss adjustments and risk management are relatively simple and transaction costs are low.</p>	<p>Does not cover specific assets, losses or damages caused by accidents. Payments are supposed to be rapid immediately after a disaster, but this seems a serious challenge.</p>	<p>While tested for agriculture in cases of natural calamities, this type of insurance mechanism has not been tested in SSF. Payouts and premium/coupon payments through private insurers may extend the reach of these mechanisms.</p>
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6.1 Traditional insurance

In the case of traditional insurance services, these might work better in cases where the small-scale fishing communities, serviced by a particular insurance company, reside and operate in close proximity of the offices of the insurance provider. This is the case in many small island countries. Where close social networks and proximity exist, the insured and insurers can more easily communicate with each other.

The advantage traditional insurance companies have in providing insurance services to the small-scale fisheries sector is that insurance companies have sound administrative capacity and qualified and experienced staff. They further have full control over insurance policies, claim settlement etc. Re-insurance is easy to obtain. They could further establish linkages with fisheries administrations to acquire information about the risks involved and about the economic performance of the small-scale fisheries sector. Another advantage is that many of the same traditional insurers already provide marine hull insurance (for merchant and fishing vessels) to the large scale vessels and could also relatively easily provide third party liability, health and life insurance to SSF.

A disadvantage, when compared to community/cooperative based and mutual insurance providers, could be that insurance premiums might be higher, depending on the ownership of (and investors in) insurance companies. Profit margins are more important for traditional insurance companies than for community/cooperative based and mutual insurance providers.

6.2 Partner agent-model

In the partner-agent model, distribution of insurance services is facilitated, because ideally the agent, in many cases an NGO, has a network of representations in fishing villages. If this network functions well, information gaps are reduced and risk management is improved. Many NGO micro-finance institutions in coastal areas already provide other social and financial functions (e.g. capacity building, credit and savings) and have strong and established relationships at the village level also with fisheries households. The combination of capacity building, savings, credit, insurance and social empowerment services makes those NGOs highly suitable agents. Administrative responsibilities are shared between partner and agent resulting ideally in the reduction of transaction costs.

However, the weak point is that the strength of the partner-agent model relies entirely on the capacity of the NGO and its links with the small-scale fisheries sector. This includes the capacity of the agent to value fishing vessels and equipment to be insured and to carry out loss adjustments. The micro-insurance report of the Allianz Group of insurers (Allianz Group, 2010) highlights a considerable number of other challenges including the following:

- › Assessment of risks and sharing of risk assessments in the absence of sufficient data;
- › Adaptation of insurance products to meet the diversified needs of its customers;
- › Efficient organization of sales and administration of insurance products;
- › Education of customers in remote regions about insurance and its benefits: and
- › Establishment of market conditions that foster competition in a sustainable way in countries that have passed laws that create incentives for microfinance policies.

Also, the agent needs to be a properly registered legal entity and well established. Considerable training and capacity building is needed for staff of the agent. Technological infrastructure development might be needed for communication and interaction between insurance provider, agent and clients.

6.3 Mutual insurance⁷ and community/cooperative based insurance

Community/cooperative/association based models and mutual or self-insurance programmes might be suitable options as these models are fully integrated in the small-scale fishing communities and should have their best interests at heart.

Information about members of community/cooperative/association based and mutual or self-insurance programmes and their activities, economic status and risks should be easily available. Transaction costs and premiums can be low. Loss and claim adjustment expertise is often locally available, as local costs of construction of vessels and prices of equipment, gears and repairs are known. There is generally a high level of (social) control under this type of insurance.

These types of organization are often established to serve the small-scale fisheries sector and often have government support.

However, as in the case of the partner-agent model, the member based organizations need to be well organized and professional organizations with the capacity to provide insurance services.

A common problem in these organizations is the reliance on members to fulfill the tasks on a voluntary basis. In order to provide insurance services these organizations will have to hire financial professionals to operate their insurance (and credit) programmes.

6.4 Parametric insurance⁸

Parametric (weather index) risk insurance is a relatively new but innovative approach to provide insurance that pays out benefits on the basis of a predetermined index (e.g. rainfall level, wind speed) for loss resulting from weather and catastrophic events. Unlike in traditional insurance coverage, the benefit payable in parametric insurance is determined in advance of the policy purchase by estimating the loss as accurately as possible, subject to certain conditions being satisfied. Parametric insurance arose from the desire for faster claim payouts than typical insurance policies provide. This payout model aims to closely mirror the actual damage on the ground and enables a much more rapid payment as no loss adjusters are required after the event to assess the actual damage.

An insurer may prefer to issue parametric over traditional insurance products because of significant claims-processing savings. With a predetermined trigger and indemnity cost, there is no need for claims adjusting.

Nevertheless, a significant drawback to parametric insurance is 'basis risk' where smaller events may cause a huge loss to the sector, while a large event may conversely cause fewer losses, i.e. people may incur higher losses than the payouts provide for. On the other hand, some insureds may receive payouts without sustaining any losses.

Importantly, parametric insurance should not be seen as an alternative to traditional insurance, but rather as complementary. Experts foresee parametric insurance taking a larger role in insuring catastrophic events, where there is no need for insurers to dispatch large teams of claims adjusters to assess damages

⁷ The system of marine mutual insurance societies is widespread and based on cooperation among the members (in rendering assistance to one another) to keep down expenses in order to obtain appropriate cover at a reasonable cost (FAO,2015a, p.157).

⁸ See: https://corporatesolutions.swissre.com/insights/knowledge/what_is_parametric_insurance.html

or verify coverage. Considerable time and expense are associated with the thousands of claims resulting from catastrophic events. Parametric insurance eliminates the need for claims adjusters and requires only verification of the triggering event for claim payment.

Another potential application for parametric insurance is to help inject short-term liquidity into developing countries suffering from catastrophic events. In several instances, countries are collaborating to form multinational risk pools to act as parametric insurance for catastrophic events common to their regions. Examples of such risk pools are the Caribbean Catastrophe Risk Insurance Facility (CCRIF) and African Risk Capacity. CCRIF helps Caribbean countries recover from hurricanes, earthquakes, and floods, while African Risk Capacity provides parametric coverage for drought, erratic rainfall, and high temperatures (IRBD /World Bank, 2007).

While parametric insurance has certainly merits in helping developing countries in case of catastrophic events, it is not a comprehensive solution to the needs of small-scale fisheries for the following reasons:

- Firstly, parametric insurance provides coverage only in the case of natural disasters and catastrophes but not on a day-to-day basis. It thus does not protect against or manage the majority of risks small-scale fisheries face, which are described in [Chapter 3](#). Neither does parametric insurance provide the full range of benefits, which are expected of insurance services.
- Secondly, and equally important: parametric insurance does neither incentivize nor reward a responsible and sustainable conduct of fishing, fish processing and marketing operations and better preparedness for natural disasters. This is because payouts are not related to actual damage or loss suffered by the insured and to whether an insured has followed responsible and precautionary practices. Instead payments are based on predetermined trigger points.
- Thirdly, parametric insurance operates top-down through the Ministry of Finance of countries and does not encourage or even allow for full stakeholder participation in all stages of the process of identification of insurance needs; formulation of insurance policies; regulations and procedures; and monitoring and evaluation of the impact of insurance programmes. Neither does parametric insurance promote or involve capacity building of stakeholders.

[Annex D](#) provides some additional information on parametric risk insurance potential usefulness for the fisheries sector.

6.5 Making insurance mandatory for vessel registration

All of the options discussed in the previous sections would benefit from making insurance mandatory for the registration of commercial fishing vessels, provided insurance is affordable and meets the needs of small-scale fishers. Mandatory insurance would greatly contribute to mitigate and spread the risks faced by the fisheries sector, enhance the resilience of the fishery industry, both economically and otherwise, and to make insurance more affordable including lowering rates of insurance premiums because of a large pool of insured, which would pay premiums.

It might be advisable though to introduce mandatory vessel insurance in a phased manner. The effort could start with making insurance mandatory first for relatively larger vessels, e.g. vessels of 12 meters length overall or more. These mandatory requirements could be limited to third party liability insurance in the beginning.

7. Risk funds, climate smart practices and precaution

The challenge of large payouts required in the case of natural disasters could be met by establishment of risk funds, guarantee funds or facilities at the national or regional level, capitalized by governments and donors, which would help self-insurance pools and fisherfolk organizations settle claims in the case of natural disasters. Such help might also be needed by private insurance providers, which provide insurance to small-scale fisheries in the case of natural disasters, most of which are related to climate change.

An arrangement as to how such risk funds could be established and function, was developed in the context of the 2015/2016 assessment of insurance needs and opportunities in the Caribbean fisheries sector (Tietze, and VanAnrooy, 2018), and is outlined partially in [Box 5](#). This arrangement could also be applicable to the Asia and Pacific region.

Box 5: Establishment of risk funds for the case of natural disasters

A proposed arrangement would associate existing insurance providers, both private and public, which already offer marine policies and are willing to cooperate with a risk fund through Memorandums of Understanding and other legal instruments and agreements with the ministries of finance and fisheries. While the terms of such agreements would be subject to negotiations, a 10 - year term, with a notice period of two years to end the agreement under specified conditions might be considered reasonable.

The participating insurance providers would be eligible for payouts from a risk fund, to be channeled through the respective ministry of finance. The payouts would be triggered by a joint assessment of the national disaster/emergency management agency, the national fisheries authority and the national federation of fisherfolk organization plus the participating insurance provider that a natural calamity (cyclone, severe storm, rainfall, landslides, severe coastal erosion etc.) has taken place, which has seriously and negatively impacted the fisheries sector, the livelihoods of fisherfolk and the capacity of the sector to contribute to food security, and that has caused a sudden increase in insurance claims from the fisheries sector.

The funds would be used by the insurance providers to settle claims from the fishery sector caused by the natural calamity in a timely manner. In return for the support the insurance providers receive, they would modify their marine policies for fisheries to make them more suitable and affordable for the needs of fishers and the fishery industry. This will possibly include lowering of premiums and incorporation of no-claim bonuses, among others. The modification of present marine policies for insuring commercial fishing vessels should be done in negotiation/consultation between national fisheries authorities, national federations of fisherfolk organizations and insurance companies, which would want to involve their reinsurers.

With a view to promote climate smart practices as well as prevention and mitigation, insured fishers should be obliged to comply with a number of requirements. Regulatory action by fisheries authorities and others may be required to incentivize responsible practices and increase compliance. Examples are provided in [Box 6](#).

Box 6: Climate smart and precautionary practices

1. Fisheries infrastructure needs to be located in safe/suitable places and be properly managed and maintained.
2. Disaster preparation plans need to be in place for the fisheries sector.
3. Fishing vessels, gear and equipment should be properly built, equipped, serviced and maintained, and safely operated. Vessels should only be operated in areas, for which they are certified to be suitable for, according to the manufacturer. For example vessels, which are not suitable for offshore fishing, should not be operated offshore under no circumstances.
4. Owners of fishing vessels need to ensure that their vessels are properly berthed/secured, when in port, and that they have a disaster preparedness plan and know where and how to haul out and store their vessel and gear, should that become necessary.
5. Safety at sea training of fishing vessel operators and crew and certifications of captains and master fishermen can be considered precautionary approaches as well.

Fisheries authorities already inspect fishing vessels' seaworthiness and safety equipment carried on board at the annual renewal of vessel registration. Some countries also record the value of each vessel. All countries should adopt this procedure. If required, fisheries officers should receive further training in vessel inspection/surveying.

Countries that presently do not require for captains of vessels to be certified should introduce such a requirement. Another procedure or rule, which can help to reduce risks and is generally implemented as a measure against illegal, unreported and unregulated (IUU) fishing, is the obligation of fishing vessels to carry proper markings to facilitate their identification. Proper vessel marking will help the authorities, such as navy, coast guards, customs, fishery inspectors and port authorities, to easily identify and find a vessel and it facilitates also finding a vessel in case of distress at sea and in case a vessel is stolen.

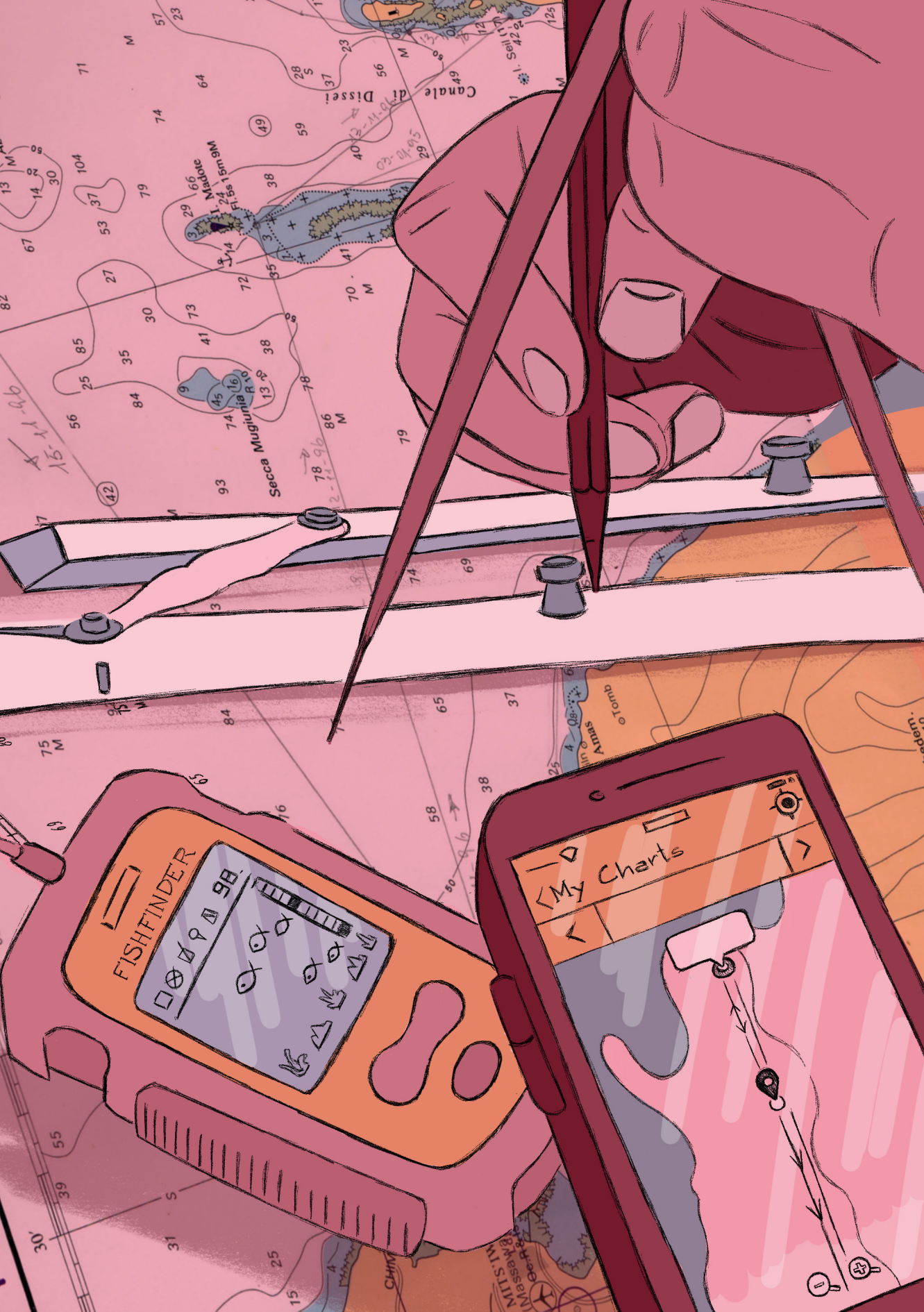
⁹ Technical Guidelines on Safety at sea: www.fao.org/3/a-i4740e.pdf

PART

3



Design and implementation
of small-scale fisheries
insurance programmes



8. Insurance assessments, surveys, policies, procedures and forms

When designing and operating an insurance programme for commercial small-scale fisheries, a number of factors need to be considered. These include:

Preparation phase:

- › An assessment of the economic and financial performance of the fishing industry to be insured and its ecological and environmental viability, sustainability and future prospects.
- › An assessment of needs and opportunities (market assessment) for the provision of insurance services with reference to particular segments of the fishing industry and geographic coverage.
- › An identification of complementary actions, which need to be taken to make insurance services viable and sustainable such as actions for a sustainable use, management and conservation of aquatic resources and ecology; actions for providing health insurance, social security and social welfare, vocational training and other services to small-scale fishing communities.
- › An assessment of the available infrastructure and services for forecasting natural disasters and assessment of damages.
- › A decision on what coverage the insurance services could provide.
- › An assessment of risks with regard to the assets to be insured including climate change related risks.
- › A determination of the cost of insurance services and premiums.

Implementation phase:

- › The establishment of procedures for evaluating insurance applications.
- › The establishment of procedures for adjusting/settling insurance claims.
- › The establishment of procedures for monitoring the performance and impact of the insurance programme and identifying challenges and opportunities in terms of monitoring of insurance enrolment; identification of factors behind increase, decrease and stagnation in the numbers of insured;
- › Assessment of the impact/success of the insurance programme in terms of increasing the economic productivity of the insured, their socio-economic well-being, as well as the implementation of safer and more responsible fishing operations.

While the first three points have already been addressed above, some other important aspects are highlighted below.

8.1 Assessments and surveys

Some of the essential steps for developing a fishing vessel and gear insurance scheme for small-scale fishers are shown in [Table 6](#).

Table 6: Steps for developing a fishing vessel and gear insurance scheme

No.	Steps
1	Collection of information on the potential size and type of the business involved (assets/persons/activities that require insurance and the current value of these assets).
2	A needs/demands assessment (market assessment) for insurance services, which can be done as part of a larger assessment for financial services in general, and could be combined with awareness-raising activities..
3	Collection and analysis of historical information on the fishing fleet, landing site infrastructure and natural and human-induced hazards that have caused losses to the sector.
4	Identification of potential insurers and NGO's that may assist in lowering transaction costs of providing insurance services to SSF.
5	Involvement of relevant government agencies (e.g. fisheries, finance) and fisheries cooperatives in awareness raising and capacity building of SSF on insurance services.
6	Seeking of government support (as necessary) in terms of guarantees and linkage with existing safety net programmes.
7	Development of policies for partnerships (insurer, NGO, fisherfolk representatives, government) that meet the needs and requirements of fishers.

Following the above steps, and in parallel with them, awareness-raising and capacity-building should be undertaken. This would require:

- › Developing materials about the benefits of insurance and the way it works;
- › Launching an awareness-raising campaign to increase understanding among fishing communities about vessel and gear insurance, accident and life insurance, and their benefits and costs, in close cooperation with local authorities, fisherfolk organisations and local agents;
- › Using broadcast and print media, posters and advertisements to disseminate information once the service is formally launched.

Examples of questionnaires to be used in insurance needs assessments, i.e. a questionnaire for fisheries authorities and a questionnaire for fishermen/women, fish processors, vendors can be found in (Tietze and VanAnrooy, 2018).

8.2 Insurance policy and coverage

Insurance coverage needs to be defined in the insurance policy. The insurance policy specifies the legal definitions used in the insurance agreement¹⁰. It also explains the general limitations and financial limits of the insurance policy as well as the exclusions. These can include unauthorized use of the insured assets, transfer of interest, concealment or fraud, dishonesty, intentional acts, seizure of impoundment

¹⁰ Regarding the principles of marine insurance and legal aspects, see FAO, 2015a

by government authorities, war, radioactive contamination, among others.

While many types of coverage can be provided by fisheries insurance, there are three primary or basic coverages that should always be considered:

- **Third party liability, protection and indemnity coverage.** This type of coverage, also referred to as protection or indemnity (PI) coverage, provides coverage for legal obligations to third parties. The legal liability typically arises from injury, loss of life or damage to another's vessel or other property as result of the operation of a fishing vessel. Collisions of vessels in crowded fishing ports or at anchorage locations are examples where third party liability can help. Liability coverage is also available for legal defense costs if a legal action is brought against the owner of a vessel that causes damages to another vessel.
- **Hull and machinery coverage.** This provides coverage for the damage to and loss of hull of a vessel, attached and unattached equipment and belongings. This coverage can be divided in total loss and partial loss coverage. The latter might require additional premiums. The coverage pays for physical damage to a vessel and is best purchased and provided on an all-risk basis. This means that if the cause of the loss/damage is not excluded under the policy, it also provides coverage in the case of natural disasters. However, it is important to note that the owner is responsible for properly maintaining and operating the vessel and that normal wear and tear is typically excluded. Theft can be included here.
- **Nets and gear coverage.** This insures against the loss of fishing gear. In most cases the coverage only applies for the total loss of nets and gear and not for partial loss/damage since this is difficult to assess.
- **Vessel disposal and pollution liability.** This coverage provides liability to pay for removing and disposing of the wreckage, when a vessel sinks offshore or in a waterway and related clean-up expenses that result from oil pollution or contamination.
- **Medical payments coverage in case of crew injury or illness.** This coverage will pay for medical expenses for those who are injured on a vessel, whether the owner is found liable or not.

8.3 Factors that determine the cost of fishing vessel insurance and insurance premiums

Insurers require the fulfillment of two primary conditions before providing coverage against an uncertain event (Freeman and Kunreuther, 1997). The first condition is the ability to identify, and possibly quantify, risk. Insurers must know that it is possible to estimate what losses they are likely to incur when providing different levels of coverage. The second condition is the ability to set premiums for different classes of customers. This requires some knowledge of the customers risks in relation to others in the population of potential insureds.

When determining insurance premiums, insurance companies and programmes need to take into account the cost aspects. The following factors should be taken into consideration.

- The value of the fishing vessel. If the vessel is new, the purchase price or market value will be used for the replacement value. In case of a vessel that has already been used, the underwriter/insurer will use the service of a marine surveyor to determine the overall condition and value of the vessel.
- In some countries, fisheries officers, who are in charge of the annual renewal of fishing vessels registrations have either been trained, or could be trained, to assess the overall condition and value of fishing vessels using depreciation rates or similar means. They could provide their services

to insurers. This seems to be a pragmatic solution in the case of small-scale fisheries and smaller vessels.

- › Length, beam, draft and age of the vessel.
- › Type, horsepower and fuel of the engine(s).
- › Mooring location and seasonal changes of the same (distance to storm shelter locations or hauling stations, as appropriate).
- › Area of navigation of the vessel.
- › Claims history of the owner and/or navigator.

In terms of payment schedules and loss of coverage in the case of missed payments, it should be kept in mind that in the case of small-scale fisheries, incomes can be unpredictable and irregular depending on the success of a particular fishing season. For this reason, payment schedules for insurance premiums should allow for a certain amount of flexibility to avoid that fishers lose their insurance cover, if they miss a single payment. Insurance premiums should be collected annually or semi-annually.

Premiums should also be adjusted and lowered annually in line with the depreciation in value of the insured assets when no claims have been submitted in the previous year. Insurance policies should also include no claim bonuses to incentivize and reward responsible and precautionary operation of fishing vessels.

8.4 Application, determination of loss settlement and claim adjustment

Samples of forms that can be used for evaluating insurance applications and for adjusting/settling insurance claims, can be found in the annexes.

Insurance application forms ([Annex A](#)) collect information on the owner of the vessel to be insured, on vessel details, on the vessel's operation, past losses, requested coverage and limits. An operator's questionnaire ([Annex B](#)), which should be completed together with the application, collects detailed information on:

- › The vessel owner.
- › the vessel to be insured.
- › specific items to be insured and insurance limits.
- › the intended operation of the vessel.
- › qualification and experience of the vessel's operator.
- › details of vessels ownership, operations and crew of the last 5 years.
- › claims/loss record of skipper for the last 5 years on all vessels operated, whether insured or not.

In addition to completing application forms and operator's questionnaire, applicants for insurance coverage should commit to safety-at-sea precautions, including safety training and drills for new crew members joining the vessel.

[Annex C](#) provides an example for how claims procedures should be designed. Marine claims procedures should emphasize the responsibility of the vessel operator to take whatever reasonable immediate steps that are necessary to prevent any further loss or damage including temporary

repairs that may be needed. The operator is also urged to report an accident as soon as possible to the marine surveyor, as late reporting may prejudice insurance coverage.

The loss settlement valuation for some commercial boat insurance including insurance for fishing vessels can be calculated based on “agreed value” or “actual cash value”. Agreed value is a policy that is purchased based on agreed value. It shows on the declaration page the maximum total loss value that will be paid, if the vessel is considered a total loss. The agreed value is determined in advanced between the insurer and the vessel owner.

The actual cash value policy pays the depreciated value of the vessel at the time of the loss, if considered a total loss and the depreciated value for damaged boat repairs and damaged or lost equipment and other property not attached to the vessel. A policy using actual cash value may provide less coverage than an agreed value policy, but typically has a lower premium.

References

Allianz Group. 2010. *Learning to insure the poor. Microinsurance report*. 40 p.

Dercon, Stefan. 2004. *Insurance against poverty*. Oxford University Press.

Environmental Defense Fund, Rare, Meloy Fund and Encourage Capital. 2018. *Principles for Investment in Sustainable Wild-Caught Fisheries*. 17 p.

FAO. 1992. *Revolving loan funds and credit programmes for fishing communities. Management guidelines*. Food and Agriculture Organization of the United Nations. Rome. Italy. 163 p.

FAO. 2000. *Report of the KMI/APRACA/FAO Regional workshop on the effects of globalization and deregulation on marine capture fisheries in Asia and the Pacific*, Pusan, Republic of Korea, 11-15 October 1999.

Tietze, U. Shresthra, B.P. *FAO Fisheries Report No. 624*. Food and Agriculture Organization of the United Nations. Rome, Italy.

FAO. 1995a. *Code of Conduct for Responsible Fisheries*. Rome. 91 p.

FAO. 1995b. *Report of the consultation on the establishment of a fisheries credit network for Asia and the Pacific*. Jakarta, Indonesia, 18-22 October 1994.

Tietze, U. *FAO Fisheries Report No. 516*. Food and Agriculture Organization of the United Nations. Rome, Italy.

FAO. 1996. *Report of the regional consultation on institutional credit for sustainable fish marketing, capture and management in Asia and the Pacific*. Manila, the Philippines, 3-7 July 1995.

Tietze, U. *FAO Fisheries Report No. 540*. Food and Agriculture Organization of the United Nations. Rome, Italy.

FAO. 1998. *Report of the workshop on financing value-added production and marketing of fishery products in Asia and the Pacific*, Kuala Lumpur, Malaysia, 26-30 May 1997.

Tietze, U. *FAO Fisheries Report No. 577*. Food and Agriculture Organization of the United Nations. Rome, Italy.

FAO. 2003. *Microfinance in fisheries and aquaculture. Guidelines and case studies*. FAO Fisheries Technical Paper No. 440. Rome. 114 p.

FAO. 2005. **Increasing the contribution of small-scale fisheries to poverty alleviation and food security**. FAO Technical Guidelines for Responsible Fisheries No. 10. Rome. 79 p.

FAO. 2007. *Credit and microfinance needs in inland capture fisheries development and conservation in Asia*.

Tietze, U., Siar, S.V., Marmulla, G., van Anrooy, R. *Fisheries Technical Paper No. 460*, eds. FAO Rome. 138 p.

FAO. 2009. *Report of the Global Conference on Small-Scale Fisheries – Securing sustainable small-scale Fisheries: Bringing together responsible fisheries and social development*. Bangkok, Thailand, 13–17 October 2008. FAO Fisheries and Aquaculture Report No. 911. Rome.

FAO. 2009a. *Fishing operations. 2. Best practices to reduce incidental catch of seabirds in capture fisheries*.

FAO. *Technical Guidelines for Responsible Fisheries. No. 1, Suppl. 2*. Rome, FAO. 49p.

FAO. 2015. *Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication*. FAO. Rome 2015. 18p.

FAO. 2015a. *Fisheries operations. Best practices to improve safety at sea in the fisheries sector*. FAO *Technical Guidelines for Responsible Fisheries. No. 1, Suppl. 3*. Rome. 196 p.

FAO 2016. *Technical and socio-economic characteristics of small-scale coastal fishing communities, and opportunities for poverty alleviation and empowerment*, by Uwe Tietze. FAO Fisheries and Aquaculture Circular No. 1111. Rome, Italy.

FAO. 2017. *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.

FAO. 2018. *The State of World Fisheries and Aquaculture 2018 - Meeting the sustainable development goals*. Rome, Italy, FAO. 210p.

Freeman, P.K. & Kunreuther, H. 1997. *Managing environmental risk through insurance*. Kluwer Academic Publishers. Boston/Dordrecht/London.107 p.

Hotta, M. 1999. *Fisheries insurance programmes in Asia: experiences, practices and principles*. FAO Fisheries Circular. No. 948. Rome, FAO. 1999. 54p.

International Bank for Reconstruction and Development /World Bank. 2007. *Insurance Against Covariate Shocks. The Role of Index-Based Insurance in Social Protection in Low-Income Countries of Africa*. By: Harold Alderman & Trina Haque.

Shinoj Parappurathu, C. Ramachandran, A. Gopalakrishnan, Dilip Kumar, M.K. Poddar, Manas Choudhury, R. Geetha, K.Mohammed Koya, R. Narayana Kumar, K.P. Salini, P.V.Sunil. 2017a. *What ails fisheries insurance in India? An assessment of issues, challenges and future potential*. In: Marine Policy Volume 86 (2017), pp. 144-155

Shinoj Parappurathu, C. Ramachandran, A. Gopalakrishnan, K. Mohammed Koya, R. Narayanakumar, K. P. Salini and P. V. Sunil. ICAR-Central Marine Fisheries Research Institute, Kochi. 2017b. *Marine Fisheries Insurance in India: Status and prospects*. In: Mar. Fish. Infor. Serv., T & E Ser., No. 233, 2017

SIFFS (South Indian Federation of Fishermen Societies).

Tietze, U. and VanAnrooy, R. 2018. *Assessment of insurance needs and opportunities in the Caribbean*

fisheries sector, FAO Fisheries and Aquaculture Circular No. 1175. Rome, FAO. 62 p.

VanAnrooy, R., Ahmad, I.U., Hart, T., Hotta, M., Ping, Y., Yang, W., Shipton, T., Benoit, C., Ruchismita, R., Upare, S., Siar, S.V. 2009. *Review of the current state of world capture fisheries insurance*. FAO Fisheries and Aquaculture Technical Paper. No. 510. Rome. Italy. FAO. 162 p.

ANNEXES: Sample forms, procedures¹¹ and additional information

Annex A: Insurance application

Name of insurance
APPLICATION FOR INSURANCE
(to be submitted together with completed vessel operator questionnaire)

Name of vessel:.....

Referred by:.....

A. Vessel owner information

Vessel owner (Individual/company/association):.....

Address:.....

Home phone:.....

Mobile phone:.....

Email:.....

Loss/damage payee:.....

B. Vessel information

Vessel marking/identification:.....

AIS/VMS:

Length:.....

Beam:.....

Draft/depth:.....

Gross tonnage:.....

¹¹ The insurance forms and procedures have been adapted to these guidelines from the ones used by the Coastal Marine Fund, Washington State, USA. <https://www.coastalmarinefund.com>. The Coastal Marine Fund (CMF) is a self-insurance program for commercial fishing vessels. Formed in 1993, CMF is committed to the responsible operation of commercial fishing vessels - working for the elimination of careless and reckless operations. CMF member-owners create and maintain funds for loss reimbursement and share the risk of loss and damage to their vessels. Members also assist fellow member's vessels in distress.

Type of vessel:.....

Type of engine/fuel:.....

Year when vessel was built:.....

Name and location of builder:.....

Documentation of vessel purchase/construction:.....

Purchase date:.....

Purchase price:.....

Last survey/stability test of vessel and record of survey/test:.....

Market value of vessel:.....

Replacement cost:.....

Watch alarm installed: Yes/No

Fire suppression system installed: Yes/No

Location of vessel lay up/port:.....

Number and names of crew:.....

Owner operated? Yes/No. If no, name of vessel operator:.....

C. Insurance details

Item to be insured	Insurance limits (currency)
Hull & machinery	
Protection & indemnity (P&I)	
Fishing gear	
Pollution	
Period for which insurance is requested	

D. Operating information

Fishery	Operating area	Operating months	Number of crew

E. Losses in last 5 years

Year	Vessel	Hull or P&I loss	Amount paid

Date

Signature

Name and address of insurance

Annex B. Vessel operator questionnaire

Operator questionnaire

A. Information on vessel operator

Name:.....

Address:.....

Phone and mobile phone:.....

Email:.....

Date of birth:.....

Number of years worked as vessel operator:.....

Number of years worked on fishing vessels in other positions:.....

Certifications/qualifications held:.....

B. Details of previous vessels owned, operated or crewed on in last 5 years

Vessel name	Home port	Size of vessel	Position held	Dates

C. Claims/loss record of skipper for the last 5 years on all vessels operated, whether insured or not

Year	Details of loss	Insurer	Amount of claim

D. Has operator at any time been involved in any major damages/total losses of any vessel whether insured or not? If so, provide details including date, costs, and names of vessel involved.

E. I hereby declare that the particular and answers given in this questionnaire are in every respect true and correct and that I have not withheld any information which could influence the decision of the insurance (name of insurance) with regard to the acceptance of the insurance application.

Date

Signature

Annex C: Marine claims procedures

A. Hull & machinery

1. Insured needs to take immediate and reasonable steps that are necessary to prevent any further loss or damage including temporary repairs.
2. Report any accident as soon as possible to the claim management and adjusting agent/marine surveyor appointed by the insurance. Late reporting may prejudice insurance coverage.
3. Skipper should fax or e-mail insurer written statement, providing full details of occurrence including date, location, cause and a brief description of the damage as soon as possible.
4. When port for permanent repair has been determined, insured need to contact claims adjusting agent again, so that marine surveyor can be sent to inspect damage before permanent repair begins.
5. Insured needs to keep invoices and receipts for all repairs for forwarding to the surveyor for his approval and reporting to underwriters.
6. Insured should notify claims adjustment agent when repairs have been completed and vessel is ready to return to its normal operations.
7. For submission of insurance claims, a separate Hull & Machinery Claim Form should be provided by the insurer and used by the insured.

B. Crew injury and illness

1. Immediate first aid need to be provided to injured crew member. If medical attention is needed, transport of injured crew member to nearest doctor or hospital needs to be arranged.
2. Injury or illness of crew member needs to be reported to claims adjustment agent as soon as possible.
3. Skipper should fax or e-mail claims adjustment agent written statement, providing full details of occurrence including date, location, nature of injury or illness, cause, first aid provided and whether crew member was transported to a hospital/doctor for treatment. Witnesses to the occurrence should write and sign a statement to send with the skipper's report.
4. Insured needs to keep invoices and receipts for any expenses related to crew member's injury or illness. Copies of invoices and receipts need to be sent to the claims adjusting agent as soon as possible.
5. For submission of insurance claims, a separate Crew Member Injury Claim Form should be provided by the insurer and used by the insured, accompanied by a signed statement of the injured crew member.

C. Pollution

1. Serious leakage of oil or other hazardous substances into the water should be reported immediately to the nearest coast guard station or vessel or other responsible government agency.
2. Any clean-up should be initiated as soon as possible.
3. Incident should be reported to claims adjusting agent as soon as possible.

Annex D. Parametric risk insurance

Parametric (Weather index) risk insurance is a relatively new concept in terms of risk transfer, with exposures being covered based on the movement of a weather index, instead of being based on actual losses measured for indemnity purposes. For fisheries weather index insurance it is anticipated that the insurance trigger would be based upon sustained wind speeds being experienced for a specified period of time, from a certain direction that results in either the cessation or reduction of fishing effort from a declared fishing port.

Unlike 'traditional' indemnity-based insurance contracts, an index-based contract pays out if the actual measurement of the index during the period of the contract moves above (or below) an agreed index point. An index is created using a historic data series, for example wind speed and direction for a given period. Index-based contracts settle solely according to a pre-agreed scale of payment, not by reference to actual loss, damage or claim: they are not contracts of indemnity. Hence policy exclusions typical in 'traditional' indemnity contracts do not apply. Weather index products avoid costs associated with individual risk assessment and indemnity, reducing overall product costs. Target buyers for fisheries weather index insurance products would include: fishing vessel owners, seafood processors, fish merchants, fishing boat insurers and credit agencies.

Weather index-based solutions typically have 4 main components:

1. The Index - the component parts of the Index include:
 - The reference Weather Station(s) - this is the location at which the weather parameter is measured.
 - Risk Period - this can range from 1 day to multiple seasons.
 - The weather parameter - this can be based on wind speed, temperature, rainfall.
2. Attachment (Strike) point - This is the point on the index at which the contract starts paying.
3. Limit - This is the point on the index at which the contract stops paying.
4. Payout - This is the amount that the contract pays per movement in the index after the attachment point is reached.

Key requirements

The key requirement for weather index insurance products is to have accurate and reliable data. This can be challenging, as some areas have limited historical data and monitoring capability. This can sometimes be addressed through the use of modelling, and the use of estimates and backfilling data, however these data may not be as reliable as recorded data.

The issue of basis risk

As noted before, the issue of basis risk can lead to a weather event falling short of a trigger, but still resulting in loss or damage; or in triggering a payout when no loss has occurred. In vulnerable fisheries communities this risk is difficult to justify. Therefore additional structures are being examined, whereby if the index-based programme does not trigger, but losses do occur, then at least some level of financial support can be provided.

A hybrid approach

The possibility of using a hybrid approach to an index-based structure is being examined, whereby individuals form a co-operative, risk pool or trust fund managed by the members, provide additional protection. In this case savings (or possibly a traditional indemnity based insurance product purchased by the fisherfolk organization) would be held in a trust or fund. In the event that losses occur the member can then approach the trust for fund for support. The amount of funds available however would depend on the size of the trust fund, or pool, and therefore could be restrictive in terms of financial relief. A hybrid approach could provide for a combination of traditional indemnity-based insurance and parametric insurance products and may be suitable for certain situations. Given that the field testing of a hybrid approach in small-scale fisheries is yet to take place, not any results or lessons learnt from the tests could be provided in these guidelines.

For more information about these guidelines and related activities, please contact:

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These Guidelines for increasing access of small-scale fisheries to insurance services in Asia have been developed to support the implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines).

The purpose of these Guidelines is to increase awareness about the needs of small-scale fishers for better risk management, disaster preparedness and insurance services; to provide guidance to policy and decision makers to help introduce insurance services to small-scale fishers; to build capacity among insurance providers, fisherfolk organizations and other stakeholders; and to promote insurance services that incentivize and reward a responsible and sustainable conduct of fishing operations and a better preparedness for natural disasters.

These Guidelines provide the context and framework in which insurance programmes for small-scale fisheries should be conceived. The document explains why most small-scale fishers are presently not insured. Major risks and consequences faced by fishers are identified and the main components of an enabling environment and different options for the provision of insurance facilities and services are presented. Practical advice is given on how to design and implement insurance programmes that suit the needs of small-scale fishing communities.