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# Guidelines for insurance value and risk assessment of small fishing vessels

With the technical support of



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# Guidelines for insurance value and risk assessment of small fishing vessels

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# Preparation of this document

These *Guidelines for insurance value and risk assessment of small fishing vessels* have been developed to facilitate the provision of insurance services to the small-scale fisheries sector, which is currently underserved by insurance. These guidelines complement the 2015 Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines), and the 2019 Guidelines for increasing access of small-scale fisheries to insurance services in Asia. They also support the implementation of the 1995 FAO Code of Conduct for Responsible Fisheries and contribute to the achievement of the United Nations Sustainable Development Goals (SDGs), particularly SDG 8 (Decent Work and Economic Growth), SDG 13 (Climate Action) and SDG 14 (Life below Water).

The preparation of these guidelines involved a literature review, together with consultations with fisheries insurers, fisherfolk leaders and fisheries authorities. A draft version was reviewed at the Expert Workshop on Developing Guidelines for Inspection and Valuation of Small-scale Fishing Vessels, which was held at FAO headquarters in Rome on 24–26 September 2024 (FAO, 2025b). Thirty-two fisheries insurance experts, maritime safety inspectors, naval architects, fisheries associations and experts, as well as representatives of the Africa Rural and Agricultural Credit Association (AFRACA), the Asia-Pacific Rural and Agricultural Credit Association (APRACA), International Maritime Organization (IMO), International Maritime Law Institute (IMLI) and the CAFI-SSF Network participated in the expert workshop. An updated draft was reviewed at a Validation workshop on developing guidelines for inspection and valuation of small-scale fishing vessels, which was held virtually on 22 January 2025. The document was finalized by FAO in March 2025.

These guidelines were written by FAO consultant Varun Tandon in close consultation with FAO consultants Derrick Menezes and Matteo Scarponi, who were involved in preparing a related document, the *Guidelines for the seaworthiness and safety inspection of small fishing vessels* (FAO, 2025a). The guidelines were reviewed by Raymon van Anrooy from the FAO Fisheries and Aquaculture Division. FAO acknowledges the valuable contributions to these guidelines made by the participants in the expert and validation workshops and by insurance experts from FAO's Rural Transformation and Gender Equality Division (ESP).

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# Abbreviations

**AFRACA**

African Rural and Agricultural Credit Association

**APRACA**

Asia-Pacific Rural and Agricultural Credit Association

**CAFI-SSF**

Global network for capacity building to increase access of small-scale fisheries to financial services

**FAO**

Food and Agriculture Organization of the United Nations

**FRP**

fibreglass-reinforced plastic

**GT**

gross tonnage

**HDPE**

high-density polyethylene

**JCI**

Japan Craft Inspection Organization

**IUU**

Illegal, unreported and unregulated fishing

**PCIC**

Philippine Crop Insurance Corporation

**SDGs**

United Nations Sustainable Development Goals

**SIFFS**

South India Federation of Fisher Societies

**SSF**

small-scale fisheries

**SSF Guidelines**

Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradiction



# 1. Introduction

Capture fisheries, which involve harvesting fish and other aquatic organisms from waterbodies like oceans, rivers and lakes, play a vital role in global food security, livelihoods, and economic development. Within the capture fisheries sector, small-scale fisheries (SSF) contribute 40 percent of global capture fisheries production and employ 60 million people, primarily in low- and middle-income countries (FAO, Duke University, and WorldFish, 2023). Small-scale fisheries cover a vast spectrum of fishing practices, from commercial to subsistence, with a wide range of characteristics. The common challenges of SSF include economic uncertainty as a result of fluctuating fish catches and market prices, and safety risks as a result of unsafe vessels and limited safety training. Hazards at sea are increasing for SSF because of climate change, related extreme weather events, and less predictable sea conditions. Insufficient access to financial tools such as credit and insurance also reduces the capacity of small-scale fishing communities to prevent, cope with, and recover from the risks involved in fishing.

The Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) highlight the importance of credit, insurance, finance and investment to support the resilience of small-scale fishers (FAO, 2015). Access to insurance products not only supports the economic stability of fishing communities, it also contributes to broader objectives such as poverty reduction, sustainable resource use, and climate resilience. Insurance services for small fishing vessels contribute to the achievement of the United Nations Sustainable Development Goals (SDGs), particularly SDG 1 (No Poverty), SDG 2 (Zero Hunger), and SDG 14 (Life below Water). Increasing the insurance penetration in this sector would thus also enable the supply of credit to fishers.

In 2022, the global fishing fleet was estimated at 4.9 million vessels, of which 3.3 million were motorized. Of these motorized vessels, there were 2.6 million small fishing vessels of less than 12 metres in length (FAO, 2024). While 90 percent of large industrial vessels (> 24 m long) and 50–60 percent of semi-industrial vessels (> 12 and < 24 m long) are covered by marine hull insurance, the vessel insurance coverage of small fishing vessels remains minimal, at 5 percent (Van Anrooy *et al.*, 2022). There is thus a great need for insurance, and yet the supply of insurance services to SSF has been limited.

The limited penetration of vessel insurance within the small-scale sector can be attributed to several factors. The insurance industry globally has a limited knowledge of fishing vessels, fishing operations, and the specific insurance needs of this sector (Tietze and van Anrooy, 2019). This knowledge gap leads to a lack of tailor-made products and standardized value and risk assessment methods for small fishing vessels. In certain markets, insurers perceive that insuring small fishing vessels is unprofitable owing to the high costs of transactions, monitoring and claims, in addition to low income from premiums. Moreover, in many countries fishing vessel insurance is not mandatory, reducing the incentive for fishers to obtain coverage. There may also be difficulties reaching fishers directly, by virtue of the absence of fisherfolk organizations willing to act as intermediaries/facilitators. Intermediaries/facilitators can play a critical role in delivery of insurance services. Many fishers have only limited knowledge of how insurance works and the type(s) of coverage available. The absence of specific data on the small fishing vessels insurance market, and the gap in inspection and valuation methodologies, represent additional challenges.

Yet there are solutions to addressing the low insurance penetration in the small-scale fishing sector. For instance, China, Japan, and Thailand have all improved coverage of fishing vessels through government support for the sector, notably through premium subsidies and mandatory insurance requirements. In India, fisherfolk organizations have enhanced fishers' access to insurance by providing mutual schemes in partnership with insurers. Innovations in vessel design, boatbuilding, and seaworthiness assessments could also contribute to increasing insurability (Maritime & Coastguard Agency, 2018).

FAO has been working with the Africa Rural and Agricultural Credit Association (AFRACA), Asia-Pacific Rural and Agricultural Credit Association (APRACA), the International Maritime Law Institute (IMLI) and the Global Network for capacity building to increase access of small-scale fisheries to financial services (CAFI-SSF) to raise awareness of the needs of small-scale fishers among finance and insurance services providers. The Organization has also guided some countries on insurance solutions for SSF.

In light of these efforts, there is a growing awareness of the opportunities for insuring small fishing vessels among insurance providers, government institutions and other stakeholders.

## 2. Objectives and scope

### 2.1. Objectives

These guidelines aim to provide information and practical guidance to facilitate value and risk assessment of small fishing vessels. The purpose of these guidelines is to enable the insurance industry to develop tailored products for this sector and to support collaboration and sharing of information among insurance providers.

The guidelines focus on motorized small fishing vessels, defined as those up to 12 metres in length and typically using outboard motors or inboard engines. However, these guidelines could also be useful for insurance of small non-motorized boats. The objectives of these guidelines are threefold:

1. Improve insurance access for small-scale fishers through simplified asset value assessment and risk management procedures.<sup>1</sup>
2. Raise awareness about the small-scale fishing sector among insurers and enable insurers to design inclusive vessel insurance products that suit the demand and needs of small-scale fishers.
3. Encourage governments to provide support for increasing insurance penetration in this sector.

The target audience for these guidelines includes insurance companies, insurance brokers, risk assessors, independent surveyors, reinsurance companies, insurance regulators, fishers, fisherfolk organizations, boat builders and fisheries- and maritime officers.

### 2.2. What are value and risk assessment and when are they needed

Value assessment is a critical process which insurance companies use to establish the value of a vessel – this in turn serves to establish the sum insured.

There are various valuation methods that determine insurance payouts, including:

- **Agreed value**, which sets a fixed amount at the policy's start, providing predictable payouts regardless of depreciation.
- **Cash value**, which factors in depreciation, covering the item's current market worth at the time of loss, often with lower premiums but less replacement coverage.
- **Replacement cost**, which offers coverage to replace the item with a new equivalent, ignoring depreciation, but generally requires higher premiums.
- **Commercial value**, which aligns payouts with current market value.

Agreed value and cash value are commonly used valuation methods for fishing vessels, offering a combination of payout certainty and relatively lower premiums.

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<sup>1</sup> For the purpose of these guidelines FAO defines small-scale fisheries as fisheries conducted with small fishing vessels of less than 12 metres in length.

Risk assessment is part of the insurance company's underwriting process. It serves to evaluate the risks to which an asset is exposed, in this case a fishing vessel. The risk assessment will provide important information to decide the right premium to charge for insurance coverage. This assessment is needed whenever an insurance policy is considered. It helps the insurer to understand the level of risk involved and price the insurance accordingly.

For fishing vessels, the value and risk assessment processes begin with the submission of an application, together with documentation about the vessel and its operations. The insurer then conducts an initial screening, followed by an inspection and valuation of the vessel. This inspection includes analysing the type of fishing operations, the seaworthiness of the vessel (based on a structural inspection and possibly stability tests), the safety measures in place, and the qualifications of the crew. Additionally, the vessel's claims history is reviewed. Based on the available information, the insurer assesses the value, analyses the risk, calculates the premium and tailors the policy to fit the specific risk profile of the fishing vessel.

# 3. Existing methods for value and risk assessment of small fishing vessels

The value and risk assessment of small fishing vessels focuses on the hull, outboard motors or inboard engines, and any onboard equipment. The value and risk assessment methods for capture fisheries insurance are well-established and have remained relatively consistent over the past decade, by virtue of the influence of the London market on global underwriting standards (Van Anrooy *et al.*, 2022). However, insurers tailor their methods to account for the specific characteristics of each fishing vessel and the regulatory environment. The methods used can be broadly classified as follows:

- comprehensive value and risk assessment methods;
- rules- and table-driven value and risk assessment methods;
- materials-based value and risk assessment methods; and
- community-driven value and risk assessment methods.

## 3.1. Comprehensive value and risk assessment methods

Comprehensive methods involve a thorough, customized value and risk assessment, where insurers review all vessel documentation, followed by onsite inspections. The main steps involved in these methods are outlined below:

### 1. Obtaining vessel documentation and records

Before commencing the value and risk assessment, insurers obtain the vessel documentation to gather comprehensive information about the vessel including:

- **Management and ownership history:** Records of the vessel's ownership and management help insurers assess the reliability and experience of those responsible for the vessel.
- **Vessel registration status:** Evidence that the vessel is registered and complies, through its registration documents, with national and international maritime regulations.
- **Valuation certificate or purchase invoice:** An official document that certifies the current value of the vessel is crucial for determining the appropriate level of coverage/insurance value and for calculating premiums.
- **Loss/claim history:** A record of any previous incidents, claims, or losses helps insurers assess the vessel's risk profile and likelihood of future claims.

### 2. Physical inspections

Insurers often reserve the right to conduct physical inspections of the vessel, before issuing a policy. These inspections serve multiple purposes:

- **Verification of documentation:** Ensuring that the information provided in the application form and documentation is accurate and complete.
- **Assessment of seaworthiness:** Evaluating the vessel's structural integrity, stability, and overall seaworthiness, including the condition of critical systems such as navigation, propulsion, and safety equipment and whether these systems are able to perform the intended functions, including safe operation, and hence are fit for purpose.

- **Risk profiling:** Developing a detailed understanding of the vessel's risk profile, which influences the terms of coverage and the premium rate.

Physical inspections are common for high-value vessels or those insured at higher premiums. For vessels that are renewing their policies, inspections are usually less frequent, unless significant changes have occurred or if the vessel is listed on the combined IUU (Illegal, Unreported, and Unregulated) vessel list.<sup>2</sup>

### 3. Parameters used for value assessment

Factors that are typically considered for value assessment include:

- **Vessel size:** Gross tonnage and overall length.
- **Hull material:** The material of the vessel's hull (e.g., steel, wood, fibreglass, HDPE, aluminium) is a key parameter in determining the vessel's insurance value.
- **Fishing operations:** The type of fishing operation (e.g., trawling, long lining, gillnetting) and fishing area (e.g. coastal waters, high seas, inland waters) influences the vessel's operational risk and, thus, its insurance value.
- **Vessel age:** The age of the vessel is a critical factor as vessels lose value (depreciate) during their lifespan.

### 4. IUU fishing considerations

The marine insurance industry pays an increasing attention to the issue of illegal, unreported, and unregulated (IUU) fishing. Vessels involved in IUU activities pose a higher risk and potential reputational damage to insurers. In response, insurers adopted the following approaches:

- **Blacklisting:** Some insurers, particularly in Europe, have begun to deny insurance coverage to vessels that are listed on the combined IUU vessel list. This helps to combat IUU fishing by reducing the operational capabilities of these vessels.
- **Random inspection:** Insurers may randomly inspect vessels suspected of IUU activities, even after a policy has been issued, to ensure compliance with international and national legislation.

### 5. Risk assessment and premium calculation

Risk assessment and premium calculation are based on a comprehensive evaluation of the vessel's risk profile. This includes:

- **Vessel characteristics:** Size, age, hull material, and the general condition of the vessel.
- **Home:** Port/country and flag state
- **Region:** Exposure to natural disasters such as hurricanes, cyclones, typhoons, tsunamis. Protocols in the event of such a disaster.
- **Claims history:** The vessel's history of incidents and claims, which can indicate the likelihood of future claims.

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<sup>2</sup> This list is available on the IUU website: [www.iuu-vessels.org](http://www.iuu-vessels.org)



- **Coverage scope:** The breadth of coverage (e.g., partial loss included vs total loss only, types of perils included) and any specific endorsements or exclusions.<sup>3</sup>
- **Market conditions:** Broader market factors also influence premium rates, including the availability of reinsurance and trends in the marine insurance sector.

This comprehensive value and risk assessment method, while prudent in terms of risk management, is resource-intensive, costly and therefore more suited to large industrial fishing vessels.

### 3.2. Rules and tables-driven value and risk assessment methods

Another method for value and risk assessment of fishing vessels uses existing surveys or inspections, and rules based, table-driven valuation and risk assessments. The "rules" are the predefined criteria, guidelines, or formulas that are applied in the assessment process. These rules ensure consistency when determining both value and risk. The rules are typically based on industry standards, regulatory requirements, and historical data. They are put in tables, which help insurers to assess vessel characteristics, assign values, and calculate premiums systematically, without the need for new physical inspections.

The differences between these rules and table-driven methods and the comprehensive methods are:

#### 1. Prior inspection data

- Insurers rely on data from previous inspections, such as inspection reports from the vessel construction (pre-registration) or regular inspections, to verify the structure and stability of fishing vessels. In Japan, fishing vessels must obtain a registration certificate from the prefectural governor, which includes regular inspections of the vessel and its documentation. Additionally, some vessels may be inspected by the Japan Craft Inspection Organization (JCI) or the Ministry of Land, Infrastructure, Transport, and Tourism. This reliance on existing inspection records minimizes the need for insurers to conduct their own inspections. Notably, fishing vessels under 20 tonnes or 12 m in length do not require inspection unless they operate more than 12 nautical miles offshore or carry passengers. All fishing vessels are required to be registered.
- In Japan, when assessing the insured value of a newly insured fishing vessel, insurers first obtain the fishing vessel registration card. This card includes essential information such as the vessel's name, owner, type of fishing, registration number, gross tonnage, dimensions, engine manufacturer, horsepower, and equipment details. For second-hand vessels or in cases where there are concerns, insurance staff may visit the vessel at the port to verify its condition, equipment, and alignment with the registration card.

#### 2. Calculation of the insured value

- **Standard value tables:** The insured value of fishing vessels is primarily calculated using standard value tables, which categorize vessels based on factors such as gross tonnage, hull material (e.g. steel, fibreglass, wood, HDPE), age, type of fishery (e.g. trawl, gillnet, longline, seine, traps) and equipment. The standard value per tonne is multiplied by the vessel's gross tonnage to determine the insurance value.
- **Adjustment flexibility:** Insurers have the flexibility to adjust the calculated value within a specified range above or below the standard value, if the standard value is deemed incorrect for the specific vessel.

<sup>3</sup> The most utilized clauses in fishing vessel insurance policies are the Institute of London Underwriters clauses (Institute of London Underwriters, 1982)

- **Special equipment:** For vessels equipped with special, high-value equipment not typically found on similar fishing vessels, the value of this equipment may be separately assessed and added to the overall insured value.
- In Japan, there are two primary methods for evaluating the insured value of fishing vessels, each with an accompanying standard value table. The first method evaluates the fishing vessel as a whole. The second method assesses the values of the hull, engine, and equipment separately, and then sums these values. In the overall evaluation method, the insured value is calculated using a unit price per gross tonnage based on the vessel's hull material and type of fishing. This unit price is multiplied by the gross tonnage, and the value may be adjusted within a range of 30% above or below this calculated amount. For contract renewals and second-hand vessels, a depreciation rate is applied to reflect the vessel's reduced value over time. If neither of these methods yields an appropriate insured value, the vessel's construction cost can be used as an alternative benchmark.

### 3. Risk classification and rules-based premium calculation

- Premiums are determined by applying standardized percentage rates to different categories of fishing vessels, or by using rate tables that consider factors such as hull material, fishing type and gross tonnage or engine power. These tables are based on rules and aim to show the risk associated with the vessel's specific characteristics. Surcharges and discounts are applied based on factors such as vessel age and claims history.

In most cases, standardized procedures and tables are used in Japan to calculate fishing vessel insurance values and premium without physical inspections (see Table 1). This method streamlines the value assessment process and reduces costs while managing the risk of each fishing vessel.

#### 3.3. Materials-based value and risk assessment methods

Materials-based methods categorize fishing vessels based on their type (motorized, non-motorized), hull material (e.g. fibreglass, aluminium, wood, steel, HDPE), and age. The sum insured is determined by the actual cost of materials and construction, as outlined in a "bill of materials" submitted with the insurance application. This method is used in several countries, including Sri Lanka, Thailand and the Philippines. For example, the Philippine Crop Insurance Corporation (PCIC) has the following approach in its underwriting guidelines (see Table 1):

- The sum insured is capped for motorized boats, non-motorized fibreglass boats, and non-motorized hardwood boats.
- In terms of risk assessment, all vessels undergo inspections by PCIC staff, who complete a "Fishing Boat Inspection Report" to verify the type of boat, materials used, and other relevant details before coverage is granted.
- The inspections ensure the accuracy of information provided and that the vessel meets the eligibility criteria, such as being under 3 gross tons, maximum 10 years of age with regular maintenance, and registered with the BoatR or as a municipal boat. Vessels must be certified as seaworthy by the local government unit or registered with BoatR.

The materials-based valuation method allows for accurate and individualized valuation, while risks are managed through the inspection process and by verifying compliance with local regulations.

### 3.4. Community-driven value and risk assessment methods

A community-driven method combines local knowledge, resources, and organizational capabilities of fisherfolk organizations, enhancing the accuracy and effectiveness of value and risk assessments of small fishing vessels.

An example of this method is used in south India, where fisherfolk organizations are involved in the value and risk management process, particularly in the valuation and inspection of vessels (see Table 1). This method includes the following broad steps:

- **Invoice-based valuation:** The insurance value of a vessel and its engines is calculated based on the invoice provided at the time of purchase, which includes essential information such as the age of the boat and its engines. A depreciation rate of 20 percent per year is applied to the value of these assets from the date of purchase.
- **Local expertise and facilitation:** Fisherfolk organizations utilize their local expertise to assist in organizing and facilitating inspections. This is particularly beneficial in areas where individual fishers may find it difficult to communicate directly with insurers.
- **Supporting documentation:** Fisherfolk organizations help vessel owners prepare the necessary documentation, including invoices, for the underwriting process. These documents are crucial for accurate risk assessments and valuation.
- **Negotiation:** Fisherfolk organizations help negotiate better terms and conditions for their members during the insurance process through the use of collective bargaining power.

**Table 1. Comparison of value and risk assessment methods used in different countries**

|   | Japan  | China   | India   | Philippines  |
|---|--|---|---|--|
| Seaworthiness inspection during vessel registration?                              | Yes  | Yes   | No  | No   |
| Mandatory coverage requirement?   | Yes  | Yes   | No  | No   |
| Premium subsidies?  | Yes, up to 32% of premium for fishing vessels < 12 m in length                               | Yes, up to 40% of premium   | No  | Yes up to 100% of premium  |
| Involvement of fisherfolk organizations   | Yes  | No  | Yes   | No   |
| Value assessment  | Price per gross tonnage (GT) based on hull material, fishing type and tonnage classification | Price per GT based on hull material and vessel age  | Invoice based value assessment and based on self-declaration in "South India Federation of Fisher Societies" (SIFFS) mutual insurance within certain parameters | Value assessment for motorized – steel, wood and non-motorized is based on bill of materials for each vessel |
| Depreciation method   | Depreciation rates are fixed based on hull material and vessel age                           | Depreciation rates are fixed for vessel age ranges  | Depreciation is calculated at 20% reduction for each year, assuming straight line depreciation over the vessel's life.  | Calculated using a pro-rata method, which assumes straight line depreciation over the vessel's life          |
| Risk assessment - inspection of small fishing vessel?                             | Use of existing inspection data by prefecture or JCI   | Seaworthiness certificate required  | Inspection by a fisherfolk organization   | Inspection required by PCIC, regional offices or local government staff                                      |
| Risk assessment - calculation of insurance premium for fishing vessel & equipment | Standard rates and tables  | Standard rates and tables based on hull material, vessel age, vessel length and prior claims experience | SIFFS applies a fixed premium rate  | Fixed premium rates are used for PCIC products for small fishing vessels                                     |

Source: Authors' own elaboration.

This method is used by the Post-Tsunami Sustainable Livelihood Programme self-insurance scheme in India (see Table 1), and often employed in self-insured (mutual) insurance schemes or arrangements made through fisherfolk organizations, which can monitor fishers' behaviour and enforce social controls.

The methods discussed above rely on underlying enabling conditions, such as the availability of inspection data, the presence of fisherfolk organizations, and/or the use of premium subsidies. The insurance value assessment also takes into account a vessel's depreciation based on its age, as well as the estimated economic lifespan of the specific type of vessel. Different methods are used to calculate the depreciation of a fishing vessel (see Table 1). The first method provides a standard depreciation percentage based on the hull material and age of the boat (used in Japan); the second method assumes straight-line depreciation over the vessel life (used in the Philippines); and the third method allows the fisher to factor in the depreciation into the self-declared value of the vessel. In China, the depreciation method used is a version of the first method with a standard depreciation percentage based on vessel age ranges.

Some insurers employ a combination of these approaches to optimize both risk management and cost-efficiency and tailor their strategies to the specific needs of their market.

### 3.5. Need for fast-track value and risk assessment for small fishing vessels

The comprehensive value and risk assessment processes mentioned above are typically designed for medium- and large-sized fishing vessels, where the higher vessel values and related premiums justify the expense of a comprehensive value and risk assessment. However, for small fishing vessels the premiums are significantly lower, making the cost of a full underwriting process unjustifiable. Small fishing vessels are often perceived as high-risk, which presents a challenge when balancing effective risk management with cost-efficiency. Fast-track value and risk assessment methods for small fishing vessels would therefore enable insurers to achieve the dual objectives of risk management and cost-efficiency.

However, fast-track value and risk assessment methods rely on the availability of information on the vessels such as registration certificates, seaworthiness and safety inspections, as well as the presence of intermediaries and distribution agencies such as fisherfolk organizations, which can facilitate the supply of insurance services to small-scale fishers. Yet in some countries registration certificates may not be issued for small fishing vessels, while in many others no seaworthiness inspections or stability tests are carried out for small fishing vessels. Additionally, fishers may not be organized into fisherfolk organizations, or these organizations may not facilitate the provision of insurance for their members. Therefore,, insurance companies often still require a comprehensive value and risk assessment process, including inspection, for most small fishing vessels. This results in high operational costs for the insurance company, raising the premium for the fisher and making the insurance unaffordable.

Hence it is important to streamline the value and risk assessment methods for small fishing vessels to make these vessels attractive to insurers, and to develop tailor-made insurance products and services for the fishers.



## 4. Recommended value and risk assessment methods for small fishing vessels

It is essential that the valuation and risk assessment of small fishing vessels balance risk management with cost-effectiveness, in order to maintain the accessibility and affordability of this process. This chapter provides methods to make small vessel insurance attractive to both small-scale fishers and insurers. These recommendations combine the best elements of existing methods and address the diverse needs of small fishing vessel owners, insurers, and regulatory bodies.

### 4.1. Risk qualification/screening process

The risk qualification or risk screening process (see Figure 1) is a critical step that is needed to determine the level of inspection small fishing vessels should undergo during the value and risk assessment process.

By applying specific entry criteria, small fishing vessels can be classified into risk categories (low, medium, or high), which allows for a more streamlined and efficient allocation of resources during the assessment. High-risk vessels require comprehensive inspection, medium-risk vessels may need some additional inspection, while low-risk<sup>4</sup> vessels can be fast-tracked through the value and risk assessment process.

#### Entry criteria for risk qualification

The entry criteria are designed to establish an initial risk profile for each vessel based on:

- available documentation;
- previous inspection records confirming the vessel's structural integrity and stability;
- compliance with safety requirements; and
- photographic evidence of the vessel's current condition.

The results of the assessment based on these criteria help to guide the subsequent valuation and risk assessment steps.

#### Key entry criteria include:

- **Registration and/or builder's certificate:** A valid registration or builder's certificate is essential as it verifies that the vessel was constructed according to recognized standards.
- **Photographic evidence:** The vessel owner must submit recent photos showing the current condition of the vessel, ensuring it aligns with the details provided in the registration or builder's certificate. These images should clearly depict the vessel from all sides to assess any changes to its superstructure, outfitting and/or lifting arrangements that may reduce stability (see Annex 8.1 for photo requirements).
- **Safety inspection certification:** Evidence of the latest safety inspection is required to confirm that the vessel is equipped with necessary safety gear and adheres to local safety regulations. For small undecked vessels, self-declaration may be sufficient, as long as the local fisherfolk organization has checks in place.

<sup>4</sup> For the purpose of these guidelines the term low-risk is used to distinguish from higher risk vessels. Some insurers prefer to use the term "standard risk" for a low-risk asset if the risk is qualified as standard.



- **Self-declaration form:** The vessel owner must complete a self-declaration form, declaring that the vessel remains in its original registered condition, with all safety equipment functioning as required. This form is a key element of the fast-track process, reducing the need for physical inspections when other criteria are met (see Annex 8.1 for elements of the self-certification form).
- **Seaworthiness certificate including a stability assessment:** A recent seaworthiness certificate including a valid stability assessment is essential to confirm that the vessel has been inspected and tested for stability.<sup>5</sup> Prior inspection information in this regard is sufficient. For boats with similar designs, a single seaworthiness certificate may cover all, provided no significant modifications have been made.

Insurers may have limits for the maximum sum insured through the fast-track assessment process. Beyond such limits, a fast-track assessment would not be allowed.

In cases where prior safety inspection data, seaworthiness certificates, or stability booklets are unavailable, it is recommended to perform a physical stability test, which can typically be completed in 10-15 minutes. These tests are crucial for verifying the vessel's basic stability (see the *Guidelines for the seaworthiness and safety inspection of small fishing vessels*).

### **Operationalizing the risk qualification process**

The risk qualification process can be operationalized in various ways, as feasible.

**1. Involving fishers themselves:** Empowering fishers by involving them directly in the risk qualification process can enhance transparency and ownership: fishers are intimately familiar with the conditions and risks associated with their vessels and operations, making them valuable contributors. This approach also reduces transaction costs and builds capacity at the local level. It is especially relevant, but not limited, to mutual insurance schemes in which fisherfolk organizations play a role in facilitating insurance, including supporting value and risk assessment. This has the added benefit of reinforcing mutual trust among the fishers and creating an environment which reduces fraud.

**2. Independent local surveyors:** Utilizing independent local surveyors or assessors can provide an objective evaluation of vessel conditions. To ensure the independence of surveyors, it is recommended to employ professionals who are not directly affiliated with boat vendors to avoid potential conflicts of interest. An innovative approach could be bundling insurance with new vessels – similar to car insurance models – where the surveyor's role is clearly delineated and regulated to maintain impartiality.

**3. Insurer-led:** Insurers conducting their own risk qualification can control the quality and thoroughness of the inspection process. This method may increase costs and transaction times, making it less feasible for remote fishing communities or for small-scale operations.

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<sup>5</sup> Information about vessel seaworthiness and stability assessment can be found in the *Guidelines for the seaworthiness and safety inspection of small fishing vessels* (FAO, 2025a).



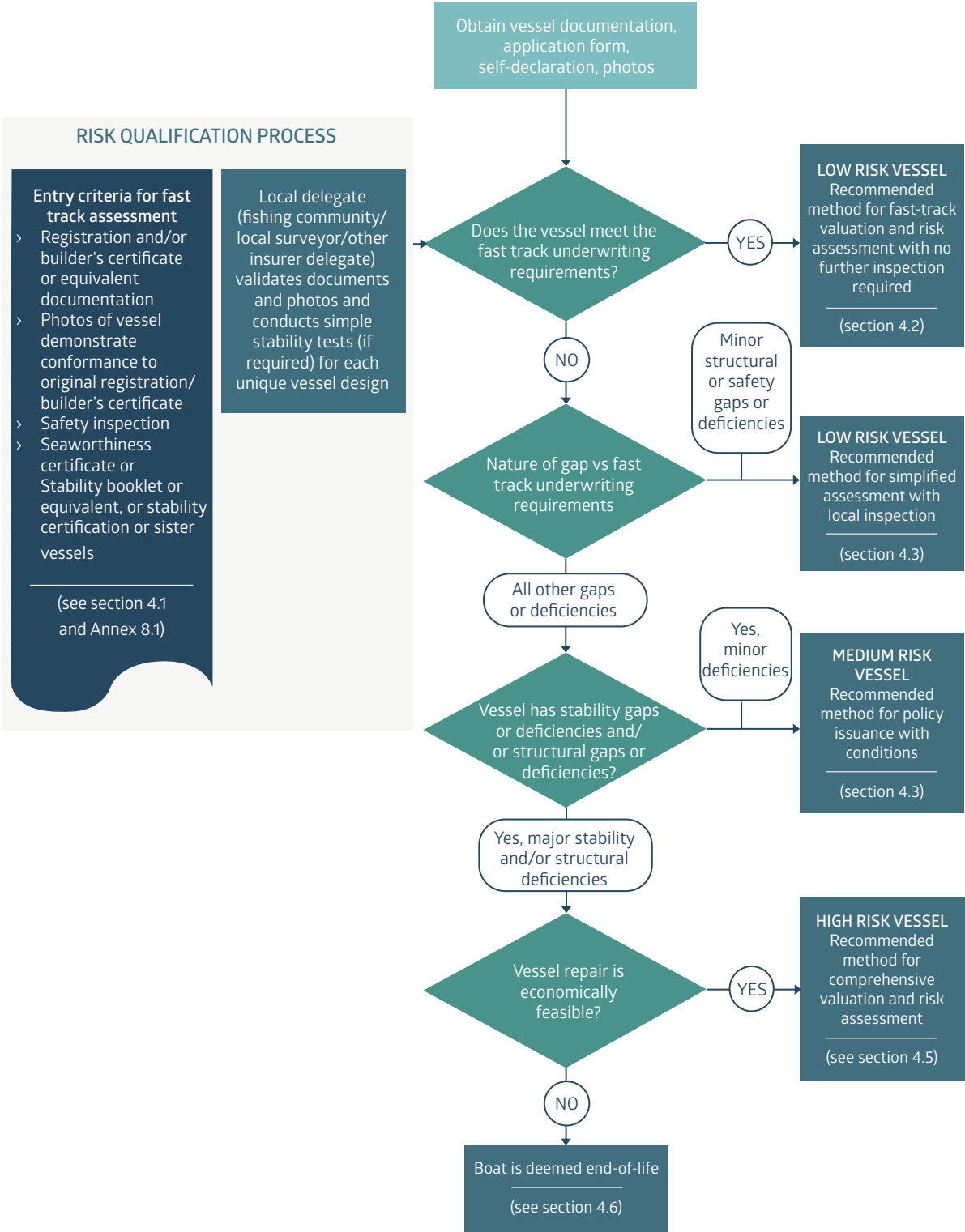
Given the importance of this step in streamlining the overall valuation and risk assessment process, it is recommended that both insurers and authorities invest in capacity building with fisherfolk organizations or local surveyors. This investment will enable these local delegates to validate the required documents and photos before submission to the insurer (see annex 8.1 for a validation checklist). The capacity building material could include simple standards, and information on the measurements that insurers need for risk assessment. Additional recommendations to streamline the process are:

**1. Group inspections** (as in the Philippines example): Conducting (annual) group inspections of small fishing vessels as part of the risk qualification process can reduce costs and improve efficiency. This collective approach allows for the sharing of best practice and knowledge among fishers, and provides possibilities for addressing common issues.

**2. Individual assessments aided by technology:** Leveraging technology such as insurer apps, QR codes and georeferencing can streamline individual inspections. This technology helps to maintain accurate records and provides easy access to vessel histories and compliance statuses. Such tools are particularly useful in remote geographic areas, in areas where group inspections are not feasible.

Technologies increasingly used by insurers involve the use of satellites and drones for inspections. Commercial satellite service providers offer high-resolution imagery, enabling insurers to track fishing vessels before and after specific events, to provide real-time weather alerts to fisherfolk, and to assess damage efficiently. Drones can also be used for conducting detailed inspections, though their use is subject to national regulations.

Figure 1. Decision flow to select the assessment method for fishing vessels



Source: Authors' own elaboration.

## Risk qualification or screening outcomes

The outcome of the risk qualification or screening process determines the path each vessel will take through the valuation and risk assessment procedure (see Figure 1). The following pathways emerge based on risk qualification:

### Low risk vessels

- **Fast-track value and risk assessment:** Low-risk vessels which meet the acceptance criteria (see Table 2 in Annex 8.1) can be fast-tracked through the process, receiving insurance coverage quickly and efficiently.
- **Gaps or deficiencies:** For vessels which have gaps or deficiencies relative to the entry requirements, these can be assessed based on the nature of deficiency:
  - **Safety gaps or deficiencies** → Vessels with safety equipment deficiencies must address these gaps by renewing or restocking the necessary equipment. A local safety inspection should then be conducted, followed by re-certification. Once the safety certification has been updated, it can be resubmitted to the insurer for continued coverage.
  - **Minor structural gaps or deficiencies** → Simplified assessment with local re-inspection: If photos indicate minor structural changes from the original vessel specifications, a simplified assessment will be conducted. These vessels require a local re-inspection to verify that the structural integrity remains intact before proceeding with the insurance process.

### Medium risk vessels

Vessels that do not meet stability requirements - whether due to structural changes affecting stability, failure in stability tests, invalid stability booklets, or deviations from certified sister vessels - should be evaluated based on the severity of the deficiencies.

- **Minor stability deficiencies** → Policy issuance with restrictions: Vessels with minor stability issues can be classified as medium-risk vessels and may be issued insurance policies subject to certain conditions. Such conditions would allow the vessel to operate under restricted conditions, such as limited weather exposure, maximum wave heights or reduced loading capacity, ensuring that safety is not compromised.

### High risk vessels

- **Major stability gaps or deficiencies and/or major structural deficiencies** → Comprehensive assessment: High-risk vessels with significant stability deficiencies or major structural deficiencies must undergo a comprehensive assessment. This assessment may involve substantial interventions, before the vessel can be insured.

By utilizing this risk qualification approach, insurers can ensure that each vessel is assessed based on its risk profile.

## 4.2. Fast track value and risk assessment

The fast-track process is designed for vessels that meet the entry criteria, allowing for fast-track value and risk assessment without the need for physical inspections. This approach is particularly suited for low-risk vessels, which represent most small fishing vessels. The key steps in this method are outlined below (see Figure 2).

### Process overview:

1. **Application form and supporting documents:** The insurer collects the application form and vessel invoice/other valuation document in addition to the documents collected as part of the risk qualification process. These documents provide the necessary information to proceed with the assessment.

2. **Value assessment:** the insurer conducts the value assessment of the vessel based on predefined rules and standardized tables. The insurance value is calculated by multiplying the tonnage of the vessel with the standard price per tonne, which is mentioned in standard tables (see Annex 8.1). These tables can incorporate criteria such as:

a) **Hull material:** The hull material largely determines the vessel's value, as different materials (steel, wood, fibreglass etc.) have varying levels of durability and cost.

b) **Fishing operations type and area:** Understanding the vessel's intended use helps assess associated risks and adjust the value accordingly.

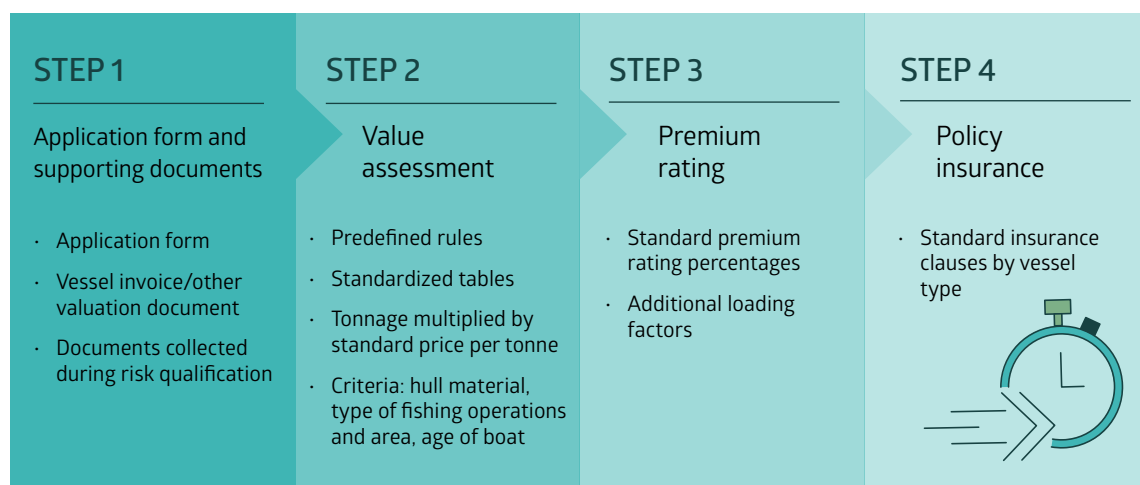
c) **Age of the vessel:** The depreciation rate applied affects the insurance value of the vessel. The depreciation rate can be determined using standard depreciation tables for different types of vessels.

3. **Premium rating:** The insurer calculates the premium by applying standard premium rating percentages to the assessed value, as outlined in the standardized tables (see Annex 8.1). Additional loading factors or discounts may be applied to reflect local contexts and specific risks. For instance, the previous claims experience may be a relevant factor if this information is available.

4. **Policy issuance:** The insurer then issues the insurance policy for the vessel based on standard insurance clauses by vessel type, given that this vessel has been identified as low risk at the risk qualification stage.

Given the standardized, rule-based nature of the fast-track assessment process, insurers can automate many steps. Automation can significantly reduce the time and cost associated with this process. Verification of submitted documents may still be necessary for a sample of applications to ensure accuracy and compliance. This fast-track process reduces the cost and time between insurance application and issuance of the insurance policy, which is beneficial to the insurer and the fishing vessel owner.

**Figure 2: Process flow for fast-track value and risk assessment**



Source: Authors' own elaboration.

### 4.3. Simplified value and risk assessment with local inspection

The fast-track process is designed for vessels that meet the entry criteria, allowing for a quick value and risk assessment without comprehensive physical inspections. This process is particularly suited for low-risk vessels, which constitute the majority of small fishing vessels.

For vessels screened as low-risk vessels with minor structural deficiencies or gaps in safety equipment, a local inspection can enable the vessel to enter the fast-track process. The local inspection steps are conducted between Step 1 and Step 2 of the fast-track process (see Figure 2).

#### Process overview:

**1a. Local delegate inspection:** A local delegate, such as a member of a fisherfolk organization or local surveyor/authority, conducts an initial inspection to verify the vessel's condition. This includes checking for minor structural issues, the status of safety equipment, and ensuring conformity with registration documents (if any).<sup>6</sup> The inspection results in an inspection certificate. If all is fine, then Step 2 in the fast-track process can be undertaken.

**1b. Local rectification and re-inspection:** Any minor issues identified during the inspection can be rectified locally. Following these repairs, the vessel can be re-inspected by the local delegate, who then updates the certification to reflect compliance with structural or safety standards. Step 2 of the fast-track process can then start.

By utilizing the expertise and reach of fisherfolk organizations or local surveyors/authorities, insurers can obtain information required for risk management, while reducing costs.

### 4.4. Policy issuance with restrictions

For vessels with stability gaps or deficiencies, insurance policies may be issued with conditions to facilitate insurance coverage without requiring a full value and risk assessment. Minor deficiencies refer to issues that, while not critical, still require attention to ensure the vessel's safe operation under specific conditions. For instance, a fishing vessel could fail a heel test when lifting a heavy load but passes when lifting a lighter load.<sup>7</sup> Based on the assessment conducted by a local delegate, insurance policies can be issued with the appropriate operational restrictions, such as:

- **Proximity to shore:** Vessels are permitted to operate only within a specified distance from the shore, ensuring they remain in safer, more controlled environments and may easily be rescued if in danger. The risk of encountering breaking waves for beach-launched vessels should be identified and mitigated.
- **Sea state:** Vessels are allowed to operate only under specific wave heights, minimizing the risks associated with larger waves that may overwhelm the vessel.
- **Loading limits:** Vessels must adhere to a maximum loading capacity, which is set to ensure that the vessel remains stable and seaworthy under normal operating conditions.

The Wolfson Stability Guidance referred to in the *Guidelines for the seaworthiness and safety inspection of small fishing vessels* provides an evidence-based framework to aid conditional certification. Insurance policy with restrictions allows medium risk vessels, with minor deficiencies, to obtain insurance coverage while ensuring that safety is not compromised, thus balancing the need for risk management with practical insurance solutions.

<sup>6</sup> An inspection checklist is included in the *Guidelines for the seaworthiness and safety inspection of small fishing vessels* (FAO, 2025a).

<sup>7</sup> See the stability tests in the *Guidelines for the seaworthiness and safety inspection of small fishing vessels* (FAO, 2025a).

## 4.5. Comprehensive value and risk assessment

A comprehensive value and risk assessment is recommended only for vessels that present significant risks due to factors like major structural deficiencies or serious stability issues and for vessels that exceed the operating parameters like area of operation or loading. This method is designed for high-risk vessels and involves an in-depth evaluation to ensure the vessel's safety and insurability.

### Key steps in the comprehensive process:

- **Detailed inspection:** A maritime consultant inspects the vessel, focusing on structural integrity, stability, and overall seaworthiness. This includes evaluating any modifications made to the vessel since its original certification.
- **Stability testing:** If the vessel fails initial stability tests, additional tests and modifications may be required.
- **Rectification and re-certification:** a vessel with significant deficiencies must undergo the necessary repairs or modifications. Once these are completed, the vessel must be re-inspected and re-certified before insurance coverage can be approved.

The comprehensive assessment ensures that high-risk vessels are evaluated and likely hazards are addressed, thereby protecting crew, vessel owners and insurers from unforeseen risks. This longer process is needed to manage the higher risks associated with these vessels, ensuring that only vessels that meet safety and operational standards receive insurance coverage.

## 4.6. End-of-life vessels

Older fishing vessels are more likely higher risk vessels. The hull and machinery have wear and tear, hull material may have deteriorated, and the vessel may have outdated design and safety features. Age-related deterioration often leads to weakened structural integrity and reduced operational efficiency, increasing the likelihood that repairs will exceed the vessel's market value.

In some cases, these vessels may have also sustained damage during storms, hurricanes, or other extreme weather events, further lowering their economic viability and safe usage. Vessels deemed beyond economic repair or operational safety should be declared end-of-life and decommissioned accordingly.

It is crucial that the implementation of these guidelines adheres to the national legislation of the country where the vessels are registered and operated. Each country may have specific laws and regulations concerning the disposal of maritime assets, environmental protection, recycling standards, and hazardous waste management. National legislation often provides instructions on how to responsibly decommission vessels, including requirements for removal of oil and other substances, and for dismantling, and disposal of materials.

### Steps for end-of-life vessels:

- **Full professional assessment:** A qualified maritime consultant inspects the vessel, with special attention to structural integrity, material and equipment wear, stability, and any modifications. The vessel's age should also be considered as a critical factor, as older vessels may face accelerated depreciation and additional wear that contributes to its risk profile. This assessment determines the extent of the deficiencies and the potential costs of bringing the vessel up to safety and operational standards.
- **Economic viability assessment:** The vessel owner evaluates whether the recommended repairs and modifications are economically viable. For older vessels, the accumulated

depreciation may result in market values that are too low to justify expensive repairs. If the cost of making the vessel compliant with safety and stability standards exceeds its market value, the vessel is deemed beyond economic repair.

- **End-of-life declaration and regulations:** For vessels identified as beyond economic repair, local authorities should enforce end-of-life regulations. These regulations ensure that the vessel is safely decommissioned, preventing it from posing risks to the maritime environment, the maritime community or other vessels. Decommissioning should follow environmentally responsible practices to minimize any negative impact.
- **Integration with national laws:** All procedures for declaring a vessel as end-of-life and its subsequent decommissioning should conform to the local maritime and environmental laws.

#### 4.7. Integration of technology and local knowledge

Incorporating technology and local knowledge is important in the value and risk assessment process for small fishing vessels. Indeed, the use of digital tools can be combined with insights provided by local communities. These elements help to: minimize transaction costs; appraise an insurance application quickly; and facilitate the claim and loss adjustment processes.

##### **Technology integration:**

- **Digital documentation:** Insurers can employ digital platforms for the submission and review of documentation. This approach accelerates the assessment process, reduces the likelihood of errors, and facilitates easy access to records for both insurers and fishing vessel owners.
- **Remote inspections:** Insurers can utilize remote inspection technologies, such as video conferencing, especially for cases requiring reassessment, or when there has been a change in vessel ownership. This method minimizes the need for onsite visits, making assessments more efficient and cost-effective.
- **Real-time data collection:** Insurers can leverage real-time data on weather conditions, vessel operations, and fishing activities for risk management (e.g. by using vessel monitoring systems [VMS] or Automatic Identification Systems [AIS]), including monitoring vessels' adherence to agreed operating parameters.

##### **Local Knowledge:**

- **Community involvement:** Insurers can tap into the knowledge of local communities, particularly through fisherfolk organizations. These organizations understand the vessels and operations specific to their region, which makes their inspections valuable.
- **Local training:** Insurers and/or authorities can train local delegates on inspection and certification procedures. This training ensures that processes applied at the community level are consistent and reliable, thereby building local capacity and fostering the long-term sustainability of insurance services.
- **Peer-to-peer models:** An innovative area to explore is integrating peer-to-peer methods into risk assessment, certification, and inspection processes for small fishing vessels. Peer-to-peer approaches empower vessel owners to conduct inspections of other owners' vessels and share their findings through digital platforms, creating a community-based monitoring system. This builds local knowledge, increases trust, encourages compliance, and fosters collaboration between fishers in managing their risks. Supported by technologies like live video conferencing and georeferencing, peer-to-peer models enhance transparency and facilitate the collection and sharing of data. Methods of this kind enable the accurate tracking of inspections, maintenance history, and compliance. While managed within the community, the outputs of these methods can be verified by insurers and regulatory bodies.







## 5. Recommended methods for value and risk assessment of engines and onboard equipment

The value and risk assessment of inboard engines, outboard motors and onboard equipment are critical components of the overall assessment of small fishing vessels. The engines and equipment directly influence the operational efficiency, safety, and value of a vessel. The most cost-effective method for value and risk assessment of engines and onboard equipment is to conduct the assessment along with the assessment of the vessel. This saves time and effort. Thus, if a fast-track method is used for the vessel, the same method could include the engine and onboard equipment assessment. The following methods are recommended:

### 5.1. Surveys and table-driven methods

In places with large fleets of similar vessels, engines/outboard motors and equipment, a table-driven assessment method can be employed. This method utilizes predefined tables that categorize engines and equipment based on key characteristics such as engine power, fuel type, age and expected lifespan. Insurers can use these tables, to estimate the insurance value (including depreciation) for inboard engines, outboard motors and other equipment, without requiring a detailed onsite inspection. This insurance value can then be used to calculate the premium based on standard rates and adjustment factors. This method is cost-effective and efficient, particularly for low-risk vessels.

### 5.2. Self-declaration for engines and onboard equipment

In cases where formal documentation is limited, or where engines and equipment are standard for the type of fishing vessels and their operations, vessel owners may be allowed to self-declare the value of their onboard engines, outboard motors and other equipment. This method is often used in mutual insurance schemes, where the community of fishers collectively assumes the risk. Insurers should provide guidance to vessel owners on how to assess and declare the value of their engines and equipment accurately.

### 5.3. Comprehensive value assessment for engines and onboard equipment

In situations where table driven methods or self-declarations are not possible, a comprehensive value assessment method is used. The comprehensive method includes a detailed review of all relevant documentation pertaining to the engine and onboard equipment. This involves analyzing purchase invoices, maintenance records, and any modifications that have been made to enhance performance. A qualified technician or engineer inspects the operational status and condition of the engine/outboard motor and on-board equipment on site. The inspection covers the following subjects:

- **Engine type and condition:** assessing the engine's brand, model, power output, age, and operational condition. Where available, the number of hours of operations could be used for assessment.
- **Maintenance history:** reviewing the maintenance records to determine the frequency and quality of servicing, which directly impacts the engine's reliability and longevity.

- **Specialized equipment:** evaluating the condition and functionality of any onboard equipment that is integral to the vessel's operations, such as winches, cranes, line- and net hauling systems, ice machines, refrigeration units, radio communication equipment, fish finder, and navigation equipment.

Based on this comprehensive value assessment, the insurer can determine the insurance value and premium for the engine/outboard motor and other on-board equipment.

## 6. Way forward

The successful implementation of these guidelines requires that insurers, government institutions, financial service providers such as rural credit associations [e.g. APRACA, AFRACA, and the Latin American Association of Development Financing Institutions (ALIDE)], and fisherfolk organizations each play their part. This section outlines the actions needed to facilitate effective assessment processes and to support the supply of insurance services to the small-scale fishing sector.

### 6.1. Recommended actions for insurers

Insurers are encouraged to streamline their assessment processes and make small fishing vessel insurance more accessible and affordable. This would allow insurers to access a large untapped market segment with potential for cross-selling other products. The following actions are recommended:

- **Build capacity for serving the small-scale fishing sector:** Insurers that find this segment attractive should make an effort to understand the industry and expand their knowledge of the fishery sector.
- **Adopt fast-track assessment processes:** Insurers should implement the risk qualification and fast track value and risk assessment processes for small fishing vessels. The adoption of these processes minimizes the need for extensive inspections, thereby reducing operational costs and speeding up assessment. By standardizing the value and risk assessment process based on hull material, vessel type, age, life span and equipment, insurers can offer lower premium rates, which are attractive for fishers.
- **Involve fisherfolk organizations:** Insurers should collaborate with fishers organizations, distribution agents including credit unions, NGOs, and microfinance institutions or local community groups that can act as intermediaries. These entities can help streamline the insurance process by facilitating communication, document submission, premium collection, and payment of claims. Aggregation by fisherfolk organizations of their members interested in insurance services enables insurers to reach a larger pool of potential policyholders, which reduces administrative costs and enhances risk pooling.
- **Develop simple assessment tools:** Insurers should invest in the development of simple digital tools that allow fishers to submit documentation and perform self-assessments of their vessels and onboard equipment. These tools can include mobile apps for uploading photos, for completing self-certification forms, and for checking vessel insurance value and eligibility for fast-track assessment. Digital tools can also support remote inspections, real-time data collection, and damage assessments, further reducing the need for costly on-site inspections.
- **Initiate pilot programmes:** Insurers should initiate pilot programmes in countries with well-organized fishing communities and government support. These pilots will help insurers assess fishers' insurance needs and develop suitable insurance programmes for this sector. The pilot programmes allow insurers to test the effectiveness of the fast-track assessment processes and gather feedback for further refinement. The insights gained from these pilots can be used to adapt the assessment methods to different contexts, contributing to broader use and success. These pilot programmes may also provide opportunities for the insurers to gain the trust of fisher communities and will help fishers to increase their knowledge of how insurance works.

## 6.2. Recommended actions for government institutions

Government institutions, such as ministries of finance and fisheries, have key supporting roles in creating an enabling environment for insurers and fishers. Given that some countries have low loss ratios for insurance policies in this sector, government institutions should take steps to encourage the private sector to participate. This would involve cooperation of government institutions with the insurance companies and could include subsidies, financing and enabling legislation. The following specific actions are recommended:

- **Provide sector information:** Governments should compile statistics for small fishing vessels per region, including the number of vessels, vessel sizes, age distribution, average values, and reported vessel accidents and losses. Through collaboration with fisherfolk organizations and insurers data and information collection could be enhanced.
- **Introduce mandatory vessel registration and certification:** Governments should have legislation for mandatory registration and certification for all small fishing vessels. This includes issuing registration certificates and/or boat building certificates by approved builders, which confirm that vessels meet recognized construction and safety standards. Digitalization of registrations and controls would simplify the implementation of legislation and its enforcement.

Regular seaworthiness inspections, including checks on vessel strength, structure, stability, and safety equipment, should be conducted by state-certified inspectors. These inspections are needed to ensure that vessels are fit for purpose and comply with safety regulations.

- **Provide incentives for insurance coverage:** Governments should introduce legislation for mandatory insurance requirements for all fishing vessels and/or offer incentives such as premium subsidies to increase insurance penetration in this sector. These measures will encourage more fishing vessel owners to obtain insurance, thereby expanding the risk pool and making insurance more viable for insurers and affordable to fishing vessel owners. Premium subsidies can be provided conditionally, based on compliance with safety standards and registration. Only vessels that meet minimum safety standards are eligible for premium subsidies.
- **Support fisherfolk organizations:** Governments should promote and support the formation of fisherfolk organizations (e.g. cooperatives, associations, or community groups). These organizations can facilitate the provision of insurance services by acting as intermediaries between fishers and insurers. Governmental support could include providing legal frameworks, technical assistance, and financial resources to help establish and strengthen these organizations.
- **Facilitate training and capacity building:** Governments should provide or sponsor training programmes for local vessel inspectors, fisherfolk organizations, and insurance personnel. These programmes should include training on the application of standardized assessment methods, inspection protocols, and the use of digital tools. Capacity building should also include educating fishers on the importance of insurance, how to maintain compliance with safety standards, and how to effectively engage with insurance providers.
- **Establish end-of-life legislation for vessels:** Governments should establish end-of-life regulations or management measures for vessels that are deemed beyond economic repair. These measures should ensure that crew do not need to work on unsafe fishing vessels, and that decommissioned vessels are safely disposed of in line with maritime safety standards and with minimal risk to the marine environment.

- **Develop sustainable partnerships:** Governments should collaborate with insurers and fisherfolk organizations to ensure long-term sustainability of fisheries insurance programmes. The integration of fisheries insurance with broader financial inclusion and climate change adaptation policies and strategies is important, including linkages with micro-finance, credit and savings programmes and social protection schemes.

### 6.3 Recommended actions for other stakeholders

To achieve the objectives of these guidelines and to support its effective implementation, international organizations, whether governmental or non-governmental, and financial services providers should recognize the special circumstances and requirements of small-scale fishers in developing countries. These stakeholders should collaborate with the insurers and governments to address the insurance needs of small-scale fishers in developing countries, especially in areas of financial and technical assistance, technology transfer, and capacity building.

Collaboration in the implementation of these Guidelines will also support the development of and access to other services that are important for small-scale fishing communities, for example, micro-finance, savings, credit and social protection schemes. Financial service providers that are active in the fisheries sector are keen to collaborate with insurers to manage the risks involved in their lending to the sector. Ensuring that the access to insurance and these other services is also available to women will be key to a successful and widespread implementation of these Guidelines. FAO will, through its SSF Guidelines implementation support programme, contribute to the implementation of these guidelines. Implementing these Guidelines contributes to achieving the Sustainable Development Goals (SDGs) and is therefore a responsibility for all stakeholders.



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# 8. Annex

## 8.1. Fast track assessment checklist and tables

### 8.1.1. Photographic evidence of the fishing vessel

Photographic evidence of the fishing vessel in the water is required. Sometimes, photographic evidence of the fishing vessel on the ground may also be needed, if damage is noted or suspected below the waterline during inspection of the hull.

#### Checklist for vessel photos

| No. | Criteria   | Y/N |
|-----|--|-----|
| 1   | <b>Identification:</b> the photos capture any identifying marks, registration numbers, or other significant identifiers.   |     |
| 2   | <b>Photos of all sides:</b> Provide clear, recent photos of all sides of the vessel.                                       |     |
| 3   | <b>Superstructure:</b> the photos clearly show the superstructure, outfitting, and any lifting arrangements on the vessel. |     |
| 4   | <b>Condition evidence:</b> the photos clearly show the current condition of the hull, deck, and on-board equipment.        |     |

### 8.1.2. Self-declaration form elements

This form will be filled out by the vessel owner and reviewed by the local delegate of the insurer. The main elements of the self-declaration form, proposed in section 4.1 are suggested below:

#### a) Vessel Information:

- Vessel Name
- Registration Number, if available
- Owner’s Name and Contact Information

#### b) Structural Integrity:

- Confirmation that the vessel is in the original registered condition.
- Declaration that no major modifications have been made since the last certification.

#### c) Safety Equipment:

- Confirmation that all required safety equipment is present and in working order.
- Details on the most recent safety inspection and any updates to equipment.

d) Operational Status:

- Information on the vessel's current operational status (active, inactive, etc.).
- Description of the main fishing methods (this could be a set of checkboxes e.g. trawling, long-lining etc.)

e) Crew Information:

- Crew training and experience in safety procedures.
- Number of crew members typically on board.

f) Owner's Declaration:

- Signature and date of the owner, certifying that the information provided is accurate and truthful.

### 8.1.3. Validation checklist

Below the main elements of the validation checklist to be used by an insurer's local delegate during risk qualification.

**Table 2: Validation checklist for risk qualification**

| no. | Item                                       | Details  | Acceptance criteria for fast-track  |
|-----|--|--|---|
| 1   | Vessel documentation and registration      | Registration and/or builder's certificate (or equivalent)      | The vessel must be registered and comply with national and international maritime regulations, if applicable. Documentation must verify the vessel's build standards and provide key information such as tonnage or dimensions.   |
| 2   | Photographic evidence                      | Photos showing current condition of the vessel                 | Clear, recent photos of all sides, showing the vessel's superstructure, any modifications, safety equipment, and visible identification marks such as registration numbers. These photos should align with the registration or builder's certificate.   |
| 3   | Safety inspection certificate              | Certificate verifying safety equipment onboard                 | A recent safety inspection certificate is required. It must confirm that all mandatory safety equipment is present, functional, and meets local safety standards. For small undecked vessels, self-declaration is permitted only if validated by a recognized third-party.  |
| 4   | Self-declaration form                      | Form completed and signed by vessel owner                      | The vessel owner must confirm that no major structural changes have occurred since the last inspection and that the vessel remains in compliance with registration documents. The self-declaration must also confirm that safety equipment is operational, and the vessel is fit-for-purpose.   |
| 5   | Seaworthiness certificate                  | Valid seaworthiness certificate                                | A valid assessment on seaworthiness must be issued in accordance with inspection guidelines. If stability data is unavailable, a physical stability test is required.   |
| 6   | Seaworthiness assessment of sister vessels | Seaworthiness assessment or equivalent for similar vessels     | In cases where a valid seaworthiness certificate exists for a sister vessel, this may suffice, provided there have been no significant modifications. Stability assessments may be accepted from sister vessels, provided their designs are identical and no major structural changes have been made. Any variations or modifications will require re-assessment. |
| 7   | Risk qualification outcome                 | Verification of vessel risk classification (low, medium, high) | The local delegate, appointed by the insurance company, should classify the vessel as low, medium or high-risk and proceed accordingly.   |

Source: Authors' own elaboration.

8.1.4. Illustrative value assessment table

The following table is illustrative and should be customized for each country, considering local factors such as material costs, boatbuilding expenses, and prevalent fishing methods. As outlined in Section 4.2, the purpose of these tables is to standardize the value assessment process. The standard value is calculated by multiplying the standard price per gross ton by the vessel's gross tonnage. This calculated value is then compared to the invoice value to determine the appropriate insurance value (or sum assured). Adjustments can be made to account for specific vessel characteristics.

Table 3: Illustrative value assessment table

| Fishing     | Hull Material | Gross Tonnage (GT) | Age Range (years) | Standard value (price per GT) | Adjustment factors   |
|-------------|---------------|--------------------|-------------------|-------------------------------|--|
| Trawler     | Steel         | 2 – 5              | 0-5               | \$ X,000 - \$ Y,000           | Could include factors such as quality of maintenance, frequency of inspection, presence of advanced safety equipment |
|             |               | 5-7.5              | 6-10              | \$ X,000 - \$ Y,000           |  |
|             |               | 7.5 to 10          | 10-15             | \$ X,000 - \$ Y,000           |  |
|             | FRP           | 2 – 5              | 0-5               | \$ X,000 - \$ Y,000           |  |
|             |               | 5-7.5              | 6-10              | \$ X,000 - \$ Y,000           |  |
|             |               |                    |                   |                               |  |
| Gill netter | FRP           | 2 – 5              | 0-5               | \$ X,000 - \$ Y,000           |  |
|             |               | 5-7.5              | 6-10              | \$ X,000 - \$ Y,000           |  |
| Trap netter | Wooden        | 2 – 5              | 0-5               | \$ X,000 - \$ Y,000           |  |
|             |               | 5-7.5              | 6-10              | \$ X,000 - \$ Y,000           |  |

Source: Authors' own elaboration.

If the GT is not known, then the following formula can be used to calculate GT for small fishing vessels, based on the vessel length, breadth and depth.

Multiply together the length (L), breadth (B) and depth (D) in metres and multiply the product by the factor 0.16. (Maritime & Coastguard Agency, 2022). For example, a small fishing vessel with a length of 7m, breadth of 2.2m and a depth of 0.8m =  $(L \times B \times D \times 0.16) = (7 \times 2.2 \times 0.8 \times 0.16) = 1.97 = 2 \text{ GT}$ .

Please note that GT is always presented in full numbers, without decimals.

8.1.5. Depreciation

The recommended method for depreciation is to use to the mathematical formula below, similar to the one employed by the Philippine Crop Insurance Corporation, to compute depreciation:

Depreciation (D) = [Age of fishing boat (A) x Replacement Value (RV) - Scrap Value (SCV)] / Life span of the fishing boat (L)

where SCV = 0 if the boat is made of wood.

Example 1: A 10m length steel hulled fishing of vessel is 5 years old. The replacement value is USD 120 000. The local scrap value of steel is USD 150/tonne. The vessel weight is 16 tonnes. The estimated lifespan of the vessel is 25 years.

Depreciation (D) =  $\frac{A \times RV - SCV}{L} = \frac{5 \times 120\,000 - 2\,400}{25} = USD\,23\,904$

Example 2: An 8m length FRP hulled fishing vessel of 2 years old. The replacement value is USD 23 000. The scrap value is 0, as FRP cannot be recycled locally. The estimated lifespan of the vessel is 12 years.

Depreciation (D) =  $\frac{A \times RV - SCV}{L} = \frac{2 \times 23\,000 - 0}{12} = USD\,3\,833$

8.1.6. Sample premium rating tables

The following table is illustrative and should be customized for each country and insurer, considering local factors including claims experience. It accounts for factors such as hull material, vessel age, and gross tonnage, allowing insurers to calculate premiums based on the vessel's insured value and associated risk. The table provides a standardized approach while allowing for adjustments based on specific vessel characteristics.

The premium is calculated using the following formula<sup>1</sup>:

Premium = Sum Insured (Insurance Value) × Base Rate × Adjustment Factors.

<sup>1</sup> Several adjustment factors may be used and their application is based on the insurer's underwriting and premium adjustment guidelines.

Table 4: **Sample premium rating table**

| Hull material | Gross tonnage (GT) | Age range (years) | Base premium rate (% of insured value) | Adjustment factors                          |
|---------------|--------------------|-------------------|--|---|
| Steel         | 2-5                | 0-5               | X%                                     |   |
|               | 5-7.5              | 6-10              | Y%                                     |   |
|               | 7.5-10             | 11-15             | Z%                                     | + A% if > 10 years.                         |
| FRP           | 2-5                | 0-5               | X%                                     | + B% if claims in last year.                |
|               | 5-7.5              | 6-10              | Y%                                     | - C% if vessel is equipped with AIS or VMS. |
| Aluminium     | 2-5                | 0-5               | X%                                     |   |
|               | 5-7.5              | 6-10              | Y%                                     |   |
| Wooden        | 2-5                | 0-5               | X%                                     |   |
|               | 5-7.5              | 6-10              | Y%                                     |   |

*Source:* Authors' own elaboration.

Example: An FRP vessel of 3 GT and 3 years of age has been assigned a standard value of USD 5 000 (see Table 3). The base premium rate is 4% and an adjustment factor of -10% is applied because the vessel was inspected annually by the authorities in recent years.

Gross Premium (P) = sum insured (GT x standard value per GT) x Base rate +/- (Adjustment factor 1 x Base Premium sum)

Step 1 : Base premium = (3 x USD 5 000) x 4% = USD 600

Step 2 : Gross Premium = USD 600 - (10% x USD 600) = USD 540



These Guidelines for insurance value and risk assessment of small fishing vessels have been developed to facilitate the provision of insurance services to the small-scale fisheries sector worldwide. These guidelines complement the 2015 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 enable the insurance industry to develop tailored products for small-scale fishers and to support collaboration and sharing of information among insurance providers. The guidelines focus on motorized small fishing vessels, defined as those up to 12 metres in length and typically using outboard motors or inboard engines.

The document describes the existing methods for value and risk assessment of small fishing vessels. It provides recommended value and risk assessment methods for small fishing vessels, engines and onboard equipment. The guidelines recommend a standardized, rule-based fast-track assessment process, suited for low-risk vessels which represent most small fishing vessels. The document discusses how digital technologies, and local knowledge can accelerate insurance application and review processes. It provides checklists, self-declaration forms, guidance on depreciation and methods for value assessment of small fishing vessels. Practical guidance is given to insurers, government institutions and other stakeholders to facilitate implementation of the guidelines and improve insurance access for small-scale fishers.

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