ARTICLE IN PRESS

Marine Policy xxx (xxxx) xxx-xxx



Contents lists available at ScienceDirect

Marine Policy

journal homepage: www.elsevier.com/locate/marpol



Taking stock of the status of implementation of the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries: A country-level assessment framework

Catherine A. Courtney^{a,*}, Robert Pomeroy^b, Stephen H. Brooks^c

- ^a Tetra Tech Inc., 737 Bishop St., Honolulu, HI, USA
- ^b Connecticut Sea Grant, University of Connecticut, 1080 Shennecossett Road, Groton, CT 06340, USA
- ^c United States Agency for International Development, 1300 Pennsylvania Avenue, NW, Washington, D.C. 20523, USA

ARTICLE INFO

Keywords: Small-scale fisheries Voluntary guidelines Assessment framework

ABSTRACT

With the growing recognition of the significance of small-scale fisheries, the FAO working member states developed the *Voluntary Guidelines on Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication* (SSF Guidelines). In order to increase awareness and catalyze the uptake of the guidelines by national governments, a simpler framework and process was developed and tested in two countries for use by governments to assess their progress in meeting the guidelines. These SSF Guidelines were re-structured into an assessment framework to enable a country-level assessment of the status of implementation and to inform development programming and project design. The assessment process consisted of a combination of desk reviews, expert consultations, and workshops. The SSF assessment framework and process provides a step forward to increase awareness and application of the SSF Guidelines in support of sustainable small-scale fisheries.

1. Introduction

Securing sustainable small-scale fisheries is an emerging global development agenda [1-6]. With the growing recognition of the significance of small-scale fisheries to food security, local and global economic growth, biodiversity conservation, and other development objectives around the world, the FAO working member states developed the Voluntary Guidelines on Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) [7]. Rooted in the Code of Conduct for Responsible Fisheries [8], the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT) [9]; the recommendations of the Voluntary Guidelines on the Progressive Realization of the Right to Adequate Food in the Context of National Food Security [10], and the Principles for Responsible Investment in Agriculture and Food Systems [11], the SSF Guidelines support the visibility, recognition, and enhancement of this globally important small-scale fisheries sector and promote socially inclusive small-scale fisheries by calling for an equitable distribution of fishing rights and raise the importance of protecting all forms of legitimate marine tenure rights, from formal to informal, particularly for women that have been discussed and promoted globally [3,12,13].

The SSF Guidelines help capture the depth and breadth of smallscale fisheries as a sector, especially linkages internal and external to the sector [7,14,15]. Comprised of 90 specific guidelines organized under 10 themes [7], the SSF Guidelines are necessarily aimed at states for adoption and implementation but require support from a diverse range of sectors and stakeholders. The responsible governance of tenure is emphasized as a key theme of the SSF Guidelines. Besides advocating for the development of legislation to protect diverse forms of legitimate rights, the SSF Guidelines call on governments to grant preferential access to small-scale fishers for waters under national jurisdiction to achieve equitable outcomes as well as to engage in redistributive reform. The SSF Guidelines also encourage states to address human welfare and safety along the value chain, gender equality in which women play a substantial yet unrecognized role in the sector, and the impacts of natural disaster, climate change, and armed conflict on fishing communities.

In order to increase awareness and catalyze the adoption of the SSF guidelines, governments together with other stakeholders need to assess the status of implementation as a first step to establish a baseline from which to prioritize investments and measure progress. The existing 90 SSF guidelines are written in paragraph form making it difficult to use as-is for conducting such an assessment. This paper presents a simple

E-mail addresses: kitty.courtney@tetratech.com (C.A. Courtney), robert.pomeroy@uconn.edu (R. Pomeroy), sbrooks@usaid.gov (S.H. Brooks).

https://doi.org/10.1016/j.marpol.2018.12.005

Received 19 March 2018; Received in revised form 21 November 2018; Accepted 6 December 2018 0308-597X/ © 2018 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/BY-NC-ND/4.0/).

^{*} Corresponding author.

C.A. Courtney et al.

Marine Policy xxxx (xxxxx) xxxx—xxxx

assessment framework and process to support a participatory country-level assessment of the status of implementation of the SSF Guidelines. The SSF assessment framework is intended to: (a) raise awareness of the SSF Guidelines among development partners; (b) enable an assessment of the status of implementation of guidelines at a country level; and (c) identify gaps and opportunities for investment for development programs and partners working across a diversity of sectors. The assessment framework is not intended to replace the SSF Guidelines but to transform them into a format that can be used for assessment. The SSF assessment framework was tested in two countries (Indonesia and Philippines). Sample results are presented to illustrate the process. Lessons learned to improve and utilize the assessment framework and process are discussed.

2. Methodology

Key Features

A number assessment tools have been developed to assess the status of small-scale fisheries management or related themes such as tenure and gender equity [16–21]. Many of these tools are designed to include primary data collection and a combination of indicators to assess ecological, social, economic, and governance dimensions of small-scale fisheries. The methodology for developing the SSF assessment framework and process was informed by a review of two frameworks considered most relevant in assessing status of implementation of international agreements and best practices. A comparison of key features of these frameworks are provided in Table 1 and discussed below.

The World Bank's *Land Governance Assessment Framework* (LGAF) [22] is a participatory and consensus-driven approach designed to help countries assess their policies and practices regarding land governance and setting baselines for monitoring of progress (Table 1). The LGAF is a comprehensive process that involves assessment of five themes, 27 indicators, and 120 dimensions. Panels of subject matter experts are convened to review the assessment and rank governance indicators on a four-point scale. The process may take 6–9 months.

The ActionAid Toolkit for Assessing Implementation of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Forests, and Fisheries [23] is a rapid and participatory assessment tool that uses desk studies, stakeholder and expert reviews, and community consultations to validate and provide feedback on the assessment. Both World Bank and ActionAid assessment frameworks are intended to enable crosscountry comparisons.

The SSF assessment framework and process was designed first and foremost to unpack the information in the SSF Guidelines in a manner that could support a rapid country-level assessment of the status of implementation. As in the other frameworks, desk reviews, expert inputs, focus groups discussions are used as part of a process to develop a consensus around the status of implementation. Rating is also used to help facilitate that consensus. The SSF assessment framework was not intended to facilitate cross-country comparisons but rather to increase awareness of the multisector nature of securing sustainable small-scale fisheries and support the development of an integrated portfolio of actions and investments to improve in-country implementation.

2.1. Development of the SSF assessment framework

The SSF assessment framework was developed by first compiling the original text of the 90 SSF guidelines, organized under the 10 themes, into an excel spreadsheet.

Each of the 90 SSF guidelines were reviewed and restructured into action-oriented "good practice statements." An example of this restructuring is provided below:

- Original SSF Guideline: States should provide small-scale fishing communities and individuals, including vulnerable and marginalized people, access through impartial and competent judicial and administrative bodies to timely, affordable and effective means of resolving disputes over tenure rights in accordance with national legislation, including alternative means of resolving such disputes, and should provide effective remedies, which may include an entitlement to appeal, as appropriate. Such remedies should be promptly enforced in accordance with national legislation and may include restitution, indemnity, just compensation and reparation.
- Good Practice Statement: Provide small-scale fishing communities
 and individuals, including vulnerable and marginalized people, access
 through impartial and competent judicial and administrative bodies to
 timely, affordable, and effective means of resolving disputes over tenure
 rights and provide and enforce effective remedies.

In some cases, the original SSF guideline was divided into two good practice statements due to its length and complexity. In other cases, where the original guideline provided numerous examples or supplementary information, some of this detail was rephrased or excluded from the good practice statement. The assessment framework is not intended to replace the SSF Guidelines but to transform them into a format that can be used for assessment. Overall, the SSF assessment framework was developed to retain as much of the original language of

ActionAid Toolkit for Assessing Implementation of the Voluntary

Table 1
Comparison of key features of two assessment frameworks reviewed in developing the SSF assessment framework and process.

World Bank Land Governance Assessment Framework (LGAF) [22]

		Guidelines on Governance of Tenure (VGGT) [23]
Assessment Objectives	• Diagnostic instrument to assess the status of land governance at the country or sub-national level	• Toolkit to assess country-level status of implementation of the VGGT [9]
	 Facilitate the dissemination of good practices across countries 	 Identify program investments to improve implementation of VGGT
	 Establishes a baseline for participatory monitoring. Use results for global and intra-regional comparisons 	 Serve as a basis for dialogue and cooperation towards better VGGT implementation
		Enable tracking change in status over time
		Support cross-country comparison
Assessment Framework	 Comprehensive, structured assessment framework and scorecard consisting of five themes, 27 indicators, and 120 dimensions covering all aspects of land governance 	 Assessment framework consists of six key principles and indicators Indicators and guiding questions focus on national legal and policy frameworks and implementation and community awareness and
	 Framework can be adapted based on in-country context 	perceptions of the six principles
Process	 6–9 month participatory/consensus drive approach among experts, specialists, and key stakeholders 	 Participatory approach among experts, specialists and national and local stakeholders
	 First assessment made for each dimension based on data gathering and analysis by an expert investigator 	 Desk studies conducted to develop a draft assessment on legal, policy, and institutional status of each key principle
	Rating assigned to each of the 116 dimensions by nine technical panels Technical validation workshop and policy dialogue to validate	 Focus groups with community members to assess on-the-ground implementation
	findings, rankings, and discussion of recommended actions	 Interviews and peer, stakeholder and expert reviews used to review, validate and provide feedback on the draft assessment

C.A. Courtney et al.

Marine Policy xxxx (xxxxx) xxxx-xxx

Table 2

Summary of the SSF assessment framework composed of eight themes and 20 strategies based on the SSF Guidelines [7] (see Appendix A for complete SSF assessment framework with good practices for each strategy).

- A. Responsible governance of tenure
- 1. Recognize and protect legitimate tenure rights
- 2. Grant preferential and equitable access and use
- 3. Address competing and conflicting resource uses
- B. Sustainable resource management
- 4. Promote responsible fishing practices and policies that ensure sustainable resource use
- 5. Strengthen the capacity of stakeholders to manage resources sustainably
- 6. Develop effective monitoring, control, and surveillance systems
- 7. Develop effective co-management arrangements
- C. Social development, employment, and decent work
- 8. Improve working conditions and safety for small-scale fisheries workers
- 9. Develop human resource capacity of small-scale fishers and fishing communities
- 10. Diversify livelihoods and income-generating activities
- 11. Ensure access of children and youth in fishing communities to education
- D. Value chains, post-harvest, and trade
- 12. Build capacity for small-scale fisheries to benefit from market opportunities
- Improve the value chain for fish and fishery products for domestic and export markets
- 14. Reform national policies to minimize adverse impacts of domestic and international trade on small-scale fisheries
- E. Gender equality
- 15. Mainstream gender equality as an integral part of small-scale fisheries development
- F. Disaster risks and climate change
- 16. Recognize and address the differential impact of natural and humaninduced disasters and climate change on small-scale fisheries and communities
- G. Policy coherence, institutional coordination, and collaboration
- Adopt national policies and laws that support an integrated, holistic, ecosystembased approach to marine and coastal management
- Establish mechanisms for institutional coordination and collaboration at international, regional, national, and subnational levels
- H. Information, research, and communication
- 19. Improve knowledge of social-ecological systems
- 20. Improve access to information and data needed for decision making

each guideline while enabling the reader to quickly grasp its meaning and significance.

After the restructuring process, complementary or sequential good practice statements within each theme were grouped. These groupings facilitated the development of "strategy statements" under each theme (Table 2). Strategy statements were developed to articulate an overarching approach toward achieving a group of good practices. Strategy statements were developed to further give the assessment framework a more actionable structure. Finally, good practice statements under two of the original 10 themes in the SSF Guidelines, capacity development

and implementation support and monitoring, were considered cross cutting and incorporated in the remaining eight themes (Fig. 1). The resulting SSF assessment framework consists of eight themes, 20 strategies, and 72 good practices (Appendix A).

2.2. Testing of the SSF assessment process

The SSF assessment process consists of a combination of: (a) desk review; (b) expert and stakeholder consultations; and (c) workshop to provide a country-level assessment of the status of implementation of SSF Guidelines. The SSF assessment process was tested to varying degrees in the Philippines and Indonesia. A desk review was prepared for the Philippines and Indonesia [12,13]. The desk review was refined through stakeholder consultations in each country. A workshop was conducted in Indonesia attended by over 30 participants from government, nongovernment, and private sector.

The desk review was conducted to summarize the national/subnational legal, policy, and institutional framework in place to support good practices under each strategy and theme. The assessment framework was used as the outline for the desk review (e.g. responsible governance of tenure; sustainable resource management; social development, employment, and decent work; value chain, post-harvest and trade; gender equality; disaster risk and climate change; policy coherence, institutional coordination and collaboration; and information, research and communication). In addition to a summary of the legal, policy, and institutional framework, the desk review documented national and local government programs and donor, NGO, or community-led projects for each theme to highlight examples of the status of subnational/local implementation of the good practices.

Stakeholder consultations were conducted through interviews with in-country experts and focus group discussions to review and refine the information summarized in the desk review and gather additional feedback on the political will and national institutional capacity to support implementation of the SSF Guidelines. Focus group discussions and expert consultations were conducted with staff from two United States Agency for International Development (USAID) funded fisheries projects in the Philippines and Indonesia. Participants of these consultations were generally aware of the SSF Guidelines but were not familiar with the details. Using the SSF assessment framework, participants were able to quickly assess the county-level status of strategies and good practices for which they had expertise. Due to time limitations, interviews were not conducted with stakeholders from all sectors represented in the assessment framework. The desk reviews for the Philippines and Indonesia were revised based on these consultations and in the case of Indonesia, based on the workshop [12,13].

A 1 ½ -day workshop was conducted (only in Indonesia) to provide

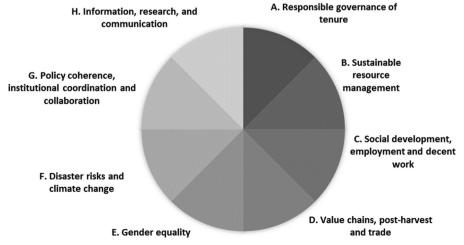


Fig. 1. Eight themes of the SSF assessment framework based on the SSF Guidelines [7].

C.A. Courtney et al. Marine Policy xxxx (xxxxx) xxxx—xxx

a forum for stakeholders to use the assessment framework to evaluate the status of implementation of the SSF Guidelines and identify gaps and opportunities for legal, policy, and institutional reforms that could support sustainable small-scale fisheries. Over 30 participants from national government, nongovernmental organizations, and academic institutions participated in the workshop. Experts gave presentations on the current situation and context for selected assessment themes. The outputs of the workshop were used to update the desk review.

Participants were organized into break out groups by theme and drew on the presentations and their knowledge and experience to assess the status of implementation using the SSF assessment framework. A worksheet was provided with focus questions to assist participants review and discuss the status of implementation of each strategy and good practice. An example of the assessment framework worksheet for *Theme A – Responsible Governance of Tenure*, is shown in Table 3.

For each theme, participants reviewed each good practice statement and identified the national legal, policy, and institutional framework supporting that good practice and provided examples of subnational or local implementation. Participants identified accomplishments and gaps in implementation and developed qualitative ratings and supporting rationale for each strategy and theme. Finally, participants identified recommendations for improving the status of implementation of the SSF guidelines based on their assessment.

A simple rating system (Tables 4 and 5) was introduced as part of the workshop to support a consensus-based approach to the assessment process. Participants rated each good practice statement in the theme based on: (a) the extent are SSF good practices are supported by the national legal, policy, and institutional framework and (b) the extent to SSF good practices are implemented on the ground (Table 4). A 3-point scale (low (1), medium (2), and high (3)) was used to rate each good practice statement (Table 5). After rating each good practice, participants developed a rating for each strategy, then each theme, maintaining separate ratings for national policy and local implementation. An overall thematic rating was assigned by the participants using Table 5.

Rating is viewed as an optional step and was not intended to serve as a quantitative exercise. An example of a completed rating from the Indonesia workshop is provided in Table 6. The rating was used to quickly generate consensus around the status of implementation and as a tool for visualizing the assessment results (Fig. 2). Fig. 2 depicts themes showing the highest and lowest scores. It also highlights the themes that were not assessed during the workshop due to a lack of expertise available at the time. While it is recognized that the use of this simple rating system has limitations, workshop participants were able to come to consensus in the limited period available for the workshop.

3. Results

The SSF assessment framework (summary in Table 2; complete framework in Appendix A) provided a standardized and comprehensible structure for synthesizing the results of desk research and inputs gained from multiple sectors. The rephrasing of SSF Guidelines as good practices and regrouping these good practices under a set of strategies for each theme enabled participants of stakeholder consultations and the workshop to conduct a rapid assessment providing relevant information and identifying information gaps for further investigation and recommendations for improvement.

The SSF assessment process, consisting of desk reviews, stakeholder consultations, and a workshop, provided multiple entry points and opportunities to conduct and refine the results of the assessment even within a limited amount of time. In the Philippines and Indonesia, the SSF assessment framework was used to develop and refine the desk review based on research, expert knowledge and input from stakeholder consultations [24]. In Indonesia, the SSF assessment results of a multisectoral, national-level workshop were used to conduct a preliminary assessment and together with stakeholder consultations was used to

Example worksheet of the SSF assessment framework for one theme and one strategy with associated good practices (see Table 4 for rating process, Table 5 for rating matrix, and Appendix A for complete SSF assessment

3. RESPONSIBLE GOVERNANCE OF TENURE (theme)	Overall thematic rati	Overall thematic rating (national and subnational):	
1. Recognize and protect legitimate tenure rights (strategy)	National Legal, Policy, & Instituto To what extent are SSF good practic national legal, policy, and institution National rating (all strategies): Strategy Rating:	National Legal, Policy, & Institutional Framework To what extent are SSF good practices supported by the national legal, policy, and institutional framework? National rating (all strategies): Strategy Rating:	Subnational/Local Implementation To what extent are the SSF good practices implemented on the ground? Subnational rating (all strategies): Strategy Rating:
Good Practices	Rating	Results/Rationale	Rating Results/Rationale

rights to aquatic resources and land and small-scale fishing areas enjoyed by small-scale fishing communities.

b. Ensure that small-scale fishers, fish workers and their communities have secure, equitable, and socially and culturally appropriate tenure rights to fishery resources (marine and inland) and small-scale fishing areas and adjacent land, with a special

caming unstream on minimizer

Gaps and Recommendations
What are recommendations/potential investments needed to improve the legal/policy/institutional framework to better support the SSF

What are recommendations/potential investments needed to improve subnational/local implementation of the SSF Guidelines?

attention paid to women with respected to tenure rights

c. Recognize, respect, and protect local norms and practices, as well as customary or otherwise preferential access to fishery resources and land by small-scale fishing communities including indigenous peoples and ethnic minorities consistent with

international human rights law.
d. Ensure that small-scale fishing communities are not arbitrarily evicted and that their legitimate tenure rights are not otherwise extinguished or infringed.

C.A. Courtney et al. Marine Policy xxxx (xxxxx) xxxx—xxx

inform the desk review [25].

The workshop also explored the use of a rating system to help participants achieve consensus around the status of implementation of good practices in the SSF assessment framework. A review of the rationale and rating of good practices conducted as part of the workshop assessment revealed that participants used several common criteria to assign a rating for the assessment of the national legal and policy framework and subnational and local implementation. Examples of the assessment results and rating given by participants for three themes at national and subnational/local levels of assessment are discussed below to illustrate thought process and rationale used by participants for rating.

3.1. Assessing the national legal, policy, and institutional framework

For most themes assessed, workshop participants were able to easily identify the national laws, regulations, executive orders and programs relevant for each good practice. Scoring the extent to which SSF good practices were supported by the national legal, policy, and institutional framework rested largely on the groups understanding of: (a) the strength and explicitness of the national legal and policy framework, (b) presence/absence of guidelines for specific laws and policies that enabled consistent implementation, and (c) institutional capacity to implement the law or policy.

Participants gave the national legal and policy framework for the theme Responsible Governance of Tenure an overall rating of 2 or medium (Table 6). Good practices under the Strategy 1 - Recognize and protect legitimate tenure rights, received the highest scores, reflecting the participants consideration that these rights are enshrined at the highest level, the Constitution, and multiple laws and regulations exist that acknowledge, respect, and protect traditional community rights. Further, participants recognized the presence of and mandate to use guidelines on marine protected area management and marine spatial planning as supporting the national policy framework to protect legitimate rights and reduce conflicting resource uses. Good practices under the remaining Strategies 2 and 3 received the lowest scores reflecting perceived weak policy on curbing open access through preferential resource use rights for small-scale fishers that compete with large scale fisheries. Participants also noted an insufficient administrative system for recording tenure rights that would partially address competing and conflicting resource use rights.

Participants gave the national and legal policy framework under the theme, Social Development, Employment, and Decent Work an overall rating of 3 or high (Table 6). Good practices under Strategies 10 and 11, Diversify livelihood and income generating activities and Ensure access of children and youth in fishing communities to education, respectively, were rated high due to the abundance of laws, policies, and programs. Regardless, participants identified several areas for needed improvement. Good practices in Strategies 8 and 9, were rated as medium reflecting the absence of specific regulations to improve safety at sea for small-scale fishers and the need for a long-term strategy for capacity building and empowerment of small-scale fishers to replace the existing short-term

Table 5Rating matrix for good practices, strategies, and themes in the SSF assessment framework

	National Legal and Policy Framework Rating			
Subnational/Local	(Laws, Policies, Regulations, Institutions)			
	RATING 1	RATING 2	RATING 3	
Implementation Rating (Programs, Projects, Actions)	Low	Medium	High	
	(weak legal, policy,		(strong legal, policy,	
	institutional		institutional	
	framework)		framework)	
RATING 1	1	2	3	
Low (isolated examples)				
RATING 2	2	3	4	
Medium		3		
RATING 3	3	4	5	
High (many examples)				

efforts that lacked follow through.

Participants gave the national legal and policy framework for the theme *Gender Equality* at 1 or low (Table 5) citing the legal and policy framework pertaining to gender equality was mostly implied lacking explicit statements or requirements.

3.2. Assessing subnational and local implementation

The extent to which SSF good practices are implemented at subnational and local levels was more challenging for workshop participants because most of the participants were representatives of national government agencies. Scoring the extent to which good practices are being implemented at subnational and local levels largely rested on the groups knowledge of: (1) specific programs, projects, and other on-the-ground efforts and (2) the effectiveness of these efforts.

Participants gave the subnational/local implementation under the theme *Responsible Governance of Tenure*, a rating of 1 or low (Table 6). Good practices under each strategy across the board were rated as low citing limited efforts to protect customary and informal tenure rights initiated by community organizations, NGOs, government and to secure preferential use to fisheries resources considering large scale fishing interests. In addition, participants cited specific examples of tenure insecurity such as land reclamation that have resulted in loss of fishing grounds and displacement of small-scale fishers despite national requirement for environment impact review process designed to protect vulnerable stakeholders from marginalization as a result of development

Participants gave the subnational/local implementation under the theme, *Social Development, Employment, and Decent Work* an overall rating of 2 or medium (Table 6). Good practices under *Strategy 8 – Improve working conditions and safety for small-scale fisheries workers*,

 Table 4

 Steps for rating good practices, strategies, and assigning an overall thematic rating.

- Step 1 Good Practice Rating: For all 72 good practices (across the 8 themes and 20 strategies) and at both "National Legal, Policy, & Institutional Framework" and "Subnational/Local Implementation" levels participants use a worksheet (see example, Table 3) to document assessment results and rationale for scoring each good practice on a scale of 1–3 using the rating matrix using Table 5.
- Step 2 Strategy Rating: For each strategy (at both "National Legal, Policy, & Institutional Framework" and "Subnational/Local Implementation") a rating is determined by the participants after discussing the scores and rationale for all good practices within each strategy.
- Step 3 National & Subnational Ratings: A national and subnational rating for each theme is determined by the participants after discussing the scores and rationale for all strategies under each theme.
- **Step 4 Overall Thematic Rating:** An overall thematic rating on a scale of 1–5 is assigned based on cross referencing national and subnational/local implementation ratings using Table 5.
- Step 5 Summary Status Table: A table of status of implementation for each theme is prepared showing the national/subnational strategy rating and overall thematic rating for each theme (see example, Table 6).

C.A. Courtney et al. Marine Policy xxxx (xxxxx) xxxx—xxx

Table 6Ratings from SSF assessment based on the Indonesia workshop.

Theme	Rating			
	1 – low; 3 – high		Overall Thematic Rating Matrix	
	National	Subnational		
A. Responsible governance of tenure	2	1	2	
B. Sustainable resource management	3	2	3	
C. Social development, employment, and decent work	3	2	4	
D. Value chains, postharvest, and trade	3	3	5	
E. Gender equality	1	2	2	
F. Disaster risks and climate change	_	-	-	
G. Policy coherence, institutional coordination, and collaboration	2	1	2	
H. Information, research, communication	-	-	-	

^{*}Themes F and H were not assessed.

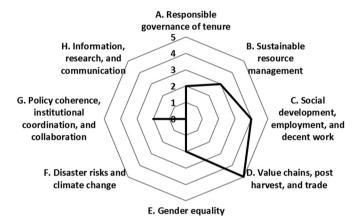


Fig. 2. Visual representation of the thematic rating generated using the SSF assessment framework in workshop (Themes F and H were not assessed).

received a score of 1 or low, reflecting perceived lack of implementation of national laws including a mandate for fisheries industries to apply for human rights certification. Good practices under Strategy 10 – Diversify livelihood and income generating activities and Strategy 11 - Ensure access of children and youth in fishing communities to education, received scores of 3 or high with participants able to cite many government and nongovernmental programs on the ground. Good practices under Strategy 9 – Develop human resource capacity of small-scale fishers and fishing communities, received a medium score or 2, to reflect that many training programs were available to small-scale fishing communities, but of limited effectiveness as these were short-term trainings with little or no follow up.

Participants gave the subnational/local implementation for the theme *Gender Equality* a 2 or medium (Table 6). In contrast to the low national rating for this theme, participants noted that many local fisheries programs and interventions were targeted to fisherwomen as well as fishermen in the community. However, in many instances the roles of fishermen are still dominant in accordance with traditions and norms in Indonesian communities, including that of fishing communities.

4. Discussion

4.1. SSF assessment framework

The SSF assessment framework facilitated in-depth discussions of the status of implementation of the SSF Guidelines. Through these discussions, a number of insights emerged related to: (1) the level awareness of the SSF Guidelines, (2) the level of understanding of the existing national legal and policy framework for small-scale fisheries and potential gaps, and (3) the need for collaboration and policy coherence among multiple sectors, not just fisheries managers, to secure sustainable small-scale fisheries.

Many participants of stakeholder consultations and the workshop were generally aware of the SSF Guidelines; however, few had reviewed them in the context of their existing laws, policies, and programs. The SSF assessment framework enabled all participants to readily discuss and evaluate the status of implementation and fostered a greater appreciation of the multi-dimensional nature of small-scale fisheries as a sector. Participants recognized the need to engage other agencies and experts in the assessment process to provide a more complete picture of the status of implementation and to develop specific recommendations for investment.

The SSF assessment provided a forum for stakeholders to discuss and develop a greater understanding of the multitude of national and subnational laws, policies, and institutions that directly and indirectly affect the small-scale fisheries sector. Using the SSF assessment framework revealed inconsistencies and gaps in stakeholder knowledge the legal and policy framework to support the multiple dimensions of small-scale fisheries management. For example, the legal, policy, and institutional framework for tenure governance generated numerous discussions on how or if tenure rights are protected, under what circumstances, and who the responsible government entity was to protect those rights. These discussions increased awareness and understanding of various laws, policies, and programs among participants as well as identified the need for greater policy coherence among different departments and agencies.

The assessment process helped to identify areas of policy and programmatic conflicts and gaps. This was particularly evident in assessing the status of implementation of responsible governance of tenure as an essential but often undervalued element of securing sustainable small-scale fisheries. For example, participants recognized that a legal framework may be in place to support a particular theme of the assessment, but implementation mechanisms were weak or absent. A recommendation to develop an integrated policy document was proposed to clarify and communicate existing national laws, policies, and programs for small-scale fisheries at both national and local levels of governance. In this regard, the desk review, refined through expert consultations, focus groups, and the workshop, could serve as a useful tool to document and clarify the existing status as well as gaps or needed revisions in policies.

4.2. SSF assessment process

The SSF assessment process, consisting of desk review, stakeholder consultations, and workshop, provided multiple entry points and an iterative process to conduct the assessment. Key factors limiting the completion of a comprehensive assessment included: (1) breadth of expertise and experience from multiple sectors needed to complete an

C.A. Courtney et al.

Marine Policy xxxx (xxxxx) xxxx-xxx

assessment of all themes, (2) additional time needed to review and revisit the assessment results and recommendations with key stakeholders, (3) the need for a follow up process to use the results in developing an integrated, multisector action plan or investment strategy.

A broad cross-section of stakeholders from relevant government, private sector, and nongovernmental organizations at national and subnational levels is needed to conduct a comprehensive assessment of all eight themes in the SSF assessment. Participants recognized the need to engage different sectors (i.e. labor, health, information management, disaster management) to avoid gaps in the assessment. Even with key stakeholders involved in the assessment of a particular theme, participants realized that additional expertise would be needed to assess some of the good practices.

Stakeholders at both national, subnational, and local levels of governance (i.e., national and local government, non-governmental organizations, community groups, fishers, traders) are needed to provide better information on the extent and effectiveness of subnational and local implementation. Recommendations from workshop participants highlighted the value of conducting the SSF assessment at subnational levels with small-scale fishers and fishing associations to increase awareness of local stakeholders about the SSF Guidelines and national laws and policies concerning small-scale fisheries and gather better information on local conditions and context as it relates to implementation of the SSF Guidelines.

The SSF assessment process can support a rapid appraisal or more comprehensive process where the end goal could be a national plan of action or investment strategy. An initial workshop at both national and local levels would be useful in conducting a preliminary assessment that could be followed by an in-depth desk review and stakeholder consultations. A second round of national and local workshops could present the results of the assessment for review and refinement and vet the recommendations for national implementation. A panel of experts could be assembled for each theme to contribute to and refine the assessment results, similar to that used in the LGAF [22].

The assessment process also included a qualitative rating system to assign a score to the status of implementation of each theme. During the workshop it was emphasized that rating of each assessment theme was intended to facilitate deeper discussion and not to provide an absolute measure of status. If a rating system is to be used in the SSF assessment process, more detailed criteria and focus questions should be developed to help participants identify and document strengths, weakness, and gaps for each good practice. The criteria that emerged from discussions on rating provide a good starting point for developing a more structured set of focus questions.

5. Conclusions

"Small-scale fisheries" is shorthand for a globally significant and complex sector that includes subsistence, artisanal, and commercial fisheries that supply food and support livelihoods and rural economies especially in developing countries [1,26]. The SSF Guidelines reflects this complexity highlighting the multiple dimensions that need to be considered or that impact the sector. Interactive governance among multiple sectors and at multiple scales will be needed to catalyze recognition and implementation of the SSF Guidelines [27]. The SSF assessment framework and process provides a step forward toward unpacking this complexity in order to increase awareness and application of the SSF Guidelines to support improvements in the governance of small-scale fisheries.

The SSF assessment framework and process as tested can certainly be improved through additional testing and refinement in the Philippines, Indonesia, and other countries. Further refinement could be modeled after the LGAF which provides a more rigorous and standardized approach toward this type of assessment [28]. As with the VGGT, the SSF Guidelines could be integrated into the LGAF or be developed as a standalone theme of the LGAF that can be cross referenced as needed with relevant land governance indicators.

One impetus for development of the SSF assessment framework and process was to highlight the need for multiple sectors, some of which are outside typical national fisheries agencies, to collaborate to secure sustainable small-scale fisheries. For this reason, the SSF assessment is one of the tools included in a primer for USAID and its partners [29] to encourage the development of a more holistic and integrated investment portfolio that covers the multiple dimensions involved in securing sustainable small-scale fisheries. By bringing together a diversity of stakeholders, the assessment process can help to identify gaps and opportunities for countries to improve management of and invest in small-scale fisheries across multiple sectors in order to enable a holistic approach toward securing sustainable small-scale fisheries. The results of the assessment could be used to develop a multi-sectoral investment strategy to reduce extreme poverty in fishing communities.

Acknowledgements

This publication was based on independent research on the Tenure and Global Climate Change program that was supported by the United States Agency for International Development by Tetra Tech, through a Task Order under the Strengthening Tenure and Resource Rights Indefinite Quantity Contract (USAID Contract No. AID-OAA-TO-13–00016). This publication does not necessarily represent the views of USAID or the United States Government.

Appendix A. SSF assessment framework composed of 8 themes, 20 strategies and 72 good practices adapted from the SSF Guidelines [7]

- A. RESPONSIBLE GOVERNANCE OF TENURE STRATEGIES AND GOOD PRACTICES
- 1. Recognize and protect legitimate tenure rights
- a. Recognize, record, respect, and protect all forms of legitimate tenure rights, taking into account, where appropriate, customary rights to aquatic resources and land and small-scale fishing areas enjoyed by small-scale fishing communities.
- b. Ensure that small-scale fishers, fish workers and their communities have secure, equitable, and socially and culturally appropriate tenure rights to fishery resources (marine and inland) and small-scale fishing areas and adjacent land, with a special attention paid to women with respect to tenure rights.
- c. Recognize, respect, and protect local norms and practices, as well as customary or otherwise preferential access to fishery resources and land by small-scale fishing communities including indigenous peoples and ethnic minorities consistent with international human rights law.
- d. Ensure that small-scale fishing communities are not arbitrarily evicted and that their legitimate tenure rights are not otherwise extinguished or infringed.
- 2. Grant preferential and equitable access and use
- a. Grant preferential access of small-scale fisheries to fish in waters under national jurisdiction, with a view to achieving equitable outcomes for different groups of people, in particular vulnerable groups, including the creation and enforcement of exclusive zones for small-scale fisheries. Small-scale fisheries should be given due consideration before agreements on resource access are entered into with other countries and parties.
- b. Adopt measures to facilitate equitable access to fishery resources for small-scale fishing communities.
- c. Restore access to traditional fishing grounds and coastal lands to small-scale fishing communities displaced by natural disasters and/or armed conflict, taking into consideration the sustainability of fisheries resources.
- 3. Address competing and conflicting resource uses

C.A. Courtney et al.

Marine Policy xxxx (xxxxx) xxxx-xxx

- a. Recognize that competition from other users is increasing within small-scale fisheries areas and that small-scale fishing communities, in particular vulnerable and marginalized groups, are often the weaker party in conflicts with other sectors and may require special support if their livelihoods are threatened by the development and activities of other sectors.
- b. Consider the social, economic, and environmental impacts of large-scale development on tenure rights through impact studies, and hold effective and meaningful consultations with these communities, in accordance with national legislation.
- c. Provide small-scale fishing communities and individuals, including vulnerable and marginalized people, access through impartial and competent judicial and administrative bodies to timely, affordable, and effective means of resolving disputes over tenure rights and provide and enforce effective remedies.
- d. Establish mechanisms to support fishing communities affected by grave human rights violations to rebuild their lives and livelihoods, including the elimination of any form of discrimination against women in tenure practices in case of natural disasters and/or armed conflict.

A. SUSTAINABLE RESOURCE MANAGEMENT STRATEGIES AND GOOD PRACTICES

4. Promote responsible fishing practices and policies that ensure sustainable resource use

- a. Adopt measures for the long-term conservation and sustainable use of fisheries resources and to secure the ecological foundation for food production giving due recognition to the requirements and opportunities of small-scale fisheries.
- b. Recognize that rights and responsibilities come together and tenure rights are balanced by duties, and support the long-term conservation and sustainable use of resources and the maintenance of the ecological foundation for food production.
- c. Promote fishing practices that minimize harm to the aquatic environment and associated species and support the sustainability of the resource.
- d. Avoid policies and financial measures that may contribute to fishing overcapacity and, hence, overexploitation of resources that have an adverse impact on small-scale fisheries.

5. Strengthen the capacity of stakeholders to manage resource sustainably

- a. Enhance the capacity of small-scale fishing communities to enable them to participate in decision-making processes.
- b. Develop knowledge and skills to support sustainable small-scale fisheries development and successful co-management arrangements.
- c. Facilitate, train, and support small-scale fishing communities to participate in and take responsibility for, their legitimate tenure rights and systems, and the management of the resources on which they depend for their well-being and that are traditionally used for their livelihoods, with special attention to equitable participation of women and vulnerable and marginalized groups.

6. Develop effective monitoring, control, and surveillance systems

- a. Improve availability and access to information necessary for responsible small-scale fisheries and sustainable development, including on IUU fishing.
- b. Establish new or promote the application of existing monitoring, control, and surveillance systems applicable to and suitable for small-scale fisheries.
- c. Establish effective monitoring and enforcement mechanisms to deter, prevent, and eliminate all forms of illegal and/or destructive fishing practices having a negative effect on marine and inland ecosystems.
- d. Improve registration of small-scale fishers to support monitoring, control and surveillance systems and provide to the state fisheries authorities the information required for the management of the activity.

7. Develop effective co-management arrangements

- a. Promote participatory management systems, such as co-management.
- b. Ensure clarification and agreement on co-management roles and responsibilities through a participatory and legally supported processes.
- c. Encourage and support the role and involvement of both men and women, whether engaged in pre-harvest, harvest, or post-harvest operations, in the context of co-management and in the promotion of responsible fisheries.
- d. Address transboundary issues with shared waters and fishery resources, to ensure that small-scale fishing communities granted rights are protected.

A. SOCIAL DEVELOPMENT, EMPLOYMENT, AND DECENT WORK STRATEGIES AND GOOD PRACTICES

8. Improve working conditions and safety for small-scale fisheries workers

- a. Create conditions for men and women of small-scale fishing communities to fish and carry out fisheries-related activities in an environment free from crime, violence, mafia activities, piracy, theft, sexual abuse, corruption, and abuse of authority.
- Address occupational health issues and unfair working conditions of all small-scale fishers and fish workers by ensuring that the necessary legislation is in place and is implemented.
- c. Eradicate forced labor; prevent debt-bondage of women, men, and children; and adopt effective measures to protect fishers and fish workers, including migrants, with a view to the complete elimination of forced labor in fisheries, including small-scale fisheries.
- d. Improve sea safety, including occupational health and safety, in small-scale fisheries (inland and marine) through the development and implementation of coherent and integrated national strategies, with the active participation of the fishers themselves and with elements of regional coordination, as appropriate.

9. Develop human resource capacity of small-scale fishers and fishing communities

- b. Promote investment in human resource development such as health, education, literacy, digital inclusion, and other skills of a technical nature that generate value addition for the fisheries resources as well as awareness-raising.
- c. 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.
- d. Recognize that capacity development should build on existing knowledge and skills and be a two-way process of knowledge transfer, providing for flexible and suitable learning pathways to meet the needs of individuals, including both men and women and vulnerable and marginalized groups.

10. Diversify livelihoods and income-generating activities

- a. Recognize the economic and professional importance of the full range of activities along the small-scale fisheries value chain: pre- and post-harvest; in an aquatic environment or on land; undertaken by men or by women.
- b. Support existing, or the development of, complementary and alternative income-generating opportunities—in addition to earnings from fisheries-related activities—for small-scale fishing communities, as required and in support of sustainable resource utilization and livelihood diversification.
- c. Recognize and respect the role of migrant fishers and fish workers in small-scale fisheries, given that migration is a common livelihood strategy in small-scale fisheries.

11. Ensure access of children and youth in fishing communities to education

- a. Provide and enable access to schools and education facilities that meet the needs of small-scale fishing communities and that facilitate gainful and decent employment of youth, respecting their career choices and providing equal opportunities for all boys and girls and young men and women.
- b. Recognize the importance of children's well-being and education for the future of the children and for society at large.

A. VALUE CHAINS, POST-HARVEST, AND TRADE STRATEGIES AND GOOD PRACTICES

12. Build capacity for small-scale fisheries to benefit from market opportunities

- a. Recognize the central role that the small-scale fisheries post-harvest subsector and its actors play in the value chain.
- b. Recognize the role women often play in the post-harvest subsector and support improvements to facilitate women's participation in work.
- c. Enable timely access to all relevant and accurate market and trade information for stakeholders in the small-scale fisheries value chain.

13. Improve the value chain for fish and fishery products for domestic and export markets

- a. Recognize the traditional forms of associations of fishers and fish workers and promote that their organizational and capacity development is adequate in all stages of the value chain to enhance their income and livelihood security.
- b. Foster, provide, and enable investments in appropriate infrastructure, organizational structure, 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.
- c. Avoid post-harvest losses and waste, and seek ways to create value addition, building on existing traditional and local cost-efficient technologies, local innovations, culturally appropriate technology transfers, and environmentally sustainable practices.

14. Reform national policies to minimize adverse impacts of domestic and international trade on small-scale fisheries

a. Facilitate access to local, national, regional, and international markets and promote equitable and non-discriminatory trade for small-scale fisheries products.

ARTICLE IN PRESS

C.A. Courtney et al.

Marine Policy xxxx (xxxxx) xxxx-xxx

- b. Give due consideration to the impact of international trade in fish and fishery products and of vertical integration on local small-scale fishers, fish workers, and their communities. Ensure promotion of international fish trade and export production do not adversely affect the nutritional needs of people for whom fish is critical to a nutritious diet and their health and well-being and for whom other comparable sources of food are not readily available or affordable.
- c. Recognize that benefits from international trade should be fairly distributed and that effective fisheries management systems are in place to prevent overexploitation driven by market demand that can threaten the sustainability of fisheries resources, food security, and nutrition.
- d. Adopt policies and procedures, including environmental, social, and other relevant assessments, to ensure that adverse impacts by international trade on the environment, small-scale fisheries culture, livelihoods, and special needs related to food security are equitably addressed.

A. GENDER EQUALITY STRATEGIES AND GOOD PRACTICES

- 15. Mainstream gender equality as an integral part of small-scale fisheries development
- a. Comply with obligations under international human rights law and implement the relevant instruments to which they are part.
- b. Secure women's equal participation in decision-making processes for policies directed toward small-scale fisheries.
- c. Establish policies and legislation to realize gender equality, and as appropriate, adapt legislation, policies, and measures not compatible with gender equality, taking into account social, economic, and cultural aspects.
- d. Encourage the development of better technologies of importance and appropriate to women's work in small-scale fisheries.
- A. DISASTER RISKS AND CLIMATE CHANGE
- 16. Recognize and address the differential impact of natural and human-induced disasters and climate change on small-scale fisheries and communities
- a. Develop capacity of small-scale fishing communities to address disaster risks and adapt to climate change
- b. Account for the impact that climate change and disasters may have on the post-harvest and trade subsector in the form of changes in fish species and quantities, fish quality and shelf-life, and implications with regard to market outlets.
- c. Understand how emergency response and disaster preparedness are related in small-scale fisheries and apply the concept of the relief-development continuum.
- d. Promote the role of small-scale fisheries in efforts related to climate change and encourage and support energy efficiency in the subsector, including the whole value chain—fishing, post-harvest, marketing, and distribution.

6. POLICY COHERENCE, INSTITUTIONAL COORDINATION AND COLLABORATION STRATEGIES AND GOOD PRACTICES

- 17. Adopt national policies and laws that support an integrated, holistic, ecosystem-based approach to marine and coastal management
- a. Develop and use spatial planning approaches, including inland and marine spatial planning, that take due account of the small-scale fisheries' interests and role in integrated coastal zone management.
- b. Adopt specific policy measures to ensure harmonization of policies affecting the health of marine and inland water bodies and ecosystems and to ensure that fisheries, agriculture, and other natural resource policies collectively enhance the interrelated livelihoods derived from these sectors.
- c. Consider integrated, ecosystem, and holistic approaches to small-scale fisheries management and development that take the complexity of livelihoods into account.
- d. Recognize and address the underlying causes and consequences of transboundary movement of fishers and contribute to the understanding of transboundary issues affecting the sustainability of small-scale fisheries.
- 18. Establish mechanisms for institutional coordination and collaboration at international, regional, national, subnational levels
- a. Establish and promote the institutional structures and linkages—including local-national-regional-global linkages and networks—necessary for achieving policy coherence, cross-sectoral collaboration, and the implementation of holistic and inclusive ecosystem approaches in the fisheries sector with clear roles and responsibilities and defined points of contact in government authorities and agencies for small-scale fishing communities.
- b. Promote collaboration among their professional associations, including fisheries cooperatives and civil society organizations, through networks and platforms for the exchange of experiences and information, and to facilitate their involvement in policy- and decision-making processes relevant to small-scale fisheries communities.
- c. Recognize and promote, as appropriate, local governance contributions to effective management of small-scale fisheries, taking into account an ecosystem approach and in accordance with national law.
- d. Promote enhanced international, regional, and sub-regional cooperation in securing sustainable small-scale fisheries.

A. INFORMATION, RESEARCH, AND COMMUNICATION STRATEGIES AND GOOD PRACTICES

- 19. Improve knowledge of social-ecological systems
- a. Establish systems of collecting fisheries data, including ecological, social, cultural, and economic data relevant for decision making on sustainable management of small-scale fisheries
- b. Ensure that the knowledge, culture, traditions, and practices of small-scale fishing communities, including indigenous peoples, are recognized, and as appropriate, supported, and that they inform responsible local governance and sustainable development processes.
- c. Encourage small-scale fisheries research and collaborative and participatory data collection, analyses, and research with funding.
- d. Promote research into the conditions of work, including migrant fishers and fish workers, health, education, and decision making, in the context of gender relations, to inform strategies for ensuring equitable benefits for men and women in fisheries.
- 20. Improve access to information and data needed for decision-making
- a. Recognize the importance of communication and information, necessary for effective decision-making.
- b. Prevent corruption, particularly by increasing transparency, holding decision makers accountable, and ensuring that impartial decisions are delivered promptly and through appropriate participation and communication with small-scale fishing communities.
- c. Recognize small-scale fishing communities as holders, providers, and receivers of knowledge and the need for access to appropriate information to help them cope with existing problems and empower them to improve their livelihoods.
- d. Promote the availability, flow, and exchange of information, including on aquatic transboundary resources, through the establishment or use of appropriate existing platforms and networks at community, national, sub-regional, and regional levels, with appropriate approaches, tools, and media for communication with and capacity development for small-scale fishing communities.

References

- [1] C.A. Courtney, N.J. Jhaveri, Marine Tenure and Small-scale Fisheries: A Sourcebook on Good Practices and Emerging Themes., Washington, DC: Tenure and Global Climate Change Program, USAID Contract No: AID-OAA-TO-13-00016. Washington, DC: USAID Tenure and Global Climate Change Program, 2017.
- [2] S. Jentoft, Walking the talk: implementing the international voluntary guidelines for securing sustainable small-scale fisheries, Marit. Stud. 13 (1) (2014) 16.
- [3] A.T. Charles, Governance of tenure in small-scale fisheries: key considerations, Land Tenure J. 1 (2013) 9–37.
- [4] J.E. Cinner, et al., Looking beyond the fisheries crisis: cumulative learning from small-scale fisheries through diagnostic approaches, Glob. Environ. Change 23 (6) (2013) 1359–1365.
- [5] J.N. Kittinger, et al., Emerging frontiers in social-ecological systems research for sustainability of small-scale fisheries, Curr. Opin. Environ. Sustain. 5 (3-4) (2013) 352–357.
- [6] S.W. Purcell, R.S. Pomeroy, Driving small-scale fisheries in developing countries,

- Front. Mar. Sci. 2 (44) (2015).
- [7] FAO, Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication, FAO, Rome, 2015.
- [8] FAO, Code of Conduct for Responsible Fisheries, FAO, Rome, 2011, p. 91.
- [9] FAO, Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security, FAO, Rome, 2012, p. 40.
- [10] FAO, Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security, FAO, Rome, 2005.
- [11] CFS, Principles for Responsible Investment in Agriculture and Food Systems, Committee on World Food Security, 2014.
- [12] A.T. Charles, Small-scale fisheries, on rights, trade and subsidies, MAST 10 (2) (2011) 85–94.
- [13] B.D. Ratner, B. Åsgård, E.H. Allison, Fishing for justice: human rights, development, and fisheries sector reform, Glob. Environ. Change 27 (0) (2014) 120–130.
- [14] FAO, Implementing Improved Tenure Governance in Fisheries: A Technical Guide to Support the Implementation of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food

ARTICLE IN PRESS

C.A. Courtney et al. Marine Policy xxxx (xxxxx) xxxx–xxxx

Security, p. 71.

- [15] P. Munro-Faure, D. Palmer, An overview of the voluntary guidelines on the governance of tenure, Land Tenure J. 1 (2012) 5–17.
- [16] J.C. Rice, M.-J. Rochet, A framework for selecting a suite of indicators for fisheries management, ICES J. Mar. Sci. 62 (3) (2005) 516–527.
- [17] A.A. Cissé, F. Blanchard, O. Guyader, Sustainability of tropical small-scale fisheries: integrated assessment in French Guiana, Mar. Policy 44 (2014) 397–405.
- [18] I.V. J, et al., An interdisciplinary evaluation of fishery production systems off the state of Pará in North Brazil, J. Appl. Ichthyol. 25 (3) (2009) 244–255.
- [19] J.L. Anderson, et al., The fishery performance indicators: a management tool for triple bottom line outcomes, PLoS One 10 (5) (2015) e0122809.
- [20] N.a.E.L. Andrew, Approaches and Frameworks for Management and Research in Small-scale Fisheries in the Developing World., in The WorldFish Center Working Paper 1914.: The WorldFish Center, Penang, Malaysia, 2009.
- [21] S.M.A. Garcia, E.H, N.J. Andrew, C. Béné, G. Bianchi; de Graaf, G.J.; D. Kalikoski; Mahon. R.; J.M. Orensanz, Towards integrated assessment and advice in small-scale fisheries: principles and processes in FAO Fisheries and Aquaculture Technical Paper. No. 515: Rome. p. 84.
- [22] World Bank. Land Governance Assessment Framework: Implementation Manual.; 66], 2013. Available from: http://siteresources.worldbank.org/INTLGA/

- Resources/LGAF_Manual_Oct_2013.pdf>.
- [23] ActionAid, Assessing implementation of the Voluntary Tenure Guidelines and the AU Framework and Guidelines for Land Policy; A toolkit approach. p. 35.
- [24] C.A. Courtney, et al., Marine Tenure and Small-scale Fisheries: Learning from the Philippines Experience, USAID Tenure and Global Climate Change Program, Washington, DC, 2016.
- [25] C.A. Courtney, et al., Marine Tenure and Small-scale Fisheries: Learning from the Indonesia Experience, USAID Tenure and Global Climate Change Program and USAID Indonesia Sustainable Ecosystems Advanced Project, Washington, DC, 2017.
- [26] R. Pomeroy, N. Andrew (Eds.), Small-scale Fisheries Management: Frameworks and Approaches for the Developing World. CABI, Cambridge, MA, 2011.
- [27] S. Jentoft, Walking the talk: implementing the international voluntary guidelines for securing sustainable small-scale fisheries, Maritime Stud. 13 (1) (2014) 16.
- [28] Hailu Zerfu, Land Governance Assessment Framework Implementation in Ethiopia: Final Country Report, World Bank, 2016, p. 178.
- [29] C.A. Courtney, N.J. Jhaveri, Looking to the Sea to Support Development Objectives: A Primer for USAID Staff and Partners. Tenure and Global Climate Change Program, USAID Contract No: AID-OAA-TO-13-00016, Washington, DC: USAID Tenure and Global Climate Change Program, 2017.