





# Good Governance Barometer (GGB) of Fisheries Co-management of Four Major Lakes in Malawi

Fisheries Integration of Society and Habitats (FISH)

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Cover Page Photograph: Fisher camp in Lake Chilwa using mosquito net covered basket traps

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#### **CONTACT ADDRESS**

Pact Malawi, 1<sup>st</sup> Floor, Amina House, P.O. Box 1013, Lilongwe, Malawi,

Phone: +265-1751220; +265-1751201,

e-mail: infomw@pactworld.org

Pact Inc, 1828 L Street NW, Suite 300, Washington, DC 20036, USA. +1-202-466-5666.

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# **Abbreviations and Acronyms**

ADC Area Development Committee

APEA Applied Political Economy Analysis

BVC Beach Village Committee

CBNRM community-based natural resource management

CBO community-based organization

CISER Community Initiative for Self-Reliance

CPI Community Performance Index

DOF Department of Fisheries
DFO District Fisheries Office

ETOA Environmental Threats and Opportunity Assessment

FA Fisheries Association

FISH Fisheries Integration of Society and Habitats Project

GGB Good Governance Barometer

GiZ Duetsche Gesellschaft für Internationale Zusammenarbeit

GVH group village headman

ONA Organizational Network Analysis
PFM participatory fisheries management
LFMA Lake Fisheries Management Authority
LFMP Lake Fisheries Management Plan

TA traditional authority

USAID U.S. Agency for International Development

VDC Village Development Committee

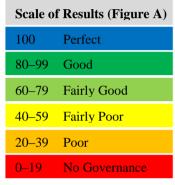
VDP Village Development Plan

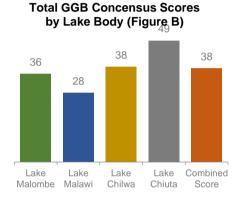
# **Summary of Results and Recommendations**

The Fisheries Integration of Society and Habitats (FISH) project completed a Good Governance Barometer (GGB) in October 2015 to assess the quality of local governance as it relates to fisheries co-management across four focus lake bodies: Lake Chilwa, Lake Chiuta, Lake Malombe and the southeast and southwest arms of Lake Malawi. Pact has used the GGB in diverse country and sector contexts to assess the status and nature of local governance. The FISH team developed a GGB tool specifically tailored to the unique contours of the fisheries sector in Malawi. GGB results were generated over four separate lake-specific workshops. In order to reflect diverse perspectives, the workshops included representatives from five distinct sub-groups: Beach Village Committees (BVCs); the District Fisheries Office (DFO); Fisheries Associations (FAs); fishers; and traditional authorities

(TAs).

The GGB identified a range of weaknesses in terms of the governance structures that support and enable fisheries co-management. Overall, local governance was found to be "poor" or "fairly poor" at each of the four lakes (see scale of





results, Figure A). GGB scores were lowest for the

southeast/southwest arms of Lake Malawi (see Figure B). Although still weak, governance scores were found to be highest for Lake Chiuta, reflecting similar findings from other FISH baseline studies, including the Community Performance Index and Applied Political Economy Analysis.

The GGB found that the government, traditional, and community institutions primarily responsible for fisheries co-management are largely incapacitated in delivering basic services to fishing communities, as well as lacking institutional stature for enforcing fisheries regulations. Participants explained that a pronounced lack of resources represents a critical constraint that hinders the ability of lake authorities to play a more constructive role in promoting sustainable fisheries management. However, participants also described a range of technical and organizational capacity constraints that limit the effectiveness of local leadership. With the exception of Lake Chiuta, participants described systemic levels of corruption and lack of transparency that undermine the credibility of lake authorities and contribute to an environment in which stakeholders can violate regulations with relative impunity.

Participants explained that key elements of the legislative and policy framework for fisheries co-management have gone largely unimplemented, including the six core policy steps that form the basis of participatory fisheries management.<sup>2</sup> Furthermore, local government structures such as the Village Development Committees (VDCs), Area Development Committees (ADCs), and District Councils were described as wholly unengaged on issues related to the management of lake resources. On balance, participants suggested that the

<sup>&</sup>lt;sup>1</sup> In the context of the GGB, "lake authorities" refers to the primary institutions responsibility for fisheries co-management, including the DFO, BVCs, FAs, and traditional authorities.

<sup>&</sup>lt;sup>2</sup> The six policy steps for participatory fisheries management is described in detail in Section 2.

public sector fails to appreciate the strategic value of fisheries resources, as well as the extent to which those resources depend on effective, collaborative co-management.

The GGB findings led to a set of specific and general recommendations:

- 1. Provide structured support for intra- and inter-group planning, building on the results of the initial action planning of workshop participants as a starting point. Support BVCs to be institutionally strengthened at ecosystem level through their FAs so as to engage in the local government development planning process and advocate for decision makers to allocate more resources to fisheries co-management, especially enforcement, given the strategic economic and food security importance of fisheries.
- 2. The government needs to provide technical assistance to support the implementation of the six policy steps for Participatory Fisheries Management (PFM), including re-vamping and strengthening the institutional framework of at ecosystem level with FAs as clustered representatives of BVCs that share the same water body, assisting in the development of a Lake Wide Fisheries Management Plan (LFMPs), and supporting the development of lake-specific bylaws. The project should use its engagement around these six steps to build shared ownership and broader support for fisheries co-management by diverse stakeholders.
- 3. The GGB makes clear that lack of accountability around finances undermines the credibility of lake authorities, particular BVCs and FAs. The Project should focus on financial transparency as a means of increasing the institutional legitimacy of BVCs and FAs. While this will require training around <a href="mailto:simple">simple</a> financial management processes, it may require an expanded set of interventions aimed at incentivizing transparency and encouraging community oversight over BVCs and FAs. Furthermore, the Project could explore supporting high performing BVCs and FAs to link to Village Savings and Loans Associations (VSLAs) to offer capital opportunities to invest in co-management.
- 4. The GGB (as the CPI) demonstrates that there exist certain lake authorities achieving higher performance in key areas. The Project team should consider including a robust focus on peer-to-peer learning within the overall capacity development strategy. For example, this could involve building on and scaling up lessons sharing efforts the Project is already facilitating among TAs and BVCs.
- 5. In the long term it is unquestionable that fisheries co-management will depend on greater public sector support and resource allocations. The project should actively plan and test advocacy and lobbying strategies that raise the profile of fisheries co-management as a priority issue at multiple levels of government.
- 6. The GGB examines local governance conditions and assesses the role played by authorities at the lake level, particularly DFO extension workers, BVCs and FAs, and TAs. The FISH project team may consider conducting a GGB focused on the Department of Fisheries (DOF) as the unit of analysis to constructively involve higher level ministry officials in a conversation around how to address key institutional issues, capacity and governance challenges within the fisheries co-management system as a whole, and local lake level enforcement in particular.
- 7. The GGB should be repeated at the end of Year 3 (or beginning of Year 4) to assess progress in terms of strengthening local fisheries governance at a midpoint in order to inform exit programming during the final two years of the Project.

#### 1. Introduction

The Fisheries Integration of Society and Habitats (FISH) project is a five year, USAIDfunded initiative aimed at increased social, ecological and economic resilience of freshwater ecosystems and people who depend on them through the achievement of two objectives:

- 1. Increased resilience to climate change
- 2. Improved biodiversity conservation through effective sustainable fisheries comanagement

To support Project Output 2: An enabling environment for conservation and management of freshwater ecosystems enhanced, in October 2015 Pact and its FISH partners conducted a Good Governance Barometer (GGB) study as part of the overall project baseline to assess the relative quality of the governance systems that support fisheries co-management across four focus lake bodies: Lake Chilwa, Lake Chiuta, Lake Malombe, and the southeast and southwest arms of Lake Malawi.

The GGB is a participatory tool for measuring the status and nature of local governance in a particular geography or sector. The GGB fits within a larger effort by the FISH team to establish a robust baseline of the socio-economic, political, organizational, and ecological conditions affecting the target ecosystems of the Project. In particular, the GGB complemented the Community Performance Index (CPI), which assessed the performance of the key institutions responsible for local management of fisheries resource, namely Beach Village Committees (BVCs) and Fisheries Associations (FAs). It also accompanied an Applied Political Economy Analysis (APEA), which was used to examine economic and political incentives that impact fisheries co-management from the central level down to the community level. Other notable baseline studies that relate to the GGB included the Organizational Network Analysis (ONA), which analyzed the connectivity of institutions linked to fisheries co-management, as well as the Environmental Threats and Opportunity Assessment (ETOA), which identified biodiversity "hotspots" of particular importance to the life stage of fish populations, as well as their management and resilience to climate change.

While the CPI examined the individual institutional capacities and performance of BVCs, the GGB looked more expansively at the governance situation formed by actors representing the three fundamental decentralized pillars of the fisheries co-management system: local government (including the Department of Fisheries), traditional authorities (TAs), and communities (including BVCs and FAs). Understanding that specific lakes face distinct opportunities and challenges, FISH chose to examine fisheries governance at the lake body level in four separate workshops.<sup>3</sup> The decision to treat lake bodies as the primary unit of analysis also reflects the Department of Fisheries' (DOF) stated intention to promote improved fisheries governance at the ecosystem level, such that the jurisdictions of FAs would be aligned with lake ecosystem boundaries. 4 Under such an arrangement, BVCs clustered around that lake ecosystem would form part of a nested structure under a single FA.

<sup>4</sup> The FISH leadership team consulted with senior DOF leadership, including Dr. Steve Donda, Senior Deputy Director of Fisheries and Extension Coordination, and Dr. Friday Njaya, Deputy Director for Planning and Monitoring, in advance of the GGB. At present there are 13 FAs within the FISH implementation area. However, many of these structures are inactive. DOF articulated support for adopting an ecosystem approach in which FAs would be reconstituted around lake boundary lines.

<sup>&</sup>lt;sup>3</sup> The southeast arm of Lake Malawi was treated as a "lake body" in the context of the GGB. "Lake Malawi" in this report refers specifically to the southeast and southwest arms unless otherwise noted.

Thus, it is possible that the lake-based GGB results describe the governance situation of future FA jurisdictions.

In order to generate diverse perspectives on key governance issues, the FISH team included representatives of BVCs, the District Fisheries Office (DFO), FAs, fishers, and TAs in GGB workshops. The Project found that governance across the four lake bodies is defined as "poor" or "fairly poor," according to the GGB criteria. Fisheries enforcement units, local government, TAs, and community-based institutions (i.e. existing BVCs and FAs) were described as being ineffective and incapable of encouraging the broad-based stakeholder engagement needed around fisheries co-management. Similarly, the legal framework was described as being poorly formed and key institutions, especially local and traditional government, are seen as largely unaccountable to the stakeholders and communities they represent. Participants argued that a dearth of resources represent a primary cause of the weak governance situation, noting that government and community structures lack the financial and material resources needed to carry out basic functions such as conducting surveillance and enforcement patrols. However, they also blamed corruption and subtle and not-so-subtle incentives that encourage key actors to ignore fisheries regulations. While there was significant continuity in results across lake bodies, Lake Malawi participants registered the poorest governance situation and Lake Chiuta reported more positive results.

The consultative GGB workshops closed with half-day sessions at which participants discussed the significance of GGB results and completed initial action planning sessions. These sessions were not enough time for stakeholders to deeply explore new and creative approaches to conducting their work. However, it allowed participants to achieve consensus regarding the types of actions needed to improve the overall governance situation related to fisheries co-management. In particular, participants emphasized the importance of improved planning within and between groups, more regular consultation with fishing communities and other stakeholders, and more joint enforcement activities among co-management stakeholders. This initial thinking will provide a useful starting point for the FISH team to encourage continued, constructive planning by lake authorities<sup>5</sup> and local communities.

This report closes with a set of conclusions and recommendations based on GGB results and initial action planning by workshop participants. The FY 2016 work plan directly addresses a number of weaknesses identified through the GGB. The Project plans a robust set of trainings for BVCs and FAs and will provide technical and other support for key elements of the fisheries co-management process. The FISH team should seek to leverage its planned investments to encourage local stakeholders to undertake their own initiatives in support of lake management, including more coordinated interventions aimed at fostering and enforcing compliance with fisheries regulations. There is also a need to think beyond training and capacity development in considering how to encourage and empower constructive activism by local stakeholders.

# 2. Background

The GGB designed by Pact, was adapted to the FISH Project in order to assess the unique governance structures connected to the fisheries co-management policy framework in Malawi. Like community scorecard tools, GGB exercises are typically focused on a single

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<sup>&</sup>lt;sup>5</sup> As noted in the Summary of Results and Recommendations, "lake authorities" refers to the primary institutions responsibility for fisheries co-management, including the DFO, BVCs, FAs, and traditional authorities.

community or governmental institutional structure as a unit of analysis. For example, recent GGBs carried out by Pact have assessed the governance of county governments in South Sudan and health centers in Nigeria. By definition, however, no single institution is responsible for the management of fisheries resources within a co-management system. Instead, the 1997 Fisheries Conservation and Management Act (FCMA) institutionalizes shared co-management responsibility by government, traditional authorities, and communities. The DOF serves as the primary government institution responsible for fisheries co-management. However, District Councils, Area Development Committees (ADCs), and Village Development Committees (VDCs) are also supposed to play critical roles in supporting the sustainable management of fisheries resources, as well as related wetlands and catchments. Under the current legislative and policy framework, communities are represented at the local level by elected BVCs and at a higher level by FAs elected from among BVC. Collectively, BVCs and FAs are referred to in policy as Lake Fisheries Management Authorities (LFMAs).

There exist six basic policy steps to establishing the institutional and regulatory framework for community-based natural resource management (CBNRM), which are implicit in the Malawi fisheries sector policy and known a Participatory Fisheries Management (PFM). These steps begin with the formation of LFMAs and conclude with approved bylaws and management agreements stipulating the contents and processes of locally-specific fisheries regulations. Project baseline assessments conducted by FISH, including the CPI and APEA, indicate that despite a two-decade history, key elements of the six steps have yet to be implemented at most lakes. However, it is expected that the steps will represent important points-of-entry for technical support to DOF and LFMAs under the FISH Project and beyond through the lake ecosystem approach. For example, the Project will support LFMA formation and the development of Lake Fisheries Management Plans (LFMPs) under Steps 1 and 4. Furthermore, the Project will encourage key stakeholders to push for the development of approved bylaws per lake body, under the oversight of a FA. The GGB study allowed stakeholders to review the status regarding the implementation of the six steps for community-based fisheries co-management, including specific indicators to understand the extent to which key elements have been carried out across the four lakes. Importantly, this baseline GGB will provide an important reference point to assess progress in the implementation of fisheries co-management activities at mid- and end-line points, and help design the Project exit strategy.

#### Box 1. Six Universal Policy Steps for Participatory Fisheries Management (PFM)

LFMAs serve as the basic organizational structures for PFM for the fisheries sector in Malawi, and are directly linked to government bodies and local authorities. The six steps include a set of scripted processes for implementing PFM such as LFMA formation, establishment of boundary of jurisdiction, resource assessments, multi-stakeholder planning, codification of bylaws, and securing of user rights. These policy steps articulate principles of co-management and shared governance responsibility between the state, TAs and local communities for fisheries regulation and enforcement. These policy steps are summarized below:

**Step 1 – Lake Management Group Formation:** Village Development Committee (VDC) develops a register of fisheries "users groups." Registered members hold elections to form LFMA committees (i.e. BVCs and FAs). FAs develop a lake wide constitution as per guidelines under the Fisheries Conservation and Management Act and all associated BVCs that share the same lake agree to abide by under a clustered network. The LFMA committees are registered as legal entities with the DOF and the Registrar General.

Step 2 – Lake Boundary Demarcation: VDCs and LFMAs demarcate fisheries resources under

the village land jurisdiction. As discussed, the DOF has expressed its intention to ensure that FA jurisdiction encompasses the whole of the lake ecosystem, while BVCs are assigned respective beaches along village boundaries.

**Step 3 – Lake Resource Assessment:** VDCs and LFMAs, assisted by the DOF, identify and undertake participatory resource assessments (PRAs) of the fishery, assessing the current level of use and assign gear types, production levels, use zones, sensitive sites, and no-take areas. Through this, they assess the need for participatory management and work with other LFMAs to develop joint area zonation maps for the whole lake.

**Step 4 – Lake Management Plan:** LFMAs work with other stakeholders (including the DOF, VDCs, and TAs) to develop fisheries co-management plans in a participatory manner. Management plans outline mitigation actions and technologies to overcome challenges, threats, and pressures. These plans are included in Village Development Plans (VDPs), Area Development Plans (ADP), and are mainstreamed in the District Development Plans (DDP).

**Step 5 – Establish Lake Bylaws:** VDCs assist LFMAs to incorporate "wise use" principles in village bylaws to protect the fisheries. Bylaws are issued at FA level, approved by the nested BVCs, endorsed by district councils, and must be consistent with sector legislation and according to the Local Government Act, approved by District Councils.

**Step 6 – Establishment of Lake Management Agreements/User Rights:** Collaborative fisheries management agreements at the FA level are submitted through the district council and signed by the DOF. These agreements become the basis for the issuance of user rights in the form of licensing of registered members and place authority with the LFMA.

The CPI identified largely weak performance in fisheries co-management among community-based organizations (CBOs) across lake bodies including both VDCs and BVCs. While VDCs scored marginally higher, the CPI demonstrated that key CBO structures practiced poor record keeping, had inadequate processes for encouraging participation and engagement by key stakeholders, and had minimal ability to carry out basic services (including enforcement activities). The CPI revealed isolated cases of higher performance, including around Lake Chiuta and individual communities, such as Kasankha VDC on the southwest arm of Lake Malawi. The GGB offered the opportunity to understand how the weak performance of community-based structures contributes to the overall governance situation. It also helped to understand the performance of government and traditional authorities alongside community-based structures.

The APEA was used to examine key incentives and interests that shape the actions and decisions of individuals and institutions within the fisheries sector. The study identified champions, spoilers, and bottlenecks in fisheries co-management, noting for example the primacy of TAs and examples of village chiefs serving to advance or block efforts at lake management. The APEA also assessed the gap between the mandate given to BVCs to improve the regulation of lake fisheries and the lack of trust they enjoy at the community level. The extent to which both BVCs and FAs face a credibility gap is similarly a key theme identified through the GGB.

The FISH team used the ONA survey to establish a baseline regarding the strength and structure of networks of BVCs, FAs, ADCs, VDCs and other institutions. The ONA found that TAs and group village heads (GVHs) play particularly important roles within local networks. TAs and GVHs tend to play hub roles within networks, exercising greater influence than BVC, FA, and VDC structures. BVCs tend to have an understanding of their roles, but require significant support in fostering strong linkages to other community-based structures.

# 3. The Good Governance Barometer Tool and Methodology

The GGB is a participatory tool for measuring the quality of local governance in a given geographic area or sector. The GGB does this by collecting and organizing perception data from citizens, institutions, and local authorities in a particular locality. Rather than using external "experts" to evaluate the status of local governance, the GGB offers a facilitated process through which local stakeholders establish their own understanding of the governance situation. It then allows those same stakeholders to understand the gaps and identify actions needed for improving local governance.

#### 3.1. The Global Model

The GGB uses a qualitative data collection approach through which representatives of key stakeholder groups pool their knowledge and perceptions related to key aspects of local governance. In the case of the FISH GGB, these stakeholder groups included key lake authorities, notably BVCs, the DFO, FAs, Fishers, and TAs. These stakeholder groups were selected as representative of primary actors within the fisheries co-management governance structures. Each group was represented by four individuals selected by project partners (e.g., four BVCs, four DFO representatives).

The project worked to ensure female voices were reflected in the study. However, the preponderance of participants were male, reflecting their strong role at various points in the value chain, as well as their overrepresentation in existing institutional structures, including FAs, BVCs, the DFO, and TAs. Of the total of 80 participants across the four lakes, 10 were female.

Water body	Male	Female
Lake Malombe	17	3
Lake Malawi (Southeast/Southwest Arms)	17	3
Lake Chilwa	19	1
Lake Chiuta	17	3
Total	70	10

The Project considered including a separate stakeholder group of women connected to the fishing sector, but felt attempting to manage more than five stakeholder groups would be unwieldy. Lake Chilwa had the lowest representation of women. While the plan was to have five women represented the workshop, planned attendees refused to go away from their homes and families to the workshop for three days. Participants pointed out that they have female members in every BVC as per BVC guidelines. However, the underrepresentation of women, particularly for the Lake Chilwa group, represents as significant limitation of the study. The FISH teams may consider conducting focus group discussions or other activities to confirm that the findings from the lake body adequately represent female perspectives.

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<sup>&</sup>lt;sup>6</sup> The Lake Malombe group did not include a separate FA group. The Lake Malombe FA was described as minimally active and the FA members in attendance were TAs and insisted on being grouped with the TA group.

The GGB consists of two models: a **global model** and a **context-specific model**. The global model is built around five "dimensions" of governance seen as representing fundamental pillars of good governance:

- *Effectiveness*: The extent to which planned activities are realized and planned results obtained.
- *Rule of Law*: The system of rules and rights which support the social contract under which citizens live together and are governed by a governing authority (i.e. usually government).
- Accountability: The extent to which public officials and institutions are answerable to local constituencies.
- *Participation*: The extent to which local citizens are able to take part in local governance processes.
- *Equity*: The extent to which public authorities work to make institutions, policies, and services equitable for all citizens, not favoring one group in society over others.

Figure 1 presents the five dimensions of governance and 25 criteria that are generally recognized as important to monitor and measure the achievement of good governance.

Effectiveness Rule of Law Accountability **Participation Equity** Existance of Legal Framework Recognition of Citizen Rights Vision and Planning Institutional Framework Effectiveness of Legal Framework Checks and Balances Equal Opportunity to Basic Services Financial Management Application of Laws Desion Making and Equal Opportunity to Legal Awareness Citizen Engagement Information Responsiveness of Laws **Equal Opportunity to** Service Delivery Resources Access to Justice Civicness Equal Opportunity to Livelihoods Leadership Incidence of Corruption Integrity

Figure 1: GGB Dimensions and Criteria

Together the five dimensions and 25 criteria represent the global model which frames the GGB. In the interest of developing a more streamlined, relevant tool for fisheries comanagement, the FISH team slightly modified the standard global model to include a total of 22 criteria. Specifically, "Effectiveness of Legal Framework" and "Application of Laws" were merged into a single criterion titled, "Application and Effectiveness of Laws." "Responsiveness of Laws" was dropped as a criterion based on the belief that "responsiveness" was effectively covered under the umbrella of legal "effectiveness." Similarly "Recognition of Citizens Rights" was not included as a separate criterion, but rather seen as reflected in the other equity-related criteria.

#### 3.2. The Context-Specific Model

The context-specific model is composed of a set of indictors that, when filled out, give meaning to the GGB's governance criteria. Indicators are fully customized to the local context. For the FISH GGB, Pact and partner staff (CISER, Emmanuel International, and

URI), and a representative from the Mangochi DFO developed the tool in a design workshop over the course of three days. The final tool of 76 indicators reflects the FISH team's effort to develop a comprehensive portrait of local governance as it relates to fisheries comanagement, while crafting a manageable tool that could be deployed over 2.5 day long GGB workshops. Pact's experience globally suggests that the tools longer than 75–80 questions are too time consuming and lead to participant fatigue.

The full GGB indicator list can be viewed in Annexes 3–6 which present GGB results by lake body. However, Table 2 illustrates how context-specific indicators are used to describe a criterion.

**Table 2: Illustrative Example of Context-Specific Indicators** 

<b>Criterion 2.2: Application and Effectiveness of Laws</b>	
How effective is the department of fisheries in enforcing fishery regulations? (e.g., size limits, closed seasons, sanctuary areas/no-take zones)	0 = <b>not</b> effective; 1 = <b>low</b> level of effectiveness; 2 = <b>moderately</b> effective; 3 = <b>highly</b> effective
How effective are traditional authorities in enforcing fisheries regulations? (e.g., size limits, closed seasons, sanctuary areas/no-take zones)	0 = <b>not</b> effective; 1 = <b>low</b> level of effectiveness; 2 = <b>moderately</b> effective; 3 = <b>highly</b> effective
How effective are FAs/BVCs at self-policing? (i.e., are FAs/BVCs able to enforce adherence to regulations by their members and local fishers, including through use of community police to enforce regulations?)	0 = <b>not</b> effective; 1 = <b>low</b> level of effectiveness; 2 = <b>moderately</b> effective; 3 = <b>highly</b> effective
What is the level of FA/BVC cooperation with local government across all levels (VDCs, ADCs, district level) around enforcement of fisheries regulations?	0= <b>no</b> cooperation; 1 = <b>low</b> level of cooperation; 2 = <b>moderate</b> level of cooperation; 3 = <b>high</b> level of cooperation
Are penalties for violations strong enough to serve as a deterrent? (i.e. penalties applied by traditional and local government authorities)	0= <b>no</b> cooperation; 1 = <b>low</b> level of cooperation; 2 = <b>moderate</b> level of cooperation; 3 = <b>high</b> level of cooperation

The FISH team used the first GGB workshop for Lake Malombe to validate the developed indicators. The Lake Malombe workshop confirmed that key questions were relevant and, with facilitation, understandable to participants. However, a key challenge for the team was in translating fairly abstract, governance-related terms such as "responsiveness" and "accountability" into Chichewa. The team, therefore, refined some of the Chichewa translation over the subsequent workshops and added one question between the first and second workshops. These changes were deemed relatively minor and did not compromise the basic standardization of the tool deployed across the four workshops.

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with the Registrar General?

<sup>&</sup>lt;sup>7</sup> The tool for the first workshop in Lake Malombe included 75 indicators. After the Lake Malombe session, a decision was to amend *Question 21: Are Local Fisheries Management Authorities (FAs, BVCs) legally registered institutions with an established constitution?*" Due to confusion among participants regarding what "legally registered" entailed, the original question was broken into two parts: *Question 21: Are FAs/BVCs registered with the Department of Fisheries with an established constitution?* and *Questions 22: Are FAs/BVCs legally registered as a community-based organization* 

#### 3.3. Data Collection

Data collection took place in separate 2.5 day workshops for the four lake bodies: Lake Malombe (October 13–15); Lake Malawi (October 16–18); Lake Chilwa (October 19–21); and Lake Chiuta (October 23–25). Within the workshops, data collection and initial analysis took place in two stages: first within stakeholder groups and second within plenary sessions.

Data collection followed a few key principles around which the GGB is built. The tool was conducted in a manner that was fully *participatory*, allowing all voices to be heard and perspectives to be understood as valid. Facilitators worked to enable rather than direct conversation. When necessary, facilitators sought to create space within the conversation for quieter voices to offer their thoughts and opinions. The tool was also used to *build consensus* and shared understanding across key fisheries co-management actors.

On Day 1 of each workshop, participants reviewed, discussed, and scored each of the indicators within their stakeholder groups. This allowed participants to consolidate their group's perspective on the governance situation. Furthermore, it allowed the project to identify the extent to which different stakeholder groups understand key issues similarly or differently. For example, stakeholder groups almost uniformly answered *Question 19: Has there been positive change in fisheries co-management within the previous two years (e.g., reduction in use of illegal gear, increased compliance with closed season, increased enforcement of sanctuaries, etc.)?* the same way, noting that there has been no or negative change over this period. By contrast, there was significant variation in response to *Question 61: Do FA/BVC members actively participate in enforcing their group's bylaws/fisheries regulations?* In the Lake Chilwa workshop, for example, different stakeholder groups described answered this question differently, describing the FA and BVC members as either highly involved or not at all involved in upholding regulations.

On Day 2 of each workshop, participants came together in plenary sessions to once again review, discuss, and develop consensus scores for each indicator. Participants were coached that their task in these sessions was not to defend their group scores, but rather explain the rationale for their score and listen to the perspectives of other groups. This process was designed to help participants understand and appreciate the views of other stakeholder groups. At the end of the Lake Malombe session, for example, one BVC member noted that he entered the session feeling like DFO staff simply did not do its jobs, but came away with a greater appreciation of the DFO's resource constraints. Consensus-based scoring also helped participants unpack the complexity of key issues and note areas where they have interpreted key questions differently in the group scoring sessions. After discussion, therefore, it was not uncommon for more than half of the participants to shift their opinions on a given indicator. Where consensus was not achievable, a majority vote determined the selected score. By the end of Day 2, final GGB scores were calculable based on completed consensus scores.

#### **Box 2. GGB Scoring**

The GGB includes a 4-point scale (0, 1, 2, 3) for individual questions. In the 4-point scale, "0" always represents the lowest governance value (or the absence of governance) and "3" represents the highest governance value (or perfect governance). Consider the following example:

Do fishing businesses (fishers, fish traders, fish processors, etc.) invest in the welfare of their beach?

 $(0 = \mathbf{no} \text{ investment}; 1 = \mathbf{little} \text{ investment}; 2 = \mathbf{moderate} \text{ investment}; 3 = \mathbf{high} \text{ degree of investment})$ 

Participant answers are transposed onto a 100-point scale with "0" representing no governance and "100" representing perfect governance. Thus, facilitators recorded "0" as 0, "1" as 33.33, "2" as 66.66, and "3" as 100 in an Excel worksheet.

#### 4. Results

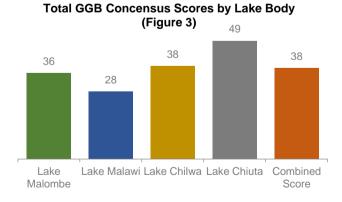
GGB results are analyzed and presented in this report in multiple ways. The weight of attention is given to consensus scores as representing the collective perceptions of workshop participants. This report presents the consensus scores for each lake body, as well as the "combined" scores, which represent the average of the consensus scores across lake bodies. Section 4.1 presents key results by dimension, emphasizing key trends and commonalities across the lake bodies. Notable differences in terms of lake body results are highlighted and discussed in text boxes in Section 4.1. Section 4.2 discusses general trends in terms of the results from specific stakeholder groups. Annexes 1 and 2 present summary scores by lake

body and stakeholder group respectively. Annexes 3–6 present full GGB results by lake body.

Some of the general results from the GGB included the following:

- 1. The overall governance situation across all lake bodies was described as either "poor" or "fairly poor." The total combined score across the four lakes was 38 (see Figure 3).
- 2. Effectiveness was consistently evaluated as the dimension marked by the poorest governance, with a combined score of
  - 23 driven by a lack of planning, inadequate financial management, dissatisfaction with service delivery, and a limited capacity of local leadership to mobilize resources and drive collective action.
- 3. By contrast, Equity consistently received the highest scores (i.e., "fairly good") with a combined score of 63, indicating that participants believed that key stakeholders are





treated with relative parity within the imperfect governance situation that exists.

- 4. The combined scores for Rule of Law, Accountability, and Participation and Engagement of Fishing Communities were all within the "poor" category, with scores ranging from 32 to 36.
- 5. Participants from Lake Malawi offered the most negative assessment of their governance situation, providing a total score of 28 and reporting the lowest score for four of five dimensions.
- 6. Participants from Lake Chiuta evaluated their governance situation most positively, providing a total score of 49. In contrast to Lake Malawi, Lake Chiuta received the highest score for four of five dimensions. Lake Malombe and Lake Chilwa were evaluated similarly, with total scores of 36 and 38 respectively.

#### 4.1. Results by Dimension

#### 4.1.1. Effectiveness

Effectiveness of governance was described as a composite of five criteria: Vision and Planning, Financial Management, Decision and Information, Satisfaction with Services, and Leadership. As is noted above, Effectiveness was evaluated as the weakest area of governance across the three lake bodies, with participants from three of the four lake bodies reserving their lowest scores for that dimension. The overall poor evaluation of Effectiveness was driven by extremely low scores for Vision and Planning, Financial Management, Satisfaction with Services, and Leadership. By contrast, there existed comparatively higher scores for Decision and Information.

Participants provided Vision and Planning with a combined score of 13 across the four lake bodies, indicating that lake authorities practice very limited to no planning either as individual institutions or as collectives (Figure 4). Three of the four lakes lack a Lake Fisheries Management Plan (LFMP), as envisioned by the Fisheries Vision and planning Management Information with Services

Effectiveness - Combined Scores (Figure 4)

19

19

12

Vision and Financial Decision and Satisfaction Leadership with Services

Conservation and Management Act. The one lake where a LFMP existed was for Lake Chilwa. However, that management plan had not been updated since 2006, whereas DFO participants indicated that it should be revised every five years. Additionally, participants across the four lakes explained that few to no BVCs developed operational plans in order to guide their activities. In the words of one TA from Lake Chilwa, "they [BVCs] don't plan ahead of time, they just do things." Participants consistently described BVCs (and FAs) as lacking both the capacity and inclination to plan. Furthermore, participants almost universally said that the co-management priorities were not reflected in Village Development Plans (VDPs), nor in District Development Plans (DDPs). The Lake Chiuta group indicated that "few" fisheries-related priorities were incorporated into those plans. These data pointed to a distinct lack of engagement of local government (i.e., district councils, ADCs, and VDCs) in

workshops, yielding accurate information.

<sup>&</sup>lt;sup>8</sup> Lake Malombe participants indicated that they did have a LFMP. However, workshop participants believed that the question was misunderstood by the participants and were able to confirm that no such document exists for the lake body. The Lake Malombe perception-based score was adjusted to match the real situation. The translation of the LFMP-related question was amended for subsequent

fisheries co-management issues that remains a recurring theme throughout the GGB, suggesting that fisheries co-management is not seen as an important mainstream activity of local government structures. This suggests that key local government institutions lack awareness of the extent to which fisheries co-management is a shared responsibility of both state and community actors. Often, local authorities consider that PFM means that the community must police the resource themselves, absolving central and local authorities from direct responsibility.

Low scores for Financial Management are driven by multiple factors. Participants explained that few to no lake authorities prepare an annual budget to run their activities, noting that the DFO is the only institution to regularly prepare a budget. However, even in the case of the DFO, participants indicated that there is a lack of clarity regarding the contents of the budget, as well as the extent to which actual activities follow from the developed budget and are funded. Participants consistently noted that lake authorities lack sufficient funds for supporting fisheries co-management activities, particularly enforcement. There was some debate over *Question 8: Do lake authorities have sufficient processes for generating revenue for fisheries co-management?* Participants uniformly explained that lake authorities do not generate sufficient revenue, but some noted that the "processes" (i.e., fines and fees) are in place. As one extension worker from Lake Chilwa explained, "we have the processes, but we don't have the capacity to execute." Similarly, a fisher from Lake Chilwa noted that "whenever we capture illegal gear we are able to generate revenue." Participants from the same workshop went on to explain, however, that authorities are inconsistent in their seizure of illegal gears and, hence, their generation of revenue is compromised by poor enforcement.

The GGB revealed similarly downbeat assessments of Service Delivery, with participants describing either no or low satisfaction with services provided by lake authorities. Participants across stakeholder groups explained that lake authorities are able to provide few to no services to key stakeholders, primarily blaming a lack of resources. For example, Lake Malombe participants reported that DFO extension workers have gone as long as seven months without receiving fuel allocations, severely limiting their engagement with fishing communities. Similarly, participants described weak feedback mechanism through which fisheries stakeholders can communicate concerns to the fisheries authorities, or influence their planning and budgeting. Extension workers from Lake Malawi complained that "even us, we are not included in the department's [DOF] budgeting." This aligns with findings from the ETOA, which similarly found that DOF lacks resources at the district and central level to conduct enforcement, and has to depend on one enforcement unit for the whole country.

Leadership received a combined score of 12, representing the lowest evaluated Effectiveness-related criterion score across lake bodies. Participants explained that lake authority leadership is largely incapable of mobilizing material resources or fostering joint activism by stakeholders connected to fisheries co-management structures. In the words of one TA from Lake Chilwa, "on the ground everyone is doing everything on his own. There is no collaboration." Participants also described lake authorities as being uniformly reluctant to consult with local stakeholders. Extension workers, for example, noted that the DFO communicates decisions that are already made, as opposed to consulting with communities. Similarly, BVC, FA, and TA leaders fail to make stakeholders a part of decision-making. Most notably, participants across all lakes explained that there has been no or negative change in terms of fisheries co-management over the previous two years. In most cases, participants noted that enforcement and service delivery has declined since the 1990s and early 2000s when there were GiZ and USAID-funded projects supporting co-management. During the past decade there have also been no district councilors in place, giving rise to a

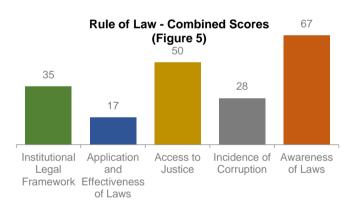
lack of local political leadership and advocacy support for BVCs and FAs, as is seen in the lack of approved bylaws.

Decision and Information was notably evaluated more positively than other Effectiveness-related criteria, receiving a combined score of 50. Participants reported that there exist credible information sources that are, to varying degrees, used by lake authorities to make decisions. In particular, DFO representatives described the frame survey as being completed reliably on an annual basis. Participants debated the extent to which BVCs and FAs maintain accurate registries of fishers. At the same time, participants had difficulty citing other information sources that support decision making by lake authorities. Thus, it is possible that the relatively high scores for Decision and Information reflect a lack of appreciation by stakeholders for what genuine access to robust information really entails.

Not surprising, participants explained that the DFO is more apt to make information-based decisions than BVCs, FAs, and TAs, who have less access to documents such as the frame survey. Extension workers explained that decisions related to selecting focus beaches for licensing and sampling are determined with direct reference to the frame survey. By contrast, participants noted that BVCs and FAs frequently fail to keep up-to-date registries of fisher members. Additionally, participants consistently explained that BVC and FA members are not consulted before new entrants begin fishing in the lake under their jurisdiction. Instead, would-be fishers typically consult directly with local village headmen, providing them with tribute and get fishing rights, thereby by-passing the BVC. As an extension worker from Lake Malawi explained, "fishers come from this side to that side and just go the chief...that is why there is a lot of disagreement between the BVC and the chiefs."

#### 4.1.2. Rule of Law

Rule of Law is composed of five criteria: Institutional Legal Framework, Application and Effectiveness of Laws, Access to Justice, Incidence of Corruption, and Awareness of Laws. The combined score across lake bodies for Rule of Law was significantly higher than for Effectiveness, but still in the "poor"



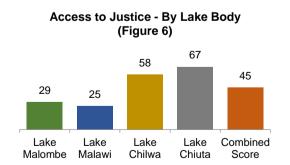
category at 36 (Figure 5). Participants described the Application and Effectiveness of Laws as being especially "poor" at 17, arguing that key elements of the legal and regulatory framework governing fisheries co-management remain unenforced. By contrast, participants described the Awareness of Laws as being "fairly good" at 67, suggesting that poor compliance with fisheries regulations does not stem from a lack of knowledge regarding the legal framework, but is driven by other factors, most notably the interest of fishers in extracting larger fish yields.

In evaluating the Institutional Legal Framework, participants identified a number of weaknesses regarding the key institutions responsible for fisheries co-management. Participants reported that most LFMAs were registered with the DOF, although some institutions were understood to lack established constitutions. However, with the exception of those in Lake Chilwa, LFMAs are not registered as CBOs with the Registrar General, as envisioned by the Fisheries Conservation and Management Act. Furthermore, participants at three out of four lake bodies described FAs and BVCs as "rarely functional," with Lake

Malombe participants describing their institutions as "often functional." Extension workers consistently explained that as many as half or more of their BVCs failed to conduct basic activities, such as holding meetings and maintaining registers of fishers. Furthermore, nearly all LFMAs lack bylaws approved by district councils, largely because of the absence of elected councils for the past 9 years. Participants also described local magistrate and customary courts as failing to understand their role in upholding fisheries laws. Interestingly, Lake Malombe, Lake Chilwa, and Lake Chiuta participants saw the customary courts as being marginally stronger than the magistrate courts in supporting fisheries regulation, whereas Lake Malawi participants saw the reverse. A common complaint was the failure of magistrate courts to impose maximum fines that have the potential of incentivizing compliance with fisheries regulations.

Participants universally issued poor evaluations regarding the Application and Effectiveness of Laws. DFOs, TAs, and LFMAs were seen as having a low level of effectiveness in terms of enforcing fisheries regulations. Each of these entities were seen as suffering from a lack of resources which makes it difficult for them to carry out even the most basic enforcement activities. For example, Lake Malawi participants indicated that no patrols had taken place this year in their regions. Participants also identified corruption as a key cause of their limited effectiveness, as is explained below under "Corruption." One extension worker from Lake Malombe explained that "traditional leaders are not effective... They are after money." Similar statements were issued in relation to each of the stakeholder groups, with participants blaming each other and, at points, themselves. Participants also described penalties for violations as providing little-to-no deterrent effect. As one extension worker from Lake Chilwa described, "penalties are not enough... He just pays and then goes fishing" (i.e., returns to the same illegal fishing practices). Participants explained that it is rare for gear to be confiscated by enforcement officials or BVCs for any length of time. In the uncommon case that a fisher is fined, their gear is released upon payment, allowing fishers to return bad practices. Artisanal fishers are typically charged no more than 20,000 kwacha by the DFO, compared to the 100,000 kwacha they can make in a day; commercial fishers on Lake Malawi may be charged 100,000 kwacha compared to 1 million they might make in a day's trawler haul.

There was significant divergence of opinion across the lake bodies regarding the extent to which key stakeholders around fisheries co-management are able to receive due process around fisheries enforcement. Lake Malombe and Lake Malawi offered scores for Access to Justice at 29 and 25 respectively, while Lake Chilwa and Lake Chiuta viewed conditions



more favorably at 58 and 67 (Figure 6). The combined score for Access to Justice was 45. Across the lake bodies, participants reported that fisheries cases are settled by magistrate courts and the DOF with a low level of fairness and efficiency. However, there was disagreement regarding the extent to which cases are settled fairly and efficiently in customary courts, as well as the level of political interference in the justice process in

fisheries cases. In Lake Malawi and Lake Malombe, participants recognized a high degree of political interference throughout the enforcement and judicial processes connected to fisheries co-management. For example, one participant from Lake Malawi explained that "sometimes maybe the son of the chief [is the culprit] and then it is not fair." Similarly, participants reported stories of political figures, including MPs and local councilors, not

wanting enforcement activities to take place for fear of loss in popularity. However, the participants at Lake Chilwa and Lake Chiuta argued that political interference was not a significant problem, particularly once cases reach the courts.<sup>9</sup>

With the notable exception of Lake Chiuta (discussed further in the text box under Section 4.1.3), participants found that fisheries co-management is marked by an exceptionally high level of corruption. Participants from Lake Malombe and Lake Malawi provided a total score of 0 for the four corruption-related indicators, noting in particular that it is highly common for stakeholders violating fisheries regulations to pay bribes to avoid sanction, and that local lake authorities make no effort to combat corruption. In discussing the systemic nature of corruption, an extension worker from Lake Malawi explained, "even us, we do it. We cannot defend ourselves. It's 90% [i.e. the prevalence of corruption]." Importantly, participants described corruption as occurring at multiple levels and resulting from clear incentives that fail to punish (and often reward) corrupt behavior. Extension workers were described as frequently accepting small payments in exchange for looking the other way in terms of the use of illegal gear. Traditional leaders commonly accept mawe (tributes) in exchange for lake access, while overlooking whether the fishing practices of the new entrants are legal. This is typically done without consulting BVC members, thus eroding the credibility of chiefs. On Lake Malawi, participants explained that commercial fisherman have a direct line to the DOF in Lilongwe, making them immune from sanction. Furthermore, given the DOF's interest in revenue generation, extension workers are provided with targets in terms of licensing, thereby providing them with incentives to license legal and illegal gear alike.

#### Box 3. Mawe: Custom or corruption?

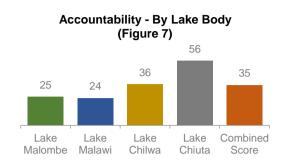
Under the Incidence of Corruption criterion, Question 40 asked participants, *Are tributes commonly paid to secure fishing rights?* Across lakes, this question generated interesting debate regarding the extent to which *mawe*, the traditional practice of gift giving to traditional leaders, represented a benign custom or a corrupt practice. Traditional leaders from Lake Malombe, for example, implored workshop facilitators to understand that *mawe* is a cultural feature that is not inherently corrupt. However, these same leaders allowed that accepting *mawe* in exchange for lake access during closed season or without verifying the legality of fishing practices is corrupt. Participants at Lake Malombe, Lake Malawi, and Lake Chilwa described *mawe* as an important source of revenue and means of showing respect for village headmen and group village headmen (GVH). The situation was described differently along Lake Chiuta, where BVCs, FAs, and TAs have made a deliberate effort to discourage the practice of *mawe* recognizing it as a source of potential corruption.

Participants across lake bodies offered significantly higher scores for the Awareness of Laws criterion. Participants identified either a moderate or high degree of understanding of fisheries regulations and argued to varying degrees that lake authorities (particularly the DFO) raise awareness regarding restrictions and enforcement. One extension worker from Malombe summarized the views of many when she argued that illegal fishers "ignore [fishing regulations] out of hunger," while another participant from Lake Malawi explained that "they just pretend and then choose to ignore regulations." Thus, there was a clear consensus across lake bodies that lack of awareness did not represent a primary constraint in terms of

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<sup>&</sup>lt;sup>9</sup> It is worth noting that the score from Lake Chilwa participants regarding the lack of political interference in the judicial process seemed somewhat at odds with their findings regarding the high incidence of corruption throughout fisheries co-management.

facilitating compliance with fisheries regulations, but that people choose to ignore the law as the punitive sanctions were not of major consequence.



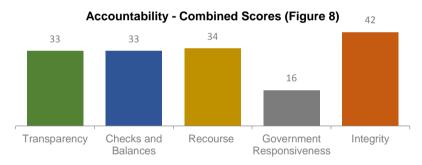
#### 4.1.3. Accountability

The combined score across lake bodies for Accountability was 35, pointing in aggregate toward weak processes and mechanisms for ensuring transparent and accountable institutions (Figure 7). The Accountability scores were marked by the widest variation across lake bodies, with 32 points separating the lowest score (Lake Malawi) from the highest

score (Lake Chiuta). Lake Chiuta, however, represents the clear outlier in among the lakes, with only 12 points separating Lake Malawi from the second highest scoring lake, Lake Chilwa. The high Accountability score for Lake Chiuta is driven in particular by a positive evaluation for Integrity, as the lake's participants argued that lake authority leaders operated with a significant measure of independence from political and "traditional" interference. By contrast, participants across lakes offered exceptionally low scores for Government Responsiveness, reflecting the inability for local government entities to respond constructively to needs and

opportunities identified by stakeholders (Figure 8).

There were divergent results for various Transparency-related indicators. Participants generally reported that BVCs and FAs are democratically elected in a way that is open and transparent, despite the fact that there are cases where elected offices overstay



their terms, or where village headmen and group village headmen (GVH) set up rival, more controlled BVC structures. However, participants were almost unanimous in stating that few to no lake authorities share reports, budgets, or information regarding activities with local stakeholders. This failure to communicate formal or informal plans to communities pointed to a model of leadership that puts little emphasis on accountability to local stakeholders. In the case of Lake Chilwa, one participant explained that "if you look at BVCs they generally hide their information." This sentiment was reflected in exceptionally low scores to *Question 44: Do stakeholders understand how BVC/FA fees and penalties are used?* In response to this question, three of the four lakes indicated that stakeholders have no level of understanding, while participants in Lake Chiuta reported "little understanding" by stakeholders. Importantly, participants at all lakes noted that a lack of transparency around use of funds severely undermines the credibility of LFMAs and raises questions about the extent to which association funds end up "in the pocket" of group leaders.

The results for Checks and Balances were also mixed. Participants identified little to moderate sharing of power among BVCs, FAs, local government, and TAs, reflecting a poor understanding of the extent to which co-management requires a sharing of power and responsibility. Many participants described a pronounced tendency for individual entities to act on their own, with little outreach to other institutional actors. Participants found that local

government (defined in Question 46 as district council, ADCs, VDCs) were generally not supportive of fisheries co-management. The lack of a district council for the past 9 years meant that local government was unable to play its mandated role in approving and, in turn, enforcing bylaws for lake bodies. Furthermore, participants described a certain degree of jealousy by local government toward LFMAs, noting that local councils tend to feel left out of lake management processes. This may stem, in part, from unmet expectations on the part of councilors that BVCs consult with them regularly. Lake Chilwa participants explained that ADCs and VDCs had specifically refused to assist in resolving conflicts with illegal fishers, arguing effectively that it was not their responsibility. This implies a larger weakness in terms of decentralization in Malawi, as local government fails to understand and take up its role as custodian of natural resources. It also reflects an attitude expressed in earlier studies, that fish and other natural resources are seen as "God given" and therefore will look after themselves.

Results varied across the four lake bodies regarding the ability of fisheries stakeholders to seek recourse from lake authorities. Participants generally found that fishing communities and BVC members have "little" or "moderate" means for issuing complaints to lake authorities. However, it was evident that communications channels are typically informal in

#### **Box 4. Lack of Support from Local Councils**

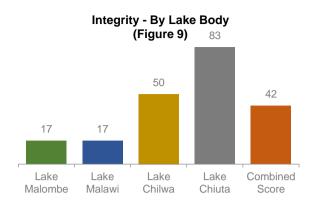
Participants at three of four lake bodies reported that district councils, ADCs, and VDCs provided "no" support for fisheries co-management, while Lake Chiuta participants argued that the councils provided some, if "little" support. These reactions reflected general dissatisfaction with the lack of involvement of local government in lake management.

nature and there is no effort to systematically source concerns or complaints from local stakeholders. For example, participants cited isolated examples of communities complaining to the central DFO office about the lack of services from extension workers. Participants differed in terms of whether stakeholders "feel comfortable" complaining to lake authority leadership. Participants from Lake Chiuta believed that

local communities have a high level of comfort speaking their minds to local leaders. However, participants from other lakes felt differently. A BVC member from Lake Malombe said that "most of the time people don't come forward because of fear," while a fisher from Lake Chilwa similarly reported that "we are afraid to say something against authorities."

The Government Response criterion examined the ability of government institutions (DFO, district council, ADCs, VDCs) to respond to needs of local stakeholders. Mirroring the related Service Delivery criterion under Effectiveness, participants described local government as being largely incapable of responding to even the most basic fisheries comanagement needs. The DFO was reported to have limited capacity and lack of financial resources to extend extension services to fishing communities, and the ADC, VDC, and DFO were all found to be ineffective in providing conflict resolution among fisheries stakeholders. Local government was described as being completely absent in terms of providing for beach development needs, such as investing in sanitation and landing facilities. Some participants laughed at the notion of government supporting beach infrastructure. One TA member from Lake Malawi noted that "we have never seen a toilet on the beach," while a fisher noted that past infrastructure development efforts have ended midstream: "they build a foundation and then nothing." As with other criteria, participations identified the lack of material resources (such as fuel for transport) as being a primary factor behind government's low level of responsiveness, reflecting the extent to which fisheries co-management remains a low priority for the central government.

There was significant divergence in the reported Integrity of lake authorities (Figure 9). Participants from Lake Malombe and Lake Malawi argued that there is a high or moderate degree of influence by political and traditional actors. Lake Malombe participants described that influence as reaching up to the highest levels of government, explaining that the President Joyce Banda's office pushed for delays in "Smart Fish" enforcement campaigns until after the 2014 elections,



anticipating that genuine enforcement would be unpopular with fishing communities and lead to a loss of votes by the ruling party. This sentiment was also reflected in a comment by a Member of Parliament to FISH staff during a biodiversity training indicating that she "disappears" during closed season so as not to be associated with such an unpopular action. Additionally, FA representatives from Lake Malawi explained that TAs sometimes undermine efforts to curtail the activities of illegal trawlers. Participants from Lake Chilwa similarly recognized a moderate degree of political influence. However, they argued that traditional actors only exercise a low degree of influence. Lake Chiuta participants similarly reported a low degree of influence by TAs and no political interference.

#### Box 5. Divergence on Corruption and Integrity Scores across Lake Bodies

There existed notable divergence across lake bodies for Criterion 2.5: Incidence of Corruption and Criterion 3.5: Integrity. Fifty-eight points separated low score from the high score for the corruption-related criterion, and 67 points separated the low and high scores for Integrity. The GGB team treated the Integrity score for Lake Chilwa of 50 with some degree of suspicion. Lake Chilwa participants originally issued a similarly high score for Incidence of Corruption. However, based on some questions from the facilitators, those participants revised the Corruption-related indicators downward at the end of the scoring session to a score of 8. The Integrity-related indictors were not explicitly reconsidered, but it is possible that they would have been similarly revised if participants had been prompted by facilitators.

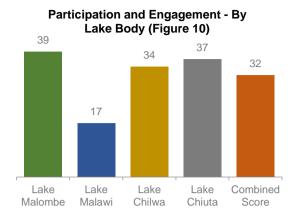
The highest scores for both criteria came from Lake Chiuta. Facilitators pressed Lake Chiuta participants multiple times to reconsider corruption and integrity-related indicators, and had some skepticism regarding the sanguine assessment. However, the results seemed to reflect a genuine perception among participants that corruption in Lake Chiuta is not a defining characteristic of lake authorities, as reported by participants at other lake bodies. The Community Performance Index (CPI) completed by FISH in August 2015 found significantly higher capacity and performance by BVCs around Lake Chiuta as compared to the other three lake bodies. Similarly, the Project's undertaking of the APEA found evidence of more cohesion and self-direction of BVCs around Lake Chiuta as compared to Lake Malombe, Lake Malawi, and Lake Chilwa. It is possible, therefore, that lake authorities around Lake Chiuta are seen as comparatively more accountable than around other lakes.

to monitor the importing and exporting of fish products.

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<sup>&</sup>lt;sup>10</sup> "Smart Fish" is a fisheries project funded by the European Union to improve fish quality through the development of laboratories for the assessment and certification of fish quality. It also focuses on inspection and enforcement of fisheries, with activities concentrated on Lake Malawi. Through the Smart Fish project, the Department of Fisheries established quality control measures at the main border posts of Mwanza, Dedza, Mchinji and Kapolo in Karonga, putting trained fisheries inspectors

#### 4.1.4. Participation and Engagement of Fishing Communities



The combined score for Participation and Engagement of Fishing Communities was the second lowest among the five dimensions of governance within the GGB (Figures 10 and 11). Lake Malombe, Lake Chilwa, and Lake Chiuta evaluated the level of Participation and Engagement similarly, with scores ranging from 34 to 37. Lake Malawi received a notably lower consensus score of 17, as participants described weak institutional structures for encouraging participation and especially noted limited stakeholder involvement in lake association

activities, and civic activities more generally. For three of the four lakes, Civic Mindedness received the lowest scores of any Participation-related criteria, with stakeholders describing extremely low levels of civic involvement by fishing communities and private sector actors.

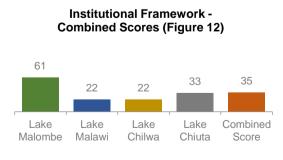
Participation and Engagement -

The Institutional Framework criterion examined the relative inclination of lake authorities to consult with relevant stakeholders, i.e. the extent to which BVCs/FAs consult with fishing communities and TAs and the DFO consults with BVCs/FAs. With the notable exception of Lake Malombe, which reported a consensus score of 61 for the criterion (Figure 12),

# Combined Scores (Figure 11) 35 32 28 Institutional Stakeholder Civic Framework Engagement Mindedness

scores for the Institutional Framework were low, with scores ranging from 22 to 33 for the three remaining lake bodies. All institutions were described as having a limited propensity to consult with key stakeholders. Extension workers from Lake Malombe summarized the thoughts of many when they confessed "we just tell [fishing communities] what to do. We don't consult." Participants from Lake Malawi, Lake Chilwa, and Lake Chiuta described TAs as making the least effort to include other entities in decision making. The reverse was reported by participants from Lake Malombe, who described TAs as "often" consulting with BVCs and FAs. This evaluation seemed to reflect a higher level of engagement by Lake Malombe TAs in fisheries co-management, in part attributed to past interventions by GiZ and FAO projects.

Participants generally described a low level of Stakeholder Engagement across three of four lakes, with marginally higher levels of engagement reported for Lake Chiuta. At all four



lakes, participants reported that there is either no or little participation of BVC/FA members and fishing communities in the monitoring of fish catches, or in evaluating the performance of lake authorities. One TA from Lake Chilwa explained that because BVCs are not engaged in monitoring catches, they "have no idea how many fish were caught for the month." At three of the four lakes, participants similarly

described low levels of participation by BVC/FA member in enforcing fishing regulations; BVC/FA members from Lake Chiuta were reported as moderately involved in enforcement

activities. On balance, however, participants described fishing communities as having limited ownership over the work of lake authorities.

The Civic Mindedness criterion was used to assess the extent to which key fisheries stakeholders understand their roles and responsibilities within the fisheries co-management structure, as well as the extent to which they make civic contributions to the welfare of beaches. With the exception of Lake Malawi, participants were generally described as having a moderate to high degree of understanding of their roles, including their responsibility toward upholding and enforcing fisheries regulations. Three of the four lakes, however, reported "no" involvement by fishing communities or fishing businesses in contributing to the basic beach welfare, with Lake Chilwa reporting limited contributions. Participants explained that stakeholders view investments in beach infrastructure and welfare as the responsibility of local government, despite the clear inability of government entities to fulfill that role.

Equity - Combined Scores

#### 4.1.5 Equity

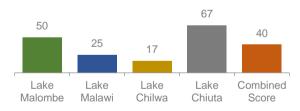
Scores for Equity were significantly higher than for any other dimension of governance (Figure 13). Participants from all four lake bodies reserved their highest scores for Equity, with the combined score of 63 being 27 points higher than the next highest dimension. Notably, participants acknowledged that women and other marginalized groups (such as youth

Equal Equal Equal Equal Access to Access to Access to Basic Power Resources Livelihoods Services

(Figure 13)

and people with disabilities) were less represented within lake authorities. Participants also described clear inequities in the treatment of artisanal fishers and commercial operators on Lake Malawi. Despite these findings, however, participants offered a clear consensus view that key stakeholders are treated with a significant degree of equality, even as the overall governance system is marked by systemic weaknesses.

#### Equal Access to Basic Services by Lake Body (Figure 14)



The Equal Access to Basic Services criterion examined the extent to which extension services, enforcement, and savings and loans schemes were afforded to fishing communities with relative equality (Figure 14). It also examined the extent to which lake authorities make discrete efforts to extend services to women and other marginalized groups. While participants identified clear

weaknesses in extension services offered by the DFO across multiple indicators, they largely agreed that receipt of those limited services were distributed relatively equally across stakeholder groups. By contrast, participants cited greater inequity around enforcement and the distribution of savings and loans schemes. One TA from Lake Chilwa captured the sentiment of many when he asked rhetorically, "if the son of the chief has illegal gear seized, will he pay?"

Participants across multiple lakes argued that savings and loans schemes were only available to those with sufficient capital. For example, Lake Malawi participants noted that commercial fishers have greater access to such schemes, while those from Lake Malombe thought that processors had better access. Lake Chilwa participants offered higher scores related to Equal Access to Basic Services, seeing enforcement activities as being applied comparatively more

equally on their lake. Lake Chilwa also gave a high score to *Question 10: Do lake authorities* make effort to extend services to vulnerable groups, including women, youth and people with physical challenges? However, they were less clear in citing examples of those discrete efforts.

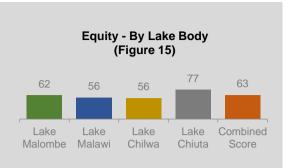
The Equal Access to Power criterion was described by two indicators looking at the representation of women and vulnerable groups within fisheries co-management, as well as the representation of fisheries stakeholders along the value chain, including fishers, processors, and traders. In most cases participants reported a moderate degree of equality in terms of representation, with Lake Chilwa and Lake Chiuta citing a low level of representation for women and marginalized groups. Participants explained that women were better represented than other vulnerable groups. For example, Lake Malawi participants noted that 50 percent of BVC members were women, while no examples of persons with disabilities being represented were reported across any of the workshops. Participants explained that women tend to be better represented within BVC structures as compared to FAs.

The Equal Access to Resources criterion was captured by a single catch-all question: *Do stakeholders (including women and marginalized groups) have equal access to fishing resources?* Across all workshops, participants explained that there is a high degree of equality in terms of resource access, reflecting the "open access" nature of the lakes. Participants acknowledged distinct cultural roles for women and men, such as the predominance of men as fishers. However, when pushed, they universally argued that women had access to fishing resources. Participants cited women's role at other points in the value chain and the fact that in certain communities, such as around Lake Malawi, women play a more active role as fishers. For example, in Zambo and Bvunguti near Monkey Bay women have their own fishing gears and fish with their crew members. They also come to Monkey Bay to sell their fish by dugout canoes. The GGB team completed the exercise with a sense that it may have been able to elicit more textured information through the use of multiple, more focused indicators under the Equal Access to Resources criterion.

The Equal Access to Livelihoods criterion looked specifically at the extent to which stakeholders have equal access to improved fisheries technology and climate-smart agriculture technologies. It also included a specific indicator around the extent to which women and other marginalized groups have access to improved technologies and alternative livelihoods. These questions were aimed at forming a baseline measure in advance of planned project interventions focused on the introduction of new technologies and the promotion of alternative livelihoods. Participants struggled in answering these questions noting that the driving problem is not inequality in the distribution of enhanced livelihoods and technologies, but rather lack of access to those benefits altogether.

# Box 6. The Impact of Commercial Fisherman on Lake Malawi

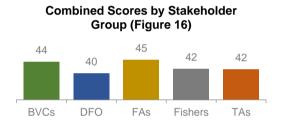
Lake Malawi tied with Lake Chilwa for the lowest Equity scores across the four lake bodies (Figure 15). The lower scores for Equity on Lake Malawi seemed to be driven largely by the strong presence of commercial fishers, who are largely absent on the other lakes. Lake Malawi participants described commercial fishers as operating by their own set of



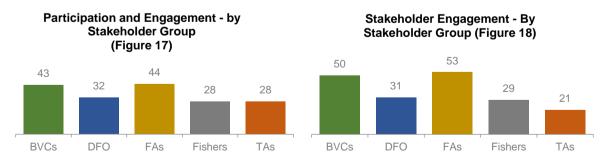
rules and as being largely untouchable by the BVC, FA, and even DFO structures. Extension workers explained that the big operators do not listen to them and have direct lines to the DOF and the larger Ministry of Agriculture, Irrigation, and Water Development in Lilongwe. There was significant frustrating among all participants that commercial operators are exempt from the closed season because their territories include only deep waters, yet they routinely fish in shallow areas with complete impunity.

#### 4.2. Key Differences among Stakeholder Groups

The scoring by individual stakeholder groups was marked far more by its consistency than by differences across groups (Figure 16). There was significantly less divergence in results reported by stakeholder groups as compared to the results reported across lake bodies. Whereas Figure 3 showed that 21 points separated the lowest-scoring lake (Lake Malawi) from the highest-



scoring lake (Lake Chiuta), Figure 16 shows that only 5 points separated the scores reported by the lowest lowest-scoring stakeholder group (DFO) from the highest scoring stakeholder group (FAs). This suggests that different stakeholder groups had generally similar assessments of the governance situation on their given lake, even while the situations across the lakes were described as distinct in key areas. Interestingly, the final combined consensus score across the three lakes of 38 was actually 2 points lower than the lowest combined score for any single stakeholder group. This reflects the fact that when critically discussing individual indicators in the plenary session, participants had a tendency to revise their



assessments downward.

One area of notable divergence in the assessments of stakeholder groups was under the Participation and Engagement dimension, which saw a 15-point difference between the low score and high score (Figure 17). The divergence was even higher (22 points) for the Stakeholder Engagement criteria (Figure 18). Interestingly, the BVCs and FAs consistently

reported higher levels of Participation and Engagement than the three remaining stakeholder groups. This suggested that LFMAs see themselves and their communities as more involved in fisheries co-management activities than participants in other institutions. Indeed, plenary discussions included some intense and even heated debate over the extent to which BVC and FA members genuinely included their members and local communities in enforcement activities, or exercises such as the monitoring of fish catches.

# 5. Initial Action Planning

In half-day sessions on Day 3 of each workshop, participants began *initial* discussions around taking forward "action planning" based on GGB results. Given the limited time available for planning, the aim of these sessions was not to develop fully-formed, ready-to-execute work plans, but rather to capture the preliminary thoughts of workshop participants regarding how they might address discrete challenges identified through the GGB. These action planning sessions, therefore, served to jumpstart a conversation around improving the overall governance situation for fisheries co-management that can be continued through a range of project activities. They also provided participants with a set of constructive, self-identified ideas in terms of actions that they could take back to their stakeholder groups.

Facilitators found that constructive and actionable ideas came out of each workshop. For example, participants identified the need to better engage a wider range of stakeholders in regular meetings at the community level. They also focused on the need to conduct basic planning, as well as to set clear but realistic targets in terms of enforcement activities such as patrols. At the same time, a half day did not provide enough time for deep probing aimed at cultivating "outside-the-box" approaches to addressing key challenges. In certain cases there was an identifiable asymmetry between the diagnosis of certain problems and proposed solutions. For example, workshop participants consistently identified awareness of regulations as generally high among fisheries stakeholders, yet many emphasized awarenessraising interventions within their action planning sessions. There was also a heavy emphasis on training and conducting meetings as the primary activities of different stakeholders, as compared to describing the tangible outcomes of those trainings and meetings. For example, participants found it easier to cite the need for corruption-related training than to describe concrete practices that lake authorities could undertake that could reduce the incidence of corruption. As is explained in Section 6, this points to a need for the Project to creatively expand the universe of what is possible through sustained engagement with key stakeholders over time.

The GGB covered a range of issues on an expansive set of topics, clearly more than could be covered in half day brainstorming sessions. Participants, therefore, focused on a few fairly broad areas they identified as being especially important and actionable, including the following: planning, participation, enforcement and transparency.

#### 5.1. Discussed Actions in Support of Planning

There was general agreement across stakeholder groups and lake bodies that there is a need for key fisheries stakeholders to undertake basic planning in order to direct their activities. With one exception no lake body has a LFMP in place, and the existing Lake Chilwa plan is out of date. Furthermore, BVCs and FAs were uniformly described as failing to conduct even the most basic operational plans. The DFO was the single institution that routinely went through an annual planning process. However, extension workers explained that stakeholders

were left out of that planning process and that annual plans often failed to truly direct the work of the DFO, as funding was never available to execute these plans.

Stakeholders at multiple lake bodies identified the development of an LFMP (or updating the LFMP in the case of Lake Chilwa) represented a useful, medium-term action. Stakeholders argued that LFMAs, particularly BVCs, should conduct annual and/or monthly planning. However, participants were less clear about what the focus of those plans should be. As is discussed in Section 6, it will be important for community-based stakeholders to develop simple, streamlined processes for completing basic planning in a way that is relevant to their actual work on the ground. Multiple participants (particularly TAs) saw written, transparent plans as providing a basis for different stakeholder groups to understand the ongoing activities of LFMAs. Participants also described the need for joint planning at specific sensitive periods, such as around closed season (discussed more below).

Key actions included the following.

Lead Stakeholder	Activity	Other Involved Stakeholders
DFO	Support the development (or revision) of LFMPs	BVCs, FAs, TAs, local government
BVC	Development of operational plans (possibly monthly and annual plans)	Fishing communities, DFO, FA
FA	Development of operational plans (possibly monthly and annual plans)	Fishing communities, DFO, FA

#### 5.2. Discussed Actions in Support of Participation

Participants consistently described individual actors within the co-management system operating as atomized institutions, with weak connections to each other and, in particular, local fishing communities. Extension workers explained that the DFO commonly communicated decisions in a top-down fashion, rather than engage stakeholders in dialogue around decision-making. Similarly, even FAs and BVCs fail to adequately involve local communities in co-management activities. Both DFO and BVC members described the challenge of getting local communities to show up for routine meetings.

The primary means identified for improving participation across the lakes was through regular consultation and meetings among different stakeholders. For example, DFO representatives explained that they are supposed to conduct monthly "fishers meetings" in their coverage areas. Lacking fuel and motorbikes, extension workers often have difficulty holding meetings in all but the most accessible communities. However, even where they have meetings, they tend to conduct outreach to a narrow range of BVC members and fishers. Extension workers explained that they should regularly bring together a more diverse set of actors, in particular TAs. Similarly, other groups cited the value of convening various institutional and individual stakeholders at the community level. Participants tended to be less clear on the outcomes of these meetings, or how they would be financed. However, they explained that regular consultation would facilitate planning and coordination of activities, such as collaboration on enforcement patrols.

Extension workers expressed frustration about the extent to which resource constraints limit their ability to have a routine presence within communities. In the Lake Chilwa workshop there was explicit discussion about the potential for extension workers to coordinate their

community visits with field technicians of FISH project. Although it does not solve the long-term resource challenges faced by the DFO, extension workers may be able to achieve better access to communities through piggybacking on field technician transportation, with no additional cost to the project. In the longer term, targeted advocacy for fisheries extension is needed to convince policy makers of the socio-economic and nutritional value of the fisheries, that once gone, it will take considerable government resources to restore.

Lead Stakeholder	Activity	Other Involved Stakeholders
DFO	Conduct monthly fisheries meeting (coordinate outreach to communities with activities of FISH field technicians)	BVCs, FAs, TAs, fishing communities
DFO	Conduct broad meetings with BVCs, FAs, VDC/ADC, local chiefs; Use meetings as opportunity to clarify roles/responsibilities and support joint planning (coordinate outreach to communities with activities of FISH field technicians)	BVCs, FAs, TAs, fishing communities, VDC/ADC
DFO	Activation/reactivation trainings for BVCs and FAs, with a focus on roles and responsibilities and community engagement	FA, BVCs
BVCs, FAs	Regular meetings with fishing communities to plan and coordinate routine activities	Fishing communities, DFO, TAs

#### 5.3. Discussed Actions in Support of Transparency

Participants explained that lake authorities are generally not transparent in how they engage with each other and fishing communities. While they gave high marks for LFMAs being democratically elected, participants explained that lake authorities fail to communicate their plans and activities outside of their institutional structures, and frequently even within their institutional structures. As is explained in Section 5.1, a significant explanation for this failure stems from the lack of up-front planning to begin with. However, participants described an environment in which key actors feel limited to no need to communicate or explain their actions to their constituencies and partners. This lack of transparency is conveyed in sharp relief by the fact that participants report that communities do not understand how their fines and fees are spent by lake authorities.

Suggested actions for promoting transparency came in two basic varieties. First, participants argued that there is a need for anticorruption-related training, with a possible emphasis on financial transparency. Second, participants universally argued that plans and budgets should be widely distributed and explained to other stakeholders. Interestingly, TAs tended to stress the importance of stakeholders sharing or conveying plans to them, but did not emphasize their own ability and need to communicate their own plans to constituents. A few of the DFO groups explained that regular meetings maybe the best forum for communicating information regarding plans and activities with communities, noting the limited literacy skills of many stakeholders.

Lead Stakeholder	Activity	Other Involved Stakeholders
DFO	Conduct monthly fisheries meeting (coordinate outreach to communities with activities of FISH field technicians)	BVCs, FAs, TAs, fishing communities
DFO	Conduct broad meetings with BVCs, FAs, VDC/ADC, local chiefs; Use meetings as opportunity to clarify roles/responsibilities and support joint planning (coordinate outreach to communities with activities of FISH field technicians)	BVCs, FAs, TAs, fishing communities, VDC/ADC
DFO	Activation/reactivation trainings for BVCs and FAs, with a focus on roles and responsibilities and community engagement	FA, BVCs
BVCs, FAs	Regular meetings with fishing communities to plan and coordinate routine activities	Fishing communities, DFO, TAs

#### 5.4. Discussed Actions in Support of Enforcement

Participants across lake bodies explained that enforcement of fisheries regulations suffer from multiple weaknesses. Enforcement was described as often absent, with few to no DFO-supported patrols happening at lakes including Lake Malawi and Lake Malombe. BVCs and FAs were generally reported to be ineffective in encouraging compliance with regulations. BVC-led patrols that do happen often have a vigilante quality to them, with collections of individual BVC members (and sometimes non-members) borrowing money to hire a police officer and conduct a patrol. Participants from Lake Chilwa recounted how a group of BVC members ended up being jailed for four days when they were unable to pay police officers for their services following one patrol. Enforcement activities, therefore, are applied inconsistently and fail to have the deterrent effect desired.

Participants universally identified enforcement as a priority area for action moving forward. Suggested activities included targeted outreach and public information activities tied to strategic periods, such as closed season. Participants noted the importance of shared governance responsibility, arguing for DFO and community-led patrols. Participants were generally unclear regarding where required resources for conducting patrols would come from. Some groups spoke vaguely about using fees and fines to pay for hiring boats for patrols. However, one concern is that borrowing funds from private individuals or entities remains the most plausible means for generating funds for BVC/FA-led patrols. This approach to patrol financing may challenge efforts to promote financial transparency, and may provide some adverse incentives in terms of applying enforcement activities equally. Certain DFO groups, such as in Lake Malombe and Lake Malawi, had explicit discussions around setting realistic targets for conducting patrols. For example, they noted that land patrols can provide a cheaper alternative to water patrols when funds are lacking. Additionally, they explained that even one patrol per month during closed season would represent progress and have some deterrent effect. Extension workers from Lake Chilwa also emphasized the need to ensure that magistrate judges better understand how to apply regulations. Underlining all of these recommendations was the need for local lake authorities to support more impartial implementation of approved by-laws and regulations.

Lead Stakeholder	Activity	Other Involved Stakeholders
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Lead Stakeholder	Activity	Other Involved Stakeholders
FA, DFO	Support the drafting/redrafting and approval of bylaws	District council, BVCs, fishing communities
DFO, BVCs, FAs	Conduct targeted information campaigns focused particularly on the closed season	TAs, fishing communities
DFO	Conduct training to TAs on their role in enforcement, including in trying cases through traditional courts	TAs, BVCS, FAs
BVCs, FAs	Regular meetings with fishing communities to plan and coordinate routine activities	Fishing communities, DFO, TAs
DFO	Conduct land and water-based patrols, prioritizing sensitive periods such as closed season and setting achievable targets in terms of the number of patrols to be conducted	BVCs, FAs, TAs
BVCs, FAs	Conduct community-based patrols, coordinating closely with DFO and TA	DFO, TAs
BVCs, FAs, DFO	Communicate cases of village headman and GVH failing to enforce or violating fisheries regulations to TAs	TAs

#### 6. Conclusion and Recommendations

The GGB revealed a broad set of weaknesses in terms of local governance as it relates to fisheries co-management across the four lake bodies targeted by the FISH project. Four of the five dimensions of governance were scored as "poor" or "fairly poor" by participants from each lake: Effectiveness, Rule of Law, Participation and Engagement, and Accountability. Scores for Equity were higher, although key issues were identified regarding inequities in the enforcement of regulations and accesses to services. Consistent with findings from the CPI and APEA, institutional structures and overall governance were found to be higher around Lake Chiuta as compared to the remaining three lake bodies.

Initial action planning completed on the final day of each workshop provided the opportunity for participants to wrestle with the significance of GGB findings and begin thinking through how they could take steps to improve governance. Importantly, these sessions allowed

participants to validate findings and in all cases workshop participants found that results reflected the current government situation. Participants across workshops appreciated the opportunity to immediately see results, as compared to more familiar INGO-implemented studies where results are often not disseminated to local communities. Useful thinking and early planning came out of the initial action planning. Participants reached consensus on

#### **Box 7. Participants and GGB Results**

Participants across lake bodies appreciated having immediate and transparent access to GGB results. In each case, participants validated the findings, agreeing that their governance situation is marked by clear weaknesses and in need of deliberate actions to strengthen fisheries co-management.

key issues, such as the need for greater intra-and inter-group planning, the importance of improved communication across fisheries stakeholders, and the necessity of joint enforcement activities. However, this brainstorming occurred within a limited period of time

and often did not force participants to fully grapple with how planned activities could be fully realized.

The GGB results and initial action planning can provide a useful reference point for FISH-supported investments in fisheries co-management moving forward. A number of activities from the FY 2016 work plan respond directly to gaps identified by the GGB. Planned training, advocacy, and technical assistance with key lake authorities has the potential to build momentum for the six policy steps that are the principle of PFM, which have been largely unimplemented or eroded across all lake bodies. Comprehensive training extended to BVCs and FAs also has the potential to address key capacity constraints, including those related to planning, stakeholder engagement, transparency, and corruption. Support for Information, Education, and Communication (IEC) will provide targeted support for awareness-raising for strategic points in the lake management process, such as the start of closed season.

The GGB and the related APEA findings may also help the FISH Project team to better target some of its activities, including broadly defined interventions focused on capacity development and advocacy. The Project should scale and scope its expectation of local authorities (particularly BVCs and FAs) to their existing capacities. The FISH team should also think creatively about how it can leverage its planned investments and activities (such as support for the development of LFMPs, support for bylaw development and approval, and support for IEC activities) to encourage lake authorities to undertake their own constructive initiatives. Indeed, the sustainability of project investments ultimately depends on using planned interventions to catalyze local-owned solutions to governance challenges.

Some specific recommendations that arise from the GGB include the following.

1. Provide structured support for group-specific and collective planning, building on initial action planning completed by workshop participants. As noted above, initial action planning began constructive discussion around addressing key governance issues identified by the GGB. To be useful, however, planning must include a wider range of stakeholders over a sustained period of time. The GGB made clear that there is a need for individual lake authorities, particularly LFMAs, to develop lake wide and locality specific operational plans. But, there is also a need for joint planning across groups. Action planning sessions with participants demonstrated that BVC and FA members in many cases lack an understanding of what real, useful planning entails. Stakeholders need help to develop approaches to simple planning that are properly scaled to the size and capacity of institutions in question. This may involve promoting very simple planning practices within trainings delivered to BVC and FAs, and offering guidance to VDCs and ADCs on how to mainstream fisheries in their development plans.

Given the current inaction of many FAs, the DOF intends to reconstitute FAs along the lines of one FA per Lake Ecosystem made up of nested BVCs. The reformation of FAs along these lines could provide an ideal opportunity for convening discussion among key actors at the lake level to facilitate shared visioning and planning that follows up on GGB discussions. It would also make the FA the logical driver of the six-step PFM process aimed at achieving lake-wide management plans, bylaws, and user rights.

2. Leverage technical assistance for developing LFMPs to build shared ownership and support for fisheries co-management by key stakeholders, including DFO. The GGB points to the need to develop (or revisit in the case of Lake Chilwa) LFMPs. Stakeholders clearly have an interest in establishing a high level vision and strategy for the

management of lake bodies. The process of developing LFMPs could provide an opportunity for engaging the full range of actors in priority setting for fisheries comanagement, including district councils, ADCs, and VDCs whose involvement in lake management is currently limited. The DOF (and DFOs, in particular) have a clear institutional interest in the development of LFMPs. The Project should use its support for the LFMP-development process as an opportunity to encourage the DOF to set realistic but strategic targets and budgets for how it helps lead on lake management and for stakeholders to accept that the fishery is a finite resource and needs management.

- 3. Provide support for the development and approval of lake-specific bylaws. Bylaws are at various stages of development across lake bodies, but have generally not been approved due to the long absence of district councils. As with the development of LFMPs, support for development or revision of current drafts of bylaws on a lake-wide basis provides an opportunity for engaging and building ownership among a wide range of key stakeholders. The approval of bylaws will also help nurture the institutional credibility of LMFAs, as well as the DFO.
- 4. Focus on financial transparency as a means of increasing the institutional legitimacy of LFMAs. The GGB makes clear that the lack of transparency of LFMAs, particularly around finances, undermines their credibility among key fisheries stakeholders. The FISH project should consider implementing a holistic package of interventions aimed at promoting greater accountability by BVCs and FAs, including inculcating basic practices that support financial transparency. As pointed out by the CPI, the GGB strongly suggests that LFMAs lack basic organizational and financial capacity. The project intends to provide a robust degree of capacity development to FAs and BVCs. Planned trainings, however, are largely technical in nature, built around the six policy steps for PFM. It will be important that adequate investment also goes to providing requisite financial and organizational skills that are necessarily required for LFMAs to fulfill their policy, technical, and managerial functions.

Financial capacity training should involve equipping LFMAs to adopt very simple, locally-appropriate processes for tracking and sharing revenue. The Project may consider other, non-training interventions that could incentivize improved practices among LFMAs. For example, the project may sponsor competitions for the "most transparent" BVC or FA. The Project could also pilot simple budget tracking by communities or other stakeholders targeted at LFMAs. Because it may be too difficult to support community budget tracking across all BVCs, the Project could consider focusing on FAs. In addition, linking high performing LFMAs to VSLA schemes to fishers would provide them with the opportunity to access resources needed for local investments, coupled with capacity in financial management and record keeping. It could also incentivize improved financial performance.

5. Support targeted awareness-raising focused on behavior change. The FY 2016 project work plan includes a robust investment in IEC materials and activities. These interventions have the potential to promote greater adherence to fisheries regulation. It is important to bear in mind that most participants believe that lack of awareness of fishing regulations is not a primary driver of poor lake management. Instead, participants were much more likely to cite lack of enforcement, low institutional capacities, and corruption as factors that explain why fishing stakeholders continue to violate regulations with relative impunity. These facts suggest that the goal of IEC should not be to make communities aware of regulations, but to really change behavior. This may involve

focusing to a greater extent on the *why* of fishing regulations. The FISH project's intention to focus IEC investments on increasing understanding for the biological reasons for regulations could support this effort. For example, there continues to be misunderstanding as to why there is a closed season for shallow-water fishing while deepwater fishing is permitted year round. It is possible that public education around the biological reasons for why closed season is important <u>may</u> positively induce behavior change. The project should critically examine the effectiveness of IEC activities in order to recalibrate investments over the life of the project.

Building on lessons from Mbenji Island, the Project will support closed season commencement ceremonies at each of the four lakes. The goal of these and similar events should be less on raising awareness of the closed season and more on contributing to community expectations and norms that support adherence to lake closure. The ceremonies are used to highlight the biological reasons for protecting fish breeding areas during the breeding season. However, the public ceremonies can also be effective forums for issuing public commitments to follow fisheries regulations that invite formal sanction and informal, community censure of violators. Thus, the Project should use the ceremonies and IEC more generally to induce commitments by the DFO and other stakeholders around their shared role in enforcement. The FISH team and lake authorities should also bear in mind that ceremonies without follow up enforcement run the risk of further undermining the perceived credibility of lake authorities.

- 6. Include a robust focus on peer-to-peer learning within the overall capacity development strategy. The GGB, CPI, and APEA demonstrate that there are clear examples of comparatively successful fisheries co-management at the community level. LFMAs are understood to be more effective at self-policing and carrying out enforcement activities in Lake Chiuta, with stronger support from traditional authorities. Similarly, Kasanha VDC on the southwest arm of Lake Malawi has a comparatively active BVC. As part of its overall capacity development strategy, the Project should include investment in peer-to-peer learning both within and between lake bodies. While there is a need to better understand the extent of success of lake authorities around Lake Chiuta, TAs from that lake body may be in a good position to explain to other TAs how their communities have benefitted from robust support for fisheries co-management and, in turn, how effective co-management has strengthened their leadership. Similarly, BVCs may be able to adopt simple, locally-appropriate practices from each other.
- 7. Develop a comprehensive advocacy strategy aimed at promoting public investment in fisheries co-management. The DFO was reported to have limited capacity to deliver extension services to fishing communities, and VDC, ADC and district councils were described as being completely absent in terms of providing enforcement and support for beach development. This stems from a low appreciation by policymakers of the important economic and food security of the country's lake fisheries. It remains challenging to induce changes in public sector prioritization and funding decisions. However, it is unquestionable that in the long term fisheries co-management will depend on greater public sector resource allocations. The project should actively plan and test advocacy and lobbying strategies that raise the profile of fisheries co-management as a priority issue at multiple levels of government.
- 8. Build synergies between the FISH technicians and DFO extension workers. The GGB makes clear that resource constraints severely limit the ability of DFO extension workers to maintain an active presence in communities, particularly along especially remote beach

sites. The Project is not in a position to directly provide DFOs with resources. However, through alignment of their schedules, extension workers should be able to achieve better access to communities at no cost to the Project by riding on the back of FISH technician motorbikes. This solution <u>does not</u> address the long-term resource challenges of the DOF and an exit strategy will be needed to promote the continued engagement of extension workers. But, over a four year period FISH offers the possibility of shifting expectations regarding the extent to which extension workers collaborate with and support LFMAs and TAs.

- 9. Focus on enhanced access to improved fisheries and "climate-smart" agricultural technologies. The GGB demonstrated that fishing communities largely lack access to updated fisheries and agricultural technologies, as well as access to savings and loans schemes. These findings lend support for the Project's planned interventions aimed at promoting access to improved technologies. The midline and endline GGB studies will provide important measures of progress in achieving more general access to new technologies.
- 10. Consider completing a GGB study of DOF in order to understand key constraints at a higher level. The October 2015 GGB examines local governance conditions and assesses the role played by lake authorities at the district and lake level, particularly DFO extension workers, LFMAs, and TAs. Even under a decentralized system, successful fisheries co-management requires that local actors are linked to a national and subnational government (particularly the DOF) that is able to lend support and deliver services. It is clear that key governance constraints exist at the central level and at DFO administrative offices. The FISH team is considering conducting a capacity needs assessment of the DOF. The project could also consider whether a GGB focused on the DOF as the unit of analysis could constructively involve higher level ministry and DFO officials in a conversation around how to address key governance and co-management capacity challenges within the fisheries system as a whole. It may also identify areas where targeted technical assistance, training, or advocacy could achieve outsized impact. Such an exercise could occur in single workshop including participants from the central ministry, DFO, and end beneficiaries.
- 11. Repeat GGB in 18–24 months to establish a midline assessment of progress. The GGB should be repeated at the end of Year 3 (or start of Year 4) to assess progress in terms of strengthening local governance at a midpoint, when there is still sufficient scope for the Project to make adjustments and incorporate lessons. Depending on the outcome on this follow up assessment, the Project may include a final GGB at the end of Year 5 to establish endline governance scores. These measures would contribute to the FISH exit strategy and inform the project's plan for sustainability.

Annex 1: GGB – Combined Consensus Scores by Lake Body

	Consensus Score (Malombe)	Consensus Score (Malawi)	Consensus Score (Chilwa)	Consensus Score (Chiuta)	Combined Score	Difference (High- Low)
1. Effectiveness	20	18	25	28	23	10
1.1 Vision and planning	11	0	33	11	14	33
1.2 Financial Management	17	25	8	25	19	17
1.3 Decision and Information	53	53	47	47	50	7
1.4 Satisfaction with Services	11	11	22	33	19	22
1.5 Leadership	8	0	17	25	12	25
2. Rule of Law	31	25	41	47	36	22
2.1 Existence of Institutional Legal Framework	42	33	33	33	35	8
2.2 Application and Effectiveness of Laws	20	0	20	27	17	27
2.3 Awareness of Laws	67	67	83	50	67	17
2.4 Access to Justice	29	25	58	67	45	42
2.5 Incidence of Corruption	0	0	8	58	17	58
3. Accountability	25	24	36	56	35	32
3.1 Transparency	33	33	22	44	33	22
3.2 Checks and Balances	42	17	25	50	33	33
3.3 Recourse	33	33	44	78	47	44
3.4 Government Responsiveness	0	20	17	27	16	27
3.5 Integrity	17	17	50	83	42	67
4. Participation and Engagement of Fishing Communities	39	17	34	37	32	22
4.1 Institutional Framework	61	22	22	33	35	39
4.2 Stakeholder Engagement	33	17	25	54	32	37
4.3 Civic Mindedness	22	11	56	22	28	44
5. Equity	62	56	56	77	63	22
5.2 Equal Access to Basic Services	50	25	17	67	40	42
5.3 Equal Access to Power	67	67	50	42	56	25
5.4 Equal Access to Resources	100	100	100	100	100	0
5.5 Equal Access to Livelihoods	33	33	56	100	56	67
<b>Total Score</b>	36	28	38	49	38	21

Annex 2: GGB – Combined Consensus Scores by Stakeholder Group

	BVCs	DFO	FAs	Fishers	TAs	Difference (High-Low)
1. Effectiveness	30	32	33	33	29	5
1.1 Vision and planning	27	31	39	35	27	12
1.2 Financial Management	15	35	22	29	19	21
1.3 Decision and Information	62	48	44	45	48	17
1.4 Satisfaction with Services	19	22	22	39	25	19
1.5 Leadership	25	23	36	19	25	17
2. Rule of Law	41	38	45	44	41	7
2.1 Existence of Institutional Legal Framework	36	42	67	50	37	30
2.2 Application and Effectiveness of Laws	28	25	20	18	33	15
2.3 Awareness of Laws	58	71	56	54	50	21
2.4 Access to Justice	48	37	53	67	52	29
2.5 Incidence of Corruption	33	17	31	31	35	19
3. Accountability	38	40	37	43	39	5
3.1 Transparency	42	42	44	39	19	25
3.2 Checks and Balances	37	37	56	37	37	18
3.3 Recourse	42	61	59	56	42	19
3.4 Government Responsiveness	23	20	24	17	32	15
3.5 Integrity	42	37	33	58	46	25
4. Participation and Engagement of Fishing Communities	43	32	44	28	28	15
4.1 Institutional Framework	42	31	41	31	42	11
4.2 Stakeholder Engagement	50	31	53	29	21	22
4.3 Civic Mindedness	36	33	37	25	22	15
5. Equity	71	59	68	61	70	13
5.2 Equal Access to Basic Services	48	48	50	48	58	10
5.3 Equal Access to Power	79	58	61	54	54	25
5.4 Equal Access to Resources	100	83	89	83	100	17
5.5 Equal Access to Livelihoods	58	44	70	58	69	26
<b>Total Score</b>	44	40	45	42	42	5

## **Annex 3: Detailed Scores – Lake Malombe**

	Question	Score Criteria	BVCs	DFO	Fishers	TAs	Consen -sus Score
1.	Effectiveness		26.00	35.44	32.22	24.11	20.11
W	hat is the effectiveness of lake authorities in advancing fisheries	co-management?	20.00	33.44	32.22	24.11	20.11
1.1	Vision and Planning						
	lake authorities have a clear vision that translates into strategi heries co-management?	c and operational plans to achieve sustainable	50.00	41.66	50.00	25.00	11.11
1	Is there an existing Lake Fisheries Management Plan (LFMP) that articulates a clear vision and strategy for co-managing fisheries resources?	0 = <b>no</b> LFMP exists; 1 = exists but <b>low</b> level of clarity; 2 = exists and <b>moderately</b> clear; 3 = exists and <b>high</b> level of clarity	33.33	66.66	100.00	33.33	0.00
2	Are FAs/BVCs included in the development of that LFMP?	0 = BVCs/FAs <b>never</b> included; 1 = <b>rarely</b> included; 2 = <b>often</b> included; 3 = <b>always</b> included	66.66	66.66	33.33	33.33	
3	Do BVCs create effective operational plans that address priorities such as enforcement patrols?	0 = BVCs do <b>never</b> create operational plans; 1 = BVCs <b>rarely</b> create effective operational plans; 2 = BVCs <b>often</b> create effective operational plans; 3 = BVCs <b>always</b> create effective operational plans	66.66	0.00	33.33	33.33	33.33
4	Are participatory fisheries management priorities reflected in Village and District Development Plans?	0 = LFMP priorities <b>never</b> reflected in VDPs/DDPs; 1 = priorities <b>rarely</b> reflected in VDPs/DDPs; 2 = priorities <b>often</b> reflected in VDPs/DDPs; 3 = priorities <b>always</b> reflected in VDPs/DDPs	33.33	33.33	33.33	0.00	0.00
1.2	Financial Management		0.00	50.00	25.00	16.67	16.67
Is	there effective and efficient management of financial resources	by lake authorities for fisheries co-management?	0.00	50.00	25.00	10.07	10.07
5	Do lake authorities prepare an annual budget to run its fisheries co-management activities?	0 = lake authorities <b>never</b> prepares budgets; 1 = <b>rarely</b> prepare budgets; 2 = <b>often</b> prepare budgets; 3 = <b>all</b> prepare budgets	0.00	33.33	0.00	0.00	0.00
6	Do lake authorities have sufficient funds to support their operations?	0 = lake authorities have <b>no</b> funds; 1 = lake authorities have <b>low</b> level of funds; 2 = <b>moderate</b> level of funds; 3 = <b>sufficient</b> funds	0.00	33.33	0.00	0.00	0.00
7	Do lake authorities have the capacity to manage finances effectively?	0 = lake authorities do <b>not</b> have capacity to manage funds effectively; 1 = <b>low</b> capacity; 2 = <b>moderate</b> capacity; 3 = <b>high</b> capacity	0.00	33.33	100.00	0.00	33.33

	Question	Score Criteria	BVCs	DFO	Fishers	TAs	Consen -sus Score
8	Do lake authorities have sufficient processes for generating revenue for fisheries co-management? (e.g., through enforcement penalties, licensing, benefit sharing)	0 = <b>no</b> processes established for generating revenue; 1 = <b>few</b> have sufficient processes; 2 = <b>many</b> have sufficient processes; 3 = <b>all</b> have sufficient processes	0.00	100.00	0.00	66.66	33.33
1.3	Decision and Info		80.00	46.66	33.33	40.00	53.33
Is	the decision making of lake authorities on fisheries co-managen	nent based on reliable and updated information?	80.00	40.00	33.33	40.00	55.55
9	Are there effective information sources for supporting management of the lake? (i.e., frame surveys, updated registry)	0 = <b>no</b> information sources exist; 1 = exists but <b>low</b> effectiveness; 2 = exists and <b>moderately</b> effective; 3 = exists and <b>highly</b> effective	100.00	100.00	33.33	33.33	100.00
10	Are lake authorities informed about the legal framework, such as fisheries act and relevant bylaws?	0 = <b>not</b> informed; 1 = <b>a little</b> informed; 2 = <b>moderately</b> informed; 3 = <b>highly</b> informed	100.00	66.66	100.00	100.00	66.66
11	Is decision making based on available information related to fisheries? (e.g., based on frame survey)	0 = decisions <b>never</b> based on available information; 1 = decisions <b>rarely</b> based on available information; 2 = decisions <b>often</b> based on available information; 3 = decisions <b>always</b> based on available information	100.00	66.66	33.33	66.66	66.66
12	Do BVCs/FAs maintain reliable, up-to-date registries of fishers?	0 = BVCs/FAs <b>never</b> have reliable registries; 1 = <b>rarely</b> reliable registries; 2 = <b>often</b> have reliable registries; 3 = <b>always</b> have reliable registries	100.00	0.00	0.00	0.00	33.33
13	Are BVC/FA members consulted before new entrants are allowed to fish in the lake?	0 = BVC/FA members <b>never</b> consulted; 1 = <b>rarely</b> consulted; 2 = <b>often</b> consulted; 3 = <b>always</b> consulted	0.00	0.00	0.00	0.00	0.00
1.4	Satisfaction with services						
	hat is the degree of stakeholder satisfaction with the quality and magement by lake authorities?	l accessibility of service delivery in fisheries co-	0.00	22.22	44.44	22.22	11.11
14	What is the degree of stakeholder (i.e., BVC/FA members, fishing communities) satisfaction with the delivery of services in fisheries co-management by lake authorities?	0 = <b>no</b> satisfaction; 1 = <b>low</b> level of satisfaction; 2 = <b>moderate</b> level of satisfaction; 3 = <b>high</b> level of satisfaction	0.00	0.00	33.33	33.33	0.00
15	Are there effective feedback mechanisms established for stakeholders (i.e., BVC/FA members, fishing communities) to share input with these lake authorities? (i.e., are there ways of communicating concerns to necessary authorities)	0 = effective feedback <b>never</b> mechanism exist; 1 = mechanisms exists but <b>rarely</b> effective; 2 = exist and <b>often</b> effective; 3 = exist and <b>always</b> effective	0.00	33.33	100.00	33.33	33.33
16	What is the level of stakeholder satisfaction in their involvement in planning and budgeting by lake authorities?	0 = <b>no</b> satisfaction; 1 = <b>low</b> level of satisfaction; 2 = <b>moderate</b> level of satisfaction; 3 = <b>high</b> level of	0.00	33.33	0.00	0.00	0.00

	Question	Score Criteria	BVCs	DFO	Fishers	TAs	Consen -sus Score
		satisfaction					
1.5	Leadership		0.00	16.67	8.33	16.67	8.33
Do	es the leadership of lake authorities have the ability to mobilize	stakeholders for fisheries co-management activities?	0.00	10.07	0.33	10.07	0.33
17	Is lake authority leadership capable of mobilizing material and financial resources for fisheries co-management activities? (e.g., through confiscations and fines, membership dues)	0 = authorities <b>not</b> capable; 1 = <b>low</b> level of capability; 2 = <b>moderate</b> level of capability; 3 = <b>high</b> level of capability	0.00	66.66	33.33	33.33	33.33
18	Is lake authority leadership able to mobilize joint action for fisheries co-management activities? (e.g., joint enforcement exercises, inter-BVC meetings to discuss issues, joint licensing efforts)	0 = authorities <b>not</b> capable; 1 = <b>low</b> level of capability; 2 = <b>moderate</b> level of capability; 3 = <b>high</b> level of capability	0.00	0.00	0.00	0.00	0.00
19	Has there been positive change in fisheries co-management within the previous two years? (e.g., reduction in use of illegal gear, increased compliance with closed season, increased enforcement of sanctuaries)	0 = <b>no/negative</b> change; 1 = <b>low</b> level of positive change; 2 = <b>moderate</b> level positive change; 3 = <b>high</b> level of positive change	0.00	0.00	0.00	33.33	0.00
20	Do lake authorities consult with local stakeholders (i.e. BVC/FA members, fishing communities) on use of financial and other material resources for fisheries co-management activities?	0 = <b>never</b> consulted; 1 = <b>rarely</b> consulted; 2 = <b>often</b> consulted; 3 = <b>always</b> consulted	0.00	0.00	0.00	0.00	0.00
2.	Rule of Law		37.67	42.33	58.00	33.66	31.50
Do	es rule of law for fisheries co-management exist?		37.07	42.33	56.00	33.00	31.50
2.1	Existence of Institutional Legal Framework		25.00	75.00	100.00	33.33	41.67
Is	there an adequate institutional legal framework for fisheries co-	-management?	23.00	75.00	100.00	33.33	11407
21	Are Local Fisheries Management Authorities (FAs, BVCs) legally registered institutions with an established constitution? 11	0 = <b>no</b> LFMAs are registered; 1 = <b>few</b> registered; 2 = <b>many</b> registered; 3 = <b>all</b> registered	0.00	0.00	100.00	100.00	100.00
23	Is there established and functional FAs/BVCs on your lake body? (i.e., it meets regularly, members come to meetings, able to enforce regulations)	0 = FAs/BVCs <b>never</b> functional; 1 = FAs/BVCs <b>rarely</b> functional; 2 = FAs/BVCs <b>often</b> functional; 3 = FAs/BVCs <b>always</b> functional	0.00	66.66	100.00	33.33	66.66

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<sup>&</sup>lt;sup>11</sup> Question 22 does not appear in this survey because it was added after the Lake Malombe survey. See Annexes 4, 5, and 6 for Question 22 and Footnote 7 for more details.

	Question	Score Criteria	BVCs	DFO	Fishers	TAs	Consen -sus Score
24	Are there effective fisheries co-management bylaws for your waterbody approved by the district council?	0 = <b>no</b> bylaws approved; 1 = bylaws approved but <b>rarely</b> effective; 2 = bylaws approved and <b>often</b> effective; 3 = bylaws approved and <b>always</b> effective	100.00	33.33	100.00	0.00	0.00
25	Does the local magistrate court understand its role in upholding fisheries law?	0 = court does <b>not</b> understand its role; 1 = <b>low</b> level of understanding; 2 = <b>moderate</b> level of understanding; 3 = <b>high</b> level of understanding	0.00	100.00	100.00	0.00	0.00
26	Does the local customary court understand its role in upholding fisheries law?	0 = court does <b>not</b> understand its role; 1 = <b>low</b> level of understanding; 2 = <b>moderate</b> level of understanding; 3 = <b>high</b> level of understanding	0.00	100.00	100.00	33.33	33.33
	Application and Effectiveness of Laws e fisheries laws and by-laws enforced?		13.33	20.00	6.67	59.99	20.00
27	How effective is the department of fisheries in enforcing fishery regulations? (e.g., size limits, closed seasons, sanctuary areas/no-take zones)	0 = <b>not</b> effective; 1 = <b>low</b> level of effectiveness; 2 = <b>moderately</b> effective; 3 = <b>highly</b> effective	0.00	33.33	0.00	66.66	33.33
28	How effective are traditional authorities in enforcing fisheries regulations? (e.g., size limits, closed seasons, sanctuary areas/no-take zones)	0 = <b>not</b> effective; 1 = <b>low</b> level of effectiveness; 2 = <b>moderately</b> effective; 3 = <b>highly</b> effective	66.66	0.00	33.33	33.33	33.33
29	How effective are FAs/BVCs at self-policing? (i.e., are FAs/BVCs able to enforce adherence to regulations by their members and local fishers, including through use of community police to enforce regulations?)	0 = <b>not</b> effective; 1 = <b>low</b> level of effectiveness; 2 = <b>moderately</b> effective; 3 = <b>highly</b> effective	0.00	33.33	0.00	66.66	33.33
30	What is the level of FA/BVC cooperation with local government across all levels (VDCs, ADCs, district level) around enforcement of fisheries regulations?	0= <b>no</b> cooperation; 1 = <b>low</b> level of cooperation; 2 = <b>moderate</b> level of cooperation; 3 = <b>high</b> level of cooperation	0.00	33.33	0.00	66.66	0.00
31	Are penalties for violations strong enough to serve as a deterrent? (i.e., penalties applied by traditional and local government authorities)	0= <b>no</b> cooperation; 1 = <b>low</b> level of cooperation; 2 = <b>moderate</b> level of cooperation; 3 = <b>high</b> level of cooperation	0.00	0.00	0.00	66.66	0.00
	Awareness of Laws		66.67	83.33	66.67	33.33	66.67
32	the fisheries laws and regulations known by the population?  Do fishing communities understand fisheries regulations?	0 = <b>no</b> understanding; $1 = $ <b>little</b> understanding; $2 =$	33.33	100.00	100.00	33.33	100.00

	Question	Score Criteria	BVCs	DFO	Fishers	TAs	Consen -sus Score
		<b>moderate</b> understanding; 3 = <b>high</b> understanding					
33	Do lake authorities raise awareness through public information campaigns (including through media) around regulations and enforcement for fisheries co-management?	0 = <b>no</b> efforts at awareness raising; 1 = <b>little</b> awareness raising; 2 = <b>moderate</b> levels awareness raising; 3 = <b>sufficient</b> awareness raising	100.00	66.66	33.33	33.33	33.33
2.4	Access to Justice		41.67	33.33	66.67	33.33	29.17
Do	fisheries stakeholders have access to justice?		41.07	33.33	00.07	33.33	29.17
34	Are fisheries cases settled fairly and efficiently by the magistrate courts?	0 = cases <b>never</b> settled fairly/efficiently; 1 = cases <b>rarely</b> settled fairly/efficiently; 2 = cases <b>often</b> settled fairly/efficiently; 3 = cases <b>always</b> settled fairly/efficiently	33.33	100.00	100.00	33.33	33.33
35	Are fisheries disputes settled fairly and efficiently by the department of fisheries?	0 = cases <b>never</b> settled fairly/efficiently; 1 = cases <b>rarely</b> settled fairly/efficiently; 2 = cases <b>often</b> settled fairly/efficiently; 3 = cases <b>always</b> settled fairly/efficiently	100.00	33.33			33.33
36	Are fisheries cases settled fairly and efficiently in customary courts?	0 = cases <b>never</b> settled fairly/efficiently; 1 = cases <b>rarely</b> settled fairly/efficiently; 2 = cases <b>often</b> settled fairly/efficiently; 3 = cases <b>always</b> settled fairly/efficiently	33.33	0.00	100.00	66.66	50.00
37	Is there political interference in the course of justice in decisions on fisheries cases?	0 = <b>high</b> degree of interference; 1 = <b>moderate</b> degree of interference; 2 <b>low</b> degree of interference; 3 = <b>no</b> interference	0.00	0.00	0.00	0.00	0.00
2.5	Incidence of Corruption		41.67	0.00	50.00	8.33	0.00
Wl	nat is the degree of corruption in fisheries co-management?		41.67	0.00	50.00	8.33	0.00
38	What is the level of corruption in fisheries co-management?	0 = <b>high</b> level of corruption; 1 = <b>moderate</b> level of corruption; 2 = <b>low</b> level of corruption; 3 = <b>no</b> corruption	0.00	0.00	0.00	0.00	0.00
39	Do people who violate fisheries regulations pay bribes to avoid sanctions?	0 = bribes/payments <b>highly common</b> ; 1 = bribes/payments <b>moderately</b> common; 2 = bribes/payments <b>uncommon</b> ; 3 = <b>no</b> bribes/payments	100.00	0.00	100.00	0.00	0.00
40	Are tributes commonly paid to secure fishing rights?	0 = tributes <b>highly common</b> ; 1 = tributes <b>moderately</b> common; 2 = tributes <b>uncommon</b> ; 3 = <b>no</b> tributes	33.33	0.00	100.00	33.33	0.00

	Question	Score Criteria	BVCs	DFO	Fishers	TAs	Consen -sus Score
41	Do lake authorities work to combat corruption?	0 = <b>no</b> effort to combat corruption; 1 = <b>low</b> effort; 2 = <b>moderate</b> effort; 3 = <b>high</b> level of effort	33.33	0.00	0.00	0.00	0.00
3.	Accountability		27.11	34.67	29.11	36.44	25.00
W	nat is the degree of accountability of lake authorities in fisheries	co-management?	27.11	34.07	27.11	30.44	25.00
3.1	Transparency						
	information related to lake authority performance in fisheries coessible to stakeholders?	o-management (budgets, achievements, etc.)	55.55	33.33	44.44	11.11	33.33
42	Do lake authorities share reports, plans, budgets, and information regarding activities with local stakeholders? (i.e., FA/BVC members, fishing communities)	0 = lake authorities <b>never</b> share reports/plans/budgets; 1 = <b>rarely</b> share; 2 = <b>often</b> share; 3 = <b>always</b> share	66.66	0.00	33.33	0.00	0.00
43	Are BVCs and FAs democratically elected in a way that is open and transparent?	0 = BVCs/FAs <b>never</b> elected openly/transparently; 1 = BVCs/FAs <b>rarely</b> elected openly/transparently; 2 = BVCs/ FAs <b>often</b> elected openly/transparently; 3 = BVCs/FAs <b>always</b> elected openly/transparently	100.00	100.00	100.00	0.00	100.00
44	Do stakeholders understand how BVC/FA fees and penalties are used?	0 = <b>no</b> understanding; 1 = <b>little</b> understanding; 2 = <b>moderate</b> understanding; 3 = <b>high</b> level of understanding	0.00	0.00	0.00	33.33	0.00
3.2	Checks and Balances		33.33	66.67	16.67	83.33	41.66
Do	lake authorities share and effectively balance each other's pow	er in fisheries co-management?	33.33	00.07	10.07	63.33	41.00
45	Is there sharing of power between BVCs, FAs, local government and traditional authorities in fisheries comanagement?	0 = <b>no</b> sharing; 1 = <b>little</b> sharing; 2 = <b>moderate</b> levels of sharing; 3 = <b>high</b> levels of sharing	66.66	33.33	33.33	66.66	66.66
46	Is local government (district council, ADCs, VDCs) effectively supporting co-management? (e.g., approval of bylaws, supporting the development of constitutions for BVCs)	0 = <b>no</b> support; 1 = <b>little</b> effective support; 2 = <b>moderate</b> level of effective support; 3 = <b>high</b> level of effective support	0.00	100.00	0.00	100.00	16.66
3.3	Recourse		0.00	66 67	77.77	44.44	22.22
Do	stakeholders have the means for making complaints and for co	mmunicating them to lake authorities?	0.00	66.67	77.77	44.44	33.33
47	Do FA/BVC members and fishing communities have means for making complaints to lake authorities?	0 = <b>no</b> means; 1 = <b>little</b> means; 2 = <b>moderate</b> means; 3 = <b>sufficient</b> means	0.00	100.00	66.66	66.66	66.66

	Question	Score Criteria	BVCs	DFO	Fishers	TAs	Consen -sus Score
48	Do lake authorities follow up on stakeholder complaints?	0 = <b>no</b> follow up; 1 = <b>little</b> follow up; 2 = <b>moderate</b> degree of follow up; 3 = <b>high</b> degree of follow up	0.00	0.00	66.66	33.33	0.00
49	Do stakeholders feel comfortable issuing complaints to lake authority leadership?	0 = stakeholders do <b>not</b> feel comfortable; 1 = <b>low</b> level of comfort; 2 = <b>moderate</b> level of comfort; 3 = <b>high</b> level of comfort	0.00	100.00	100.00	33.33	33.33
3.4	Government Responsiveness		13.33	6.67	6.67	26.67	0.00
W	hat is the level is local government responsiveness in fisheries co	-management?	13.33	0.07	0.07	20.07	0.00
50	What is local government's (ADC/VDC/DFO) responsiveness in terms of providing conflict resolution in fisheries comanagement?	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	33.33	0.00	0.00	0.00	0.00
51	What is the DFO's responsiveness in terms of providing extension services in fisheries co-management?	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	33.33	0.00	33.33	33.33	0.00
52	What is local government's (DFO/enforcement officers) responsiveness in terms of enforcing regulations in fisheries comanagement?	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	0.00	0.00	0.00	0.00	0.00
53	What is local government's (DFO, ADC/VDC) responsiveness in addressing beach development needs? (e.g., providing sanitation facilities, building landing facilities, building drying facilities)	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	0.00	0.00	0.00	0.00	0.00
54	What is local government's (DFO, ADC/VDC) responsiveness in providing budget support for fisheries co-management?	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	0.00	33.33	0.00	100.00	0.00
3.5	Integrity		33.33	0.00	0.00	16.67	16.67
W	hat is the level of integrity within lake authorities?		33.33	0.00	0.00	10.07	10.07
55	What is the level of political influence in decisions made by lake authority leadership? (e.g., decisions over enforcement, lake access)	0 = <b>high</b> influence; 1 = <b>moderate</b> level of influence; 2 = <b>low</b> level of influence; 3 = <b>no</b> level of influence	0.00	0.00	0.00	0.00	0.00
56	To what extent is lake authority leadership undermined by "traditional" influence?	0 = <b>high</b> influence; 1 = <b>moderate</b> level of influence; 2 = <b>low</b> level of influence; 3 = <b>no</b> level of influence	66.66	0.00	0.00	33.33	33.33

	Question	Score Criteria	BVCs	DFO	Fishers	TAs	Consen -sus Score
4. ]	Participation and Engagement of Fishing Communities						
Ist	there effective participation in fisheries co-management?		72.22	44.33	37.96	44.44	38.89
4.1	Institutional Framework		100.00	44.44	22.22	77.78	61.11
Is t	here an effective institutional framework for participation in fi	sheries co-management?	100.00	74.44	22.22	77.70	01.11
57	Do BVC/FA leaders consult the local fishing community in their decision making in fisheries co-management?	0 = BVCs/FAs <b>never</b> consult; 1 = <b>rarely</b> consult; 2 = <b>often</b> consult; 3 = <b>always</b> consult	100.00	66.66	33.33	100.00	66.66
58	Do traditional authorities consult BVCs/FAs in their decision making in fisheries co-management?	0 = BVCs/FAs <b>never</b> consult; 1 = <b>rarely</b> consult; 2 = <b>often</b> consult; 3 = <b>always</b> consult	100.00	66.66	33.33	100.00	83.33
59	Do DFOs consult BVCs/FAs in their decision making?	0 = BVCs/FAs <b>never</b> consult; 1 = <b>rarely</b> consult; 2 = <b>often</b> consult; 3 = <b>always</b> consult	100.00	0.00	0.00	33.33	33.33
4.2	Stakeholder Engagement		50.00	33.33	58.33	33.33	33.33
Wl	nat is the level of stakeholder engagement in fisheries co-manag	ement?	50.00	33.33	56.55	33.33	33.33
60	Are stakeholders (FA/BVC members, fishing communities) able to speak freely to lake authorities about fisheries comanagement?	0 = <b>no</b> ability to speak freely; 1 = <b>little</b> ability; 2 = <b>moderate</b> ability; 3 = <b>high</b> degree of ability	0.00	66.66	0.00	33.33	33.33
61	Do FA/BVC members actively participate in enforcing their group's bylaws/regulations?	0 = <b>no</b> participation 1 = <b>little</b> participation; 2 = <b>moderate</b> participation; 3 = <b>high</b> degree of participation	100.00	66.66	33.33	33.33	33.33
62	Do stakeholders (BVC/FA members, fishing communities) participate in the monitoring of fish catches?	0 = <b>no</b> participation 1 = <b>little</b> participation; 2 = <b>moderate</b> participation; 3 = <b>high</b> degree of participation	100.00	0.00	100.00	66.66	33.33
63	Do communities participate in the monitoring and evaluation of lake authority performance in fisheries co-management? (e.g., are their forums where communities can <u>formally</u> tell authorities that they are doing well or not well?)	0 = <b>no</b> participation 1 = <b>little</b> participation; 2 = <b>moderate</b> participation; 3 = <b>high</b> degree of participation	0.00	0.00	100.00	0.00	33.33
4.3	Civic-ness		66.67	55.22	33.33	22,22	22.22
Wl	nat is the level of civic mindedness among key stakeholders towa	ard fisheries co-management?	00.07	33,44	33.33	44,44	
64	Are key stakeholders (BVC/FA members, fishing communities) aware of their rights and responsibilities as co-managers? (e.g., rights to enforce the law, exclude entrants, set fees and fines)	$0 = \mathbf{no}$ awareness; $1 = \mathbf{little}$ awareness; $2 = \mathbf{moderate}$ awareness; $3 = \mathbf{high}$ degree of awareness	100.00	66.00	100.00	66.66	66.66

	Question	Score Criteria	BVCs	DFO	Fishers	TAs	Consen -sus Score
65	Are local stakeholders (BVC/FA members, fishing communities) involved in the development and management of beach facilities? (e.g., public toilets, wash rooms)	0 = <b>no</b> involvement; 1 = <b>little</b> involvement; 2 = <b>moderate</b> involvement; 3 = <b>high</b> degree of involvement	0.00	33.00	0.00	0.00	0.00
66	Do fishing businesses (fishers, fish traders, fish processors, etc.) invest in the welfare of their beach? (support for sanitation and beach infrastructure like landing facilities and smoking kilns)	0 = <b>no</b> investment; 1 = <b>little</b> investment; 2 = <b>moderate</b> investment; 3 = <b>high</b> degree of investment	100.00	66.66	0.00	0.00	0.00
	Equity		70.83	74.30	66.67	52.08	62.50
WI	nat is the level of equity among key stakeholders in fisheries co-	management?	7 0100		00007		02.00
5.1	Equal Access to Basic Services		50.00	58.33	33.33	41.66	50.00
Is t	there equal access to basic services in fisheries co-management?		20.00	20.22	00.00	11.00	20100
67	Do stakeholders have equal access to extension services in fisheries co-management?	0 = <b>very low</b> equality; $1 = $ <b>low</b> equality; $2 = $ <b>moderate</b> equality; $3 = $ <b>high</b> degree of equality	100.00	100.00	0.00	66.66	100.00
68	Is enforcement and regulation applied equally to all stakeholders in fisheries co-management?	0 = <b>very low</b> equality; $1 = $ <b>low</b> equality; $2 = $ <b>moderate</b> equality; $3 = $ <b>high</b> degree of equality	100.00	66.66	33.33	33.33	33.33
69	Do stakeholders have equal access to savings and loan schemes in fisheries co-management?	0 = <b>very low</b> equality; $1 = $ <b>low</b> equality; $2 = $ <b>moderate</b> equality; $3 = $ <b>high</b> degree of equality	0.00	33.33	0.00	0.00	0.00
70	Do lake authorities make effort to extend services to vulnerable groups, including women, youth and people with physical challenges? (training, awareness programs, etc.)	0 = <b>no</b> effort; 1 = <b>little</b> effort; 2 = <b>moderate</b> effort; 3 = <b>high</b> degree of effort	0.00	33.33	100.00	66.66	66.66
5.2	<b>Equal Opportunity to Power</b>		100.00	92 22	66.67	33.33	66.66
Is t	there equal opportunity to gain political and social representation	on in fisheries co-management?	100.00	83.33	66.67	33.33	00.00
71	Are women and other vulnerable groups represented on FAs/BVCs in fisheries co-management?	0 = <b>no</b> representation; 1 = <b>little</b> representation; 2 = <b>moderate</b> degree of representation; 3 = <b>high</b> degree of representation	100.00	66.66	100.00	33.33	66.66
72	Are fishery industry stakeholders along the value chain (e.g., fishers, traders, processors) adequately represented on FAs/BVCs in fisheries co-management?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	100.00	100.00	33.33	33.33	66.66
5.3	<b>Equal Access to Resources</b>		100.00	100.00	100.00	100.00	100.00
Ist	there equal access to resources in fisheries co-management?		100.00	100.00	100.00	100.00	100.00

	Question	Score Criteria	BVCs	DFO	Fishers	TAs	Consen -sus Score
73	Do stakeholders (including women and other marginalized groups) have equal access to fishing resources?	0 = <b>very low</b> equality; $1 = $ <b>low</b> equality; $2 = $ <b>moderate</b> equality; $3 = $ <b>high</b> degree of equality	100.00	100.00	100.00	100.00	100.00
	Equal Opportunity to Livelihoods		33.33	55.55	66.67	33.33	33.33
Is t	there equal opportunity to livelihoods in fisheries co-manageme	ent?	33.33 33.33				
74	Do stakeholders (including fishers and fish processors) have equal access to improved fisheries technology?	0 = <b>very low</b> equality; $1 = $ <b>low</b> equality; $2 = $ <b>moderate</b> equality; $3 = $ <b>high</b> degree of equality	0.00	66.66	0.00	0.00	0.00
75	Do stakeholders have equal access to climate-smart agriculture technologies? (i.e. conservation agriculture)	0 = <b>very low</b> equality; $1 = $ <b>low</b> equality; $2 = $ <b>moderate</b> equality; $3 = $ <b>high</b> degree of equality	100.00	33.33	100.00	66.66	66.66
76	Do women and other marginalized groups have access to improved technologies and support for alternative livelihoods? (e.g., fish farming, VSLAs)	0 = very low equality; 1 = low equality; 2 = moderate equality; 3 = high degree of equality	0.00	66.66	100.00	33.33	33.33
		Total Score	46.77	46.21	44.79	38.15	35.60

## **Annex 4: Detailed Scores – Lake Malawi**

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
1.	Effectiveness		29.22	19.44	22,22	27.11	24.79	17.89
W	hat is the effectiveness of lake authorities in advancing fishe	ries co-management?	29.22	19.44	22.22	27.11	24.78	17.89
1.1	Vision and Planning							
	lake authorities have a clear vision that translates into stra stainable fisheries co-management?	tegic and operational plans to achieve	16.67	16.67	16.67	8.33	16.67	0.00
1	Is there an existing Lake Fisheries Management Plan (LFMP) that articulates a clear vision and strategy for comanaging fisheries resources?	0 = <b>no</b> LFMP exists; 1 = exists but <b>low</b> level of clarity; 2 = exists and <b>moderately</b> clear; 3 = exists and <b>high</b> level of clarity	0.00	33.33	0.00	0.00	0.00	0.00
2	Are FAs/BVCs included in the development of that LFMP?	0 = BVCs/FAs <b>never</b> included; 1 = <b>rarely</b> included; 2 = <b>often</b> included; 3 = <b>always</b> included	0.00	33.33	33.33	0.00	33.33	
3	Do BVCs create effective operational plans that address priorities such as enforcement patrols?	0 = BVCs do <b>never</b> create operational plans; 1 = BVCs <b>rarely</b> create effective operational plans; 2 = BVCs <b>often</b> create effective operational plans; 3 = BVCs <b>always</b> create effective operational plans	33.33	0.00	33.33	33.33	33.33	0.00
4	Are participatory fisheries management priorities reflected in Village and District Development Plans?	0 = LFMP priorities <b>never</b> reflected in VDPs/DDPs; 1 = priorities <b>rarely</b> reflected in VDPs/DDPs; 2 = priorities <b>often</b> reflected in VDPs/DDPs; 3 = priorities <b>always</b> reflected in VDPs/DDPs	33.33	0.00	0.00	0.00	0.00	0.00
1.2	Financial Management							
	s there effective and efficient management of financial resources by lake authorities for fisheries co- nanagement?		25.00	16.67	25.00	41.67	25.00	25.00
5	Do lake authorities prepare an annual budget to run its fisheries co-management activities?	0 = lake authorities <b>never</b> prepares budgets; 1 = <b>rarely</b> prepare budgets; 2 = <b>often</b> prepare budgets; 3 = <b>all</b> prepare budgets	0.00	33.33	0.00	0.00	0.00	0.00
6	Do lake authorities have sufficient funds to support their operations?	0 = lake authorities have <b>no</b> funds; 1 = lake authorities have <b>low</b> level of funds; 2 = <b>moderate</b> level of funds; 3 = <b>sufficient</b> funds	0.00	0.00	0.00	100.00	0.00	0.00

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
7	Do lake authorities have the capacity to manage finances effectively?	0 = lake authorities do <b>not</b> have capacity to manage funds effectively; 1 = <b>low</b> capacity; 2 = <b>moderate</b> capacity; 3 = <b>high</b> capacity	66.66	0.00	66.66	33.33	66.66	66.66
8	Do lake authorities have sufficient processes for generating revenue for fisheries co-management? (e.g., through enforcement penalties, licensing, benefit sharing)	0 = <b>no</b> processes established for generating revenue; 1 = <b>few</b> have sufficient processes; 2 = <b>many</b> have sufficient processes; 3 = <b>all</b> have sufficient processes	33.33	33.33	33.33	33.33	33.33	33.33
1.3	Decision and Info							
	the decision making of lake authorities on fisheries co-mana formation?	agement based on reliable and updated	60.00	33.33	33.33	46.66	60.00	53.33
9	Are there effective information sources for supporting management of the lake? (i.e., frame surveys, updated registry)	0 = <b>no</b> information sources exist; 1 = exists but <b>low</b> effectiveness; 2 = exists and <b>moderately</b> effective; 3 = exists and <b>highly</b> effective	33.33	66.66	66.66	33.33	66.66	66.66
10	Are lake authorities informed about the legal framework, such as fisheries act and relevant bylaws?	0 = <b>not</b> informed; 1 = <b>a little</b> informed; 2 = <b>moderately</b> informed; 3 = <b>highly</b> informed	100.00	33.33	66.66	100.00	100.00	100.00
11	Is decision making based on available information related to fisheries? (e.g., based on frame survey)	0 = decisions <b>never</b> based on available information; 1 = decisions <b>rarely</b> based on available information; 2 = decisions <b>often</b> based on available information; 3 = decisions <b>always</b> based on available information	66.66	66.66	33.33	66.66	100.00	66.66
12	Do BVCs/FAs maintain reliable, up-to-date registries of fishers?	0 = BVCs/FAs <b>never</b> have reliable registries; 1 = <b>rarely</b> reliable registries; 2 = <b>often</b> have reliable registries; 3 = <b>always</b> have reliable registries	66.66	0.00	0.00	33.33	33.33	33.33
13	Are BVC/FA members consulted before new entrants are allowed to fish in the lake?	0 = BVC/FA members <b>never</b> consulted; 1 = <b>rarely</b> consulted; 2 = <b>often</b> consulted; 3 = <b>always</b> consulted	33.33	0.00	0.00	0.00	0.00	0.00
1.4	Satisfaction with services							
	That is the degree of stakeholder satisfaction with the quality and accessibility of service delivery in fisheries o-management by lake authorities?			22.22	11.11	22.22	22.22	11.11
14	What is the degree of stakeholder (i.e., BVC/FA members, fishing communities) satisfaction with the delivery of	0 = <b>no</b> satisfaction; 1 = <b>low</b> level of satisfaction; 2 = <b>moderate</b> level of satisfaction; 3 = <b>high</b> level of	0.00	33.33	33.33	33.33	33.33	33.33

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
	services in fisheries co-management by lake authorities?	satisfaction						
15	Are there effective feedback mechanisms established for stakeholders (i.e., BVC/FA members, fishing communities) to share input with these lake authorities? (i.e., are there ways of communicating concerns to necessary authorities)	0 = effective feedback <b>never</b> mechanism exist; 1 = mechanisms exists but <b>rarely</b> effective; 2 = exist and <b>often</b> effective; 3 = exist and <b>always</b> effective	33.33	33.33	0.00	0.00	0.00	0.00
16	What is the level of stakeholder satisfaction in their involvement in planning and budgeting by lake authorities?	0 = <b>no</b> satisfaction; 1 = <b>low</b> level of satisfaction; 2 = <b>moderate</b> level of satisfaction; 3 = <b>high</b> level of satisfaction	0.00	0.00	0.00	33.33	33.33	0.00
	Leadership		33.33	8.33	25.00	16.67	0.00	0.00
	es the leadership of lake authorities have the ability to mob tivities?	ilize stakeholders for fisheries co-management	33.33	8.33	25.00	10.07	0.00	0.00
17	Is lake authority leadership capable of mobilizing material and financial resources for fisheries co-management activities? (e.g., through confiscations and fines, membership dues)	0 = authorities <b>not</b> capable; 1 = <b>low</b> level of capability; 2 = <b>moderate</b> level of capability; 3 = <b>high</b> level of capability	33.33	0.00	66.66	33.33	0.00	0.00
18	Is lake authority leadership able to mobilize joint action for fisheries co-management activities? (e.g., joint enforcement exercises, inter-BVC meetings to discuss issues, joint licensing efforts)	0 = authorities <b>not</b> capable; 1 = <b>low</b> level of capability; 2 = <b>moderate</b> level of capability; 3 = <b>high</b> level of capability	33.33	33.33	33.33	33.33	0.00	0.00
19	Has there been positive change in fisheries co-management within the previous two years? (e.g., reduction in use of illegal gear, increased compliance with closed season, increased enforcement of sanctuaries)	0 = <b>no/negative</b> change; 1 = <b>low</b> level of positive change; 2 = <b>moderate</b> level positive change; 3 = <b>high</b> level of positive change	66.66	0.00	0.00	0.00	0.00	0.00
20	Do lake authorities consult with local stakeholders (i.e. BVC/FA members, fishing communities) on use of financial and other material resources for fisheries comanagement activities?	0 = <b>never</b> consulted; 1 = <b>rarely</b> consulted; 2 = <b>often</b> consulted; 3 = <b>always</b> consulted	0.00	0.00	0.00	0.00	0.00	0.00
	2. Rule of Law			29.33	34.00	26.66	43.00	25.00
	Does rule of law for fisheries co-management exist?  2.1 Existence of Institutional Legal Framework			16.67	26.66	53.33	20.00	33.33
4.	Existence of institutional Legal Framework		33.33	10.07	20.00	33.33	20.00	33.33

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
Is	there an adequate institutional legal framework for fisherie	s co-management?						
21	Are FAs/BVCs registered with the Department of Fisheries with an established constitution?	0 = <b>no</b> LFMAs are registered; 1 = <b>few</b> registered; 2 = <b>many</b> registered; 3 = <b>all</b> registered	100.00	0.00	33.33	100.00	33.33	100.00
22	Are FAs/BVCs legally registered as a community-based organization with the Registrar General?	o= Not registered; 1=few registered; 2=Registered; 3=All registered	0.00	0.00	0.00	0.00	33.33	0.00
23	Is there established and functional FAs/BVCs on your lake body? (i.e., it meets regularly, members come to meetings, able to enforce regulations)	0 = FAs/BVCs <b>never</b> functional; 1 = FAs/BVCs <b>rarely</b> functional; 2 = FAs/BVCs <b>often</b> functional; 3 = FAs/BVCs <b>always</b> functional	33.33	33.33	33.33	33.33	33.33	33.33
24	Are there effective fisheries co-management bylaws for your waterbody approved by the district council?	0 = <b>no</b> bylaws approved; 1 = bylaws approved but <b>rarely</b> effective; 2 = bylaws approved and <b>often</b> effective; 3 = bylaws approved and <b>always</b> effective	33.33	0.00	33.33	33.33	0.00	0.00
25	Does the local magistrate court understand its role in upholding fisheries law?	0 = court does <b>not</b> understand its role; 1 = <b>low</b> level of understanding; 2 = <b>moderate</b> level of understanding; 3 = <b>high</b> level of understanding	0.00	33.33	33.33	100.00	0.00	33.33
26	Does the local customary court understand its role in upholding fisheries law?	$0 = \text{court does } \mathbf{not} \text{ understand its role; } 1 = \mathbf{low}$ level of understanding; $2 = \mathbf{moderate}$ level of understanding	33.33	0.00	66.66	0.00	0.00	0.00
2.2	Application and Effectiveness of Laws		33.33	13.33	26,66	13.33	20.00	0.00
Ar	e fisheries laws and by-laws enforced?		33.33	13.33	20.00	13.33	20.00	0.00
27	How effective is the department of fisheries in enforcing fishery regulations? (e.g., size limits, closed seasons, sanctuary areas/no-take zones)	0 = <b>not</b> effective; 1 = <b>low</b> level of effectiveness; 2 = <b>moderately</b> effective; 3 = <b>highly</b> effective	66.66	33.33	0.00	66.66	33.33	0.00
28	How effective are traditional authorities in enforcing fisheries regulations? (e.g., size limits, closed seasons, sanctuary areas/no-take zones)	0 = <b>not</b> effective; 1 = <b>low</b> level of effectiveness; 2 = <b>moderately</b> effective; 3 = <b>highly</b> effective	0.00	0.00	66.66	0.00	33.33	0.00
29	How effective are FAs/BVCs at self-policing? (i.e., are FAs/BVCs able to enforce adherence to regulations by their members and local fishers, including through use of community police to enforce regulations?)	0 = <b>not</b> effective; 1 = <b>low</b> level of effectiveness; 2 = <b>moderately</b> effective; 3 = <b>highly</b> effective	66.66	0.00	33.33	0.00	33.33	0.00

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
30	What is the level of FA/BVC cooperation with local government across all levels (VDCs, ADCs, district level) around enforcement of fisheries regulations?	0= <b>no</b> cooperation; 1 = <b>low</b> level of cooperation; 2 = <b>moderate</b> level of cooperation; 3 = <b>high</b> level of cooperation	33.33	0.00	0.00	0.00	0.00	0.00
31	Are penalties for violations strong enough to serve as a deterrent? (i.e., penalties applied by traditional and local government authorities)	0= <b>no</b> cooperation; 1 = <b>low</b> level of cooperation; 2 = <b>moderate</b> level of cooperation; 3 = <b>high</b> level of cooperation	0.00	33.33	33.33	0.00	0.00	0.00
2.3	Awareness of Laws		50.00	83.33	66,66	33.33	66.66	66.66
Ar	e the fisheries laws and regulations known by the population	n?	30.00	03.33	00.00	33.33	00.00	00.00
32	Do fishing communities understand fisheries regulations?	0 = <b>no</b> understanding; 1 = <b>little</b> understanding; 2 = <b>moderate</b> understanding; 3 = <b>high</b> understanding	33.33	100.00	66.66	0.00	66.66	66.66
33	Do lake authorities raise awareness through public information campaigns (including through media) around regulations and enforcement for fisheries co-management?	0 = <b>no</b> efforts at awareness raising; 1 = <b>little</b> awareness raising; 2 = <b>moderate</b> levels awareness raising; 3 = <b>sufficient</b> awareness raising	66.66	66.66	66.66	66.66	66.66	66.66
2.4	Access to Justice		33.33	33.33	41.66	33.33	50.00	25.00
Do	fisheries stakeholders have access to justice?		33.33	33.33	41.00	33.33	50.00	25.00
34	Are fisheries cases settled fairly and efficiently by the magistrate courts?	0 = cases <b>never</b> settled fairly/efficiently; 1 = cases <b>rarely</b> settled fairly/efficiently; 2 = cases <b>often</b> settled fairly/efficiently; 3 = cases <b>always</b> settled fairly/efficiently	33.33	66.66	33.33	66.66	66.66	66.66
35	Are fisheries disputes settled fairly and efficiently by the department of fisheries?	0 = cases <b>never</b> settled fairly/efficiently; 1 = cases <b>rarely</b> settled fairly/efficiently; 2 = cases <b>often</b> settled fairly/efficiently; 3 = cases <b>always</b> settled fairly/efficiently	66.66	33.33	33.33	66.66	100.00	33.33
36	Are fisheries cases settled fairly and efficiently in customary courts?	0 = cases <b>never</b> settled fairly/efficiently; 1 = cases <b>rarely</b> settled fairly/efficiently; 2 = cases <b>often</b> settled fairly/efficiently; 3 = cases <b>always</b> settled fairly/efficiently	33.33	33.33	66.66	0.00	33.33	0.00
37	Is there political interference in the course of justice in decisions on fisheries cases?	0 = <b>high</b> degree of interference; 1 = <b>moderate</b> degree of interference; 2 <b>low</b> degree of interference; 3 = <b>no</b> interference	0.00	0.00	33.33	0.00	0.00	0.00

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
2.5	Incidence of Corruption		16.67	0.00	8.33	0.00	58.33	0.00
W	nat is the degree of corruption in fisheries co-management?		10.07	0.00	0.55	0.00	20.22	0.00
38	What is the level of corruption in fisheries co-management?	0 = <b>high</b> level of corruption; 1 = <b>moderate</b> level of corruption; 2 = <b>low</b> level of corruption; 3 = <b>no</b> corruption	0.00	0.00	0.00	0.00	0.00	0.00
39	Do people who violate fisheries regulations pay bribes to avoid sanctions?	0 = bribes/payments <b>highly common</b> ; 1 = bribes/payments <b>moderately</b> common; 2 = bribes/payments <b>uncommon</b> ; 3 = <b>no</b> bribes/payments	33.33	0.00	0.00	0.00	100.00	0.00
40	Are tributes commonly paid to secure fishing rights?	0 = tributes <b>highly common</b> ; 1 = tributes <b>moderately</b> common; 2 = tributes <b>uncommon</b> ; 3 = <b>no</b> tributes	0.00	0.00	0.00	0.00	100.00	0.00
41	Do lake authorities work to combat corruption?	0 = <b>no</b> effort to combat corruption; 1 = <b>low</b> effort; 2 = <b>moderate</b> effort; 3 = <b>high</b> level of effort	33.33	0.00	33.33	0.00	33.33	0.00
3.	Accountability		23.78	19.55	36.66	29.33	26.00	24.00
W	nat is the degree of accountability of lake authorities in fish	eries co-management?	23.76	19.55	30.00	29.33	20.00	24.00
3.1	Transparency							
	nformation related to lake authority performance in fisher cessible to stakeholders?	ies co-management (budgets, achievements, etc.)	33.33	44.44	44.44	44.44	44.44	33.33
42	Do lake authorities share reports, plans, budgets, and information regarding activities with local stakeholders? (i.e., FA/BVC members, fishing communities)	0 = lake authorities <b>never</b> share reports/plans/budgets; 1 = <b>rarely</b> share; 2 = <b>often</b> share; 3 = <b>always</b> share	0.00	33.33	33.33	33.33	33.33	33.33
43	Are BVCs and FAs democratically elected in a way that is open and transparent?	0 = BVCs/FAs <b>never</b> elected openly/transparently; 1 = BVCs/FAs <b>rarely</b> elected openly/transparently; 2 = BVCs/ FAs <b>often</b> elected openly/transparently; 3 = BVCs/FAs <b>always</b> elected openly/transparently	100.00	100.00	66.66	100.00	100.00	66.66
44	Do stakeholders understand how BVC/FA fees and penalties are used?	0 = <b>no</b> understanding; 1 = <b>little</b> understanding; 2 = <b>moderate</b> understanding; 3 = <b>high</b> level of understanding	0.00	0.00	33.33	0.00	0.00	0.00

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
3.2	Checks and Balances		16.67	0.00	33.33	16.67	16.67	16.67
Do	lake authorities share and effectively balance each other's	power in fisheries co-management?	10.07	0.00	33.33	10.07	10.07	10.07
45	Is there sharing of power between BVCs, FAs, local government and traditional authorities in fisheries comanagement?	0 = <b>no</b> sharing; 1 = <b>little</b> sharing; 2 = <b>moderate</b> levels of sharing; 3 = <b>high</b> levels of sharing	33.33	0.00	66.66	33.33	33.33	33.33
46	Is local government (district council, ADCs, VDCs) effectively supporting co-management? (e.g., approval of bylaws, supporting the development of constitutions for BVCs)	0 = <b>no</b> support; 1 = <b>little</b> effective support; 2 = <b>moderate</b> level of effective support; 3 = <b>high</b> level of effective support	0.00	0.00	0.00	0.00	0.00	0.00
	Recourse		55.55	33.33	55.55	22,22	22,22	33.33
Do	stakeholders have the means for making complaints and fo	or communicating them to lake authorities?				22,22		00.00
47	Do FA/BVC members and fishing communities have means for making complaints to lake authorities?	0 = <b>no</b> means; 1 = <b>little</b> means; 2 = <b>moderate</b> means; 3 = <b>sufficient</b> means	66.66	33.33	66.66	33.33	0.00	33.33
48	Do lake authorities follow up on stakeholder complaints?	0 = <b>no</b> follow up; 1 = <b>little</b> follow up; 2 = <b>moderate</b> degree of follow up; 3 = <b>high</b> degree of follow up	33.33	33.33	33.33	33.33	33.33	33.33
49	Do stakeholders feel comfortable issuing complaints to lake authority leadership?	0 = stakeholders do <b>not</b> feel comfortable; 1 = <b>low</b> level of comfort; 2 = <b>moderate</b> level of comfort; 3 = <b>high</b> level of comfort	66.66	33.33	66.66	0.00	33.33	33.33
3.4	<b>Government Responsiveness</b>		12.22	20.00	33.33	13.33	16.66	20.00
Wl	nat is the level is local government responsiveness in fisheric	es co-management?	13.33	20.00	33.33	13.33	46.66	20.00
50	What is local government's (ADC/VDC/DFO) responsiveness in terms of providing conflict resolution in fisheries co-management?	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	0.00	33.33	66.66	0.00	33.33	33.33
51	What is the DFO's responsiveness in terms of providing extension services in fisheries co-management?	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	33.33	0.00	66.66	33.33	33.33	33.33
52	What is local government's (DFO/enforcement officers) responsiveness in terms of enforcing regulations in fisheries co-management?	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	33.33	33.33	33.33	0.00	33.33	33.33

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
53	What is local government's (DFO, ADC/VDC) responsiveness in addressing beach development needs? (e.g., providing sanitation facilities, building landing facilities, building drying facilities)	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	0.00	33.33	0.00	0.00	66.66	0.00
54	What is local government's (DFO, ADC/VDC) responsiveness in providing budget support for fisheries comanagement?	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	0.00	0.00	0.00	33.33	66.66	0.00
3.5	Integrity		0.00	0.00	16.67	50.00	0.00	16.67
W	nat is the level of integrity within lake authorities?		0.00	0.00	10.07	50.00	0.00	10.07
55	What is the level of political influence in decisions made by lake authority leadership? (e.g., decisions over enforcement, lake access)	0 = <b>high</b> influence; 1 = <b>moderate</b> level of influence; 2 = <b>low</b> level of influence; 3 = <b>no</b> level of influence	0.00	0.00	0.00	0.00	0.00	0.00
56	To what extent is lake authority leadership undermined by "traditional" influence?	0 = <b>high</b> influence; 1 = <b>moderate</b> level of influence; 2 = <b>low</b> level of influence; 3 = <b>no</b> level of influence	0.00	0.00	33.33	100.00	0.00	33.33
4. ]	Participation and Engagement of Fishing Communities		30.55	6.48	36.11	13.89	23.15	16.67
Is	there effective participation in fisheries co-management?		30.33	0.40	30.11	13.09	23.15	10.07
4.1	Institutional Framework		11.11	0.00	44.44	22.22	33.33	22.22
Is 1	there an effective institutional framework for participation	in fisheries co-management?	11.11	0.00	44.44	22,22	33.33	<i>LL.LL</i>
57	Do BVC/FA leaders consult the local fishing community in their decision making in fisheries co-management?	0 = BVCs/FAs <b>never</b> consult; 1 = <b>rarely</b> consult; 2 = <b>often</b> consult; 3 = <b>always</b> consult	33.33	0.00	66.66	33.33	33.33	33.33
58	Do traditional authorities consult BVCs/FAs in their decision making in fisheries co-management?	0 = BVCs/FAs <b>never</b> consult; 1 = <b>rarely</b> consult; 2 = <b>often</b> consult; 3 = <b>always</b> consult	0.00	0.00	66.66	0.00	33.33	0.00
59	Do DFOs consult BVCs/FAs in their decision making?	0 = BVCs/FAs <b>never</b> consult; 1 = <b>rarely</b> consult; 2 = <b>often</b> consult; 3 = <b>always</b> consult	0.00	0.00	0.00	33.33	33.33	33.33
4.2	Stakeholder Engagement		<b>50.33</b>	0.22	41.00	0.22	25.00	16.67
W	is the level of stakeholder engagement in fisheries co-management?		58.33	8.33	41.66	8.33	25.00	16.67
60	Are stakeholders (FA/BVC members, fishing communities) able to speak freely to lake authorities about fisheries comanagement?	0 = <b>no</b> ability to speak freely; 1 = <b>little</b> ability; 2 = <b>moderate</b> ability; 3 = <b>high</b> degree of ability	66.66	0.00	66.66	33.33	33.33	33.33

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
61	Do FA/BVC members actively participate in enforcing their group's bylaws/regulations?	0 = <b>no</b> participation 1 = <b>little</b> participation; 2 = <b>moderate</b> participation; 3 = <b>high</b> degree of participation	66.66	33.33	66.66	0.00	33.33	33.33
62	Do stakeholders (BVC/FA members, fishing communities) participate in the monitoring of fish catches?	0 = <b>no</b> participation 1 = <b>little</b> participation; 2 = <b>moderate</b> participation; 3 = <b>high</b> degree of participation	66.66	0.00	33.33	0.00	0.00	0.00
63	Do communities participate in the monitoring and evaluation of lake authority performance in fisheries comanagement? (e.g., are their forums where communities can <u>formally</u> tell authorities that they are doing well or not well?)	0 = <b>no</b> participation 1 = <b>little</b> participation; 2 = <b>moderate</b> participation; 3 = <b>high</b> degree of participation	33.33	0.00	0.00	0.00	33.33	0.00
	Civic-ness hat is the level of civic mindedness among key stakeholders	toward fisheries co-management?	22.22	11.11	22.22	11.11	11.11	11.11
64	Are key stakeholders (BVC/FA members, fishing communities) aware of their rights and responsibilities as co-managers? (e.g., rights to enforce the law, exclude entrants, set fees and fines)	0 = <b>no</b> awareness; 1 = <b>little</b> awareness; 2 = <b>moderate</b> awareness; 3 = <b>high</b> degree of awareness	33.33	33.33	0.00	33.33	33.33	33.33
65	Are local stakeholders (BVC/FA members, fishing communities) involved in the development and management of beach facilities? (e.g., public toilets, wash rooms)	0 = <b>no</b> involvement; 1 = <b>little</b> involvement; 2 = <b>moderate</b> involvement; 3 = <b>high</b> degree of involvement	0.00	0.00	0.00	0.00	0.00	0.00
66	Do fishing businesses (fishers, fish traders, fish processors, etc.) invest in the welfare of their beach? (support for sanitation and beach infrastructure like landing facilities and smoking kilns)	0 = <b>no</b> investment; 1 = <b>little</b> investment; 2 = <b>moderate</b> investment; 3 = <b>high</b> degree of investment	33.33	0.00	66.66	0.00	0.00	0.00
5. 1	Equity		65.97	36.80	70.83	71.53	64.58	56.25
	at is the level of equity among key stakeholders in fisheries co-management?			20.00	70.05	71.00	01.00	00.20
	3.1 Equal Access to Basic Services		25.00	25.00	50.00	41.67	25.00	25.00
Is 1	s there equal access to basic services in fisheries co-management?							
67	Do stakeholders have equal access to extension services in fisheries co-management?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	66.66	33.33	66.66	100.00	66.66	66.66

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus
68	Is enforcement and regulation applied equally to all stakeholders in fisheries co-management?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	0.00	33.33	0.00	0.00	33.33	Score 0.00
69	Do stakeholders have equal access to savings and loan schemes in fisheries co-management?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	0.00	0.00	66.66	0.00	0.00	0.00
70	Do lake authorities make effort to extend services to vulnerable groups, including women, youth and people with physical challenges? (training, awareness programs, etc.)	0 = <b>no</b> effort; 1 = <b>little</b> effort; 2 = <b>moderate</b> effort; 3 = <b>high</b> degree of effort	33.33	33.33	66.66	66.66	0.00	33.33
5.2	<b>Equal Opportunity to Power</b>		83.33	33.33	66,66	100.00	66.66	66.66
Is	there equal opportunity to gain political and social represen	tation in fisheries co-management?	03.33	33.33	00.00	100.00	00.00	00.00
71	Are women and other vulnerable groups represented on FAs/BVCs in fisheries co-management?	0 = <b>no</b> representation; 1 = <b>little</b> representation; 2 = <b>moderate</b> degree of representation; 3 = <b>high</b> degree of representation	66.66	33.33	66.66	100.00	66.66	66.66
72	Are fishery industry stakeholders along the value chain (e.g., fishers, traders, processors) adequately represented on FAs/BVCs in fisheries co-management?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	100.00	33.33	66.66	100.00	66.66	66.66
5.3	<b>Equal Access to Resources</b>		100.00	33.33	100.00	100.00	100.00	100.00
Is	there equal access to resources in fisheries co-management?		100.00	33.33	100.00	100.00	100.00	100.00
73	Do stakeholders (including women and other marginalized groups) have equal access to fishing resources?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	100.00	33.33	100.00	100.00	100.00	100.00
5.4	Equal Opportunity to Livelihoods		55.55	55.55	66.66	44.44	66.66	33.33
Is	there equal opportunity to livelihoods in fisheries co-manag	ement?	33.33	33.33	00.00	44.44	00.00	33.33
74	Do stakeholders (including fishers and fish processors) have equal access to improved fisheries technology?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	66.66	33.33	66.66	100.00	33.33	0.00
75	Do stakeholders have equal access to climate-smart agriculture technologies? (i.e. conservation agriculture)	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	0.00	100.00	66.66	33.33	100.00	33.33
76	Do women and other marginalized groups have access to improved technologies and support for alternative livelihoods? (e.g., fish farming, VSLAs)	0 = very low equality; 1 = low equality; 2 = moderate equality; 3 = high degree of equality	100.00	33.33	66.66	0.00	66.66	66.66
		Total Score	36.57	22.32	39.96	33.70	36.30	27.96

## **Annex 5: Detailed Scores – Lake Chilwa**

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
1. ]	Effectiveness		20.78	45.77	35.11	32.11	21.44	25.44
WI	nat is the effectiveness of lake authorities in advancing fishe	ries co-management?	20.70	10177	00111	02011	21011	20111
1.1	Vision and Planning							
	lake authorities have a clear vision that translates into stratainable fisheries co-management?	tegic and operational plans to achieve	8.33	58.33	58.33	41.67	25.00	33.33
1	Is there an existing Lake Fisheries Management Plan (LFMP) that articulates a clear vision and strategy for comanaging fisheries resources?	0 = <b>no</b> LFMP exists; 1 = exists but <b>low</b> level of clarity; 2 = exists and <b>moderately</b> clear; 3 = exists and <b>high</b> level of clarity	0.00	66.66	33.33	33.33	33.33	33.33
2	Are FAs/BVCs included in the development of that LFMP?	0 = BVCs/FAs <b>never</b> included; 1 = <b>rarely</b> included; 2 = <b>often</b> included; 3 = <b>always</b> included	0.00	100.00	100.00	100.00	33.33	100.00
3	Do BVCs create effective operational plans that address priorities such as enforcement patrols?	0 = BVCs do <b>never</b> create operational plans; 1 = BVCs <b>rarely</b> create effective operational plans; 2 = BVCs <b>often</b> create effective operational plans; 3 = BVCs <b>always</b> create effective operational plans	33.33	33.33	100.00	33.33	0.00	0.00
4	Are participatory fisheries management priorities reflected in Village and District Development Plans?	0 = LFMP priorities <b>never</b> reflected in VDPs/DDPs; 1 = priorities <b>rarely</b> reflected in VDPs/DDPs; 2 = priorities <b>often</b> reflected in VDPs/DDPs; 3 = priorities <b>always</b> reflected in VDPs/DDPs	0.00	33.33	0.00	0.00	33.33	0.00
1.2	Financial Management							
	Is there effective and efficient management of financial resources by lake authorities for fisheries co- management?		16.67	41.66	16.67	33.33	8.33	8.33
5	Do lake authorities prepare an annual budget to run its fisheries co-management activities?	0 = lake authorities <b>never</b> prepares budgets; 1 = <b>rarely</b> prepare budgets; 2 = <b>often</b> prepare budgets; 3 = <b>all</b> prepare budgets	0.00	33.33	0.00	0.00	0.00	0.00
6	Do lake authorities have sufficient funds to support their operations?	0 = lake authorities have <b>no</b> funds; 1 = lake authorities have <b>low</b> level of funds; 2 = <b>moderate</b> level of funds; 3 = <b>sufficient</b> funds	0.00	33.33	0.00	0.00	0.00	0.00

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
7	Do lake authorities have the capacity to manage finances effectively?	0 = lake authorities do <b>not</b> have capacity to manage funds effectively; 1 = <b>low</b> capacity; 2 = <b>moderate</b> capacity; 3 = <b>high</b> capacity	0.00	33.33	0.00	33.33	0.00	0.00
8	Do lake authorities have sufficient processes for generating revenue for fisheries co-management? (e.g., through enforcement penalties, licensing, benefit sharing)	0 = <b>no</b> processes established for generating revenue; 1 = <b>few</b> have sufficient processes; 2 = <b>many</b> have sufficient processes; 3 = <b>all</b> have sufficient processes	66.66	66.66	66.66	100.00	33.33	33.33
1.3	Decision and Info							
	the decision making of lake authorities on fisheries co-mana formation?	agement based on reliable and updated	40.00	73.33	53.33	46.66	26.66	46.66
9	Are there effective information sources for supporting management of the lake? (i.e., frame surveys, updated registry)	0 = <b>no</b> information sources exist; 1 = exists but <b>low</b> effectiveness; 2 = exists and <b>moderately</b> effective; 3 = exists and <b>highly</b> effective	33.33	100.00	33.33	33.33	66.66	33.33
10	Are lake authorities informed about the legal framework, such as fisheries act and relevant bylaws?	0 = <b>not</b> informed; 1 = <b>a little</b> informed; 2 = <b>moderately</b> informed; 3 = <b>highly</b> informed	100.00	100.00	100.00	100.00	66.66	100.00
11	Is decision making based on available information related to fisheries? (e.g., based on frame survey)	0 = decisions <b>never</b> based on available information; 1 = decisions <b>rarely</b> based on available information; 2 = decisions <b>often</b> based on available information; 3 = decisions <b>always</b> based on available information	66.66	100.00	66.66	66.66	0.00	66.66
12	Do BVCs/FAs maintain reliable, up-to-date registries of fishers?	0 = BVCs/FAs <b>never</b> have reliable registries; 1 = <b>rarely</b> reliable registries; 2 = <b>often</b> have reliable registries; 3 = <b>always</b> have reliable registries	0.00	33.33	66.66	33.33	0.00	33.33
13	Are BVC/FA members consulted before new entrants are allowed to fish in the lake?	0 = BVC/FA members <b>never</b> consulted; 1 = <b>rarely</b> consulted; 2 = <b>often</b> consulted; 3 = <b>always</b> consulted	0.00	33.33	0.00	0.00	0.00	0.00
1.4	Satisfaction with services							
	What is the degree of stakeholder satisfaction with the quality and accessibility of service delivery in fisheries o-management by lake authorities?			22.22	22.22	22.22	22.22	22.22
14	What is the degree of stakeholder (i.e., BVC/FA members, fishing communities) satisfaction with the delivery of	0 = <b>no</b> satisfaction; 1 = <b>low</b> level of satisfaction; 2 = <b>moderate</b> level of satisfaction; 3 = <b>high</b> level of	33.33	33.33	33.33	33.33	33.33	33.33

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
	services in fisheries co-management by lake authorities?	satisfaction						
15	Are there effective feedback mechanisms established for stakeholders (i.e., BVC/FA members, fishing communities) to share input with these lake authorities? (i.e., are there ways of communicating concerns to necessary authorities)	0 = effective feedback <b>never</b> mechanism exist; 1 = mechanisms exists but <b>rarely</b> effective; 2 = exist and <b>often</b> effective; 3 = exist and <b>always</b> effective	33.33	33.33	0.00	33.33	33.33	33.33
16	What is the level of stakeholder satisfaction in their involvement in planning and budgeting by lake authorities?	0 = <b>no</b> satisfaction; 1 = <b>low</b> level of satisfaction; 2 = <b>moderate</b> level of satisfaction; 3 = <b>high</b> level of satisfaction	0.00	0.00	33.33	0.00	0.00	0.00
	Leadership		4.7.5	22.22	<b>47</b> 00	4.5.5	<b>62</b> 00	46.5
	es the leadership of lake authorities have the ability to mob tivities?	ilize stakeholders for fisheries co-management	16.67	33.33	25.00	16.67	25.00	16.67
17	Is lake authority leadership capable of mobilizing material and financial resources for fisheries co-management activities? (e.g., through confiscations and fines, membership dues)	0 = authorities <b>not</b> capable; 1 = <b>low</b> level of capability; 2 = <b>moderate</b> level of capability; 3 = <b>high</b> level of capability	33.33	33.33	0.00	33.33	33.33	33.33
18	Is lake authority leadership able to mobilize joint action for fisheries co-management activities? (e.g., joint enforcement exercises, inter-BVC meetings to discuss issues, joint licensing efforts)	0 = authorities <b>not</b> capable; 1 = <b>low</b> level of capability; 2 = <b>moderate</b> level of capability; 3 = <b>high</b> level of capability	33.33	66.66	100.00	33.33	0.00	33.33
19	Has there been positive change in fisheries co-management within the previous two years? (e.g., reduction in use of illegal gear, increased compliance with closed season, increased enforcement of sanctuaries)	0 = <b>no/negative</b> change; 1 = <b>low</b> level of positive change; 2 = <b>moderate</b> level positive change; 3 = <b>high</b> level of positive change	0.00	33.33	0.00	0.00	33.33	0.00
20	Do lake authorities consult with local stakeholders (i.e. BVC/FA members, fishing communities) on use of financial and other material resources for fisheries comanagement activities?	0 = <b>never</b> consulted; 1 = <b>rarely</b> consulted; 2 = <b>often</b> consulted; 3 = <b>always</b> consulted	0.00	0.00	0.00	0.00	33.33	0.00
	. Rule of Law		33.66	41.66	44.67	47.00	31.33	40.66
	Ooes rule of law for fisheries co-management exist?			41.00				22.22
2.1	Existence of Institutional Legal Framework		33.33	41.66	80.00	26.66	53.33	33.33

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
Is	there an adequate institutional legal framework for fisherie	s co-management?						
21	Are FAs/BVCs registered with the Department of Fisheries with an established constitution?	0 = <b>no</b> LFMAs are registered; 1 = <b>few</b> registered; 2 = <b>many</b> registered; 3 = <b>all</b> registered	33.33	100.00	100.00	66.66	100.00	33.33
22	Are FAs/BVCs legally registered as a community-based organization with the Registrar General?	o= Not registered; 1=few registered; 2=Registered; 3=All registered	33.33	100.00	100.00	33.33	100.00	100.00
23	Is there established and functional FAs/BVCs on your lake body? (i.e., it meets regularly, members come to meetings, able to enforce regulations)	0 = FAs/BVCs <b>never</b> functional; 1 = FAs/BVCs <b>rarely</b> functional; 2 = FAs/BVCs <b>often</b> functional; 3 = FAs/BVCs <b>always</b> functional	33.33	66.66	100.00	33.33	33.33	33.33
24	Are there effective fisheries co-management bylaws for your waterbody approved by the district council?	0 = <b>no</b> bylaws approved; 1 = bylaws approved but <b>rarely</b> effective; 2 = bylaws approved and <b>often</b> effective; 3 = bylaws approved and <b>always</b> effective	0.00	0.00	100.00	0.00	33.33	0.00
25	Does the local magistrate court understand its role in upholding fisheries law?	0 = court does <b>not</b> understand its role; 1 = <b>low</b> level of understanding; 2 = <b>moderate</b> level of understanding; 3 = <b>high</b> level of understanding	66.66	33.33	0.00	0.00	0.00	0.00
26	Does the local customary court understand its role in upholding fisheries law?	0 = court does <b>not</b> understand its role; 1 = <b>low</b> level of understanding; 2 = <b>moderate</b> level of understanding; 3 = <b>high</b> level of understanding	33.33	66.66	0.00	0.00	33.33	33.33
2.2	Application and Effectiveness of Laws		26.66	33.33	26,66	33.33	20.00	20.00
Ar	e fisheries laws and by-laws enforced?		20.00	33.33	20.00	33.33	20.00	20.00
27	How effective is the department of fisheries in enforcing fishery regulations? (e.g., size limits, closed seasons, sanctuary areas/no-take zones)	0 = <b>not</b> effective; 1 = <b>low</b> level of effectiveness; 2 = <b>moderately</b> effective; 3 = <b>highly</b> effective	66.66	66.66	66.66	33.33	33.33	33.33
28	How effective are traditional authorities in enforcing fisheries regulations? (e.g., size limits, closed seasons, sanctuary areas/no-take zones)	0 = <b>not</b> effective; 1 = <b>low</b> level of effectiveness; 2 = <b>moderately</b> effective; 3 = <b>highly</b> effective	0.00	33.33	0.00	33.33	33.33	33.33
29	How effective are FAs/BVCs at self-policing? (i.e., are FAs/BVCs able to enforce adherence to regulations by their members and local fishers, including through use of community police to enforce regulations?)	0 = <b>not</b> effective; 1 = <b>low</b> level of effectiveness; 2 = <b>moderately</b> effective; 3 = <b>highly</b> effective	33.33	33.33	66.66	33.33	33.33	33.33

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
30	What is the level of FA/BVC cooperation with local government across all levels (VDCs, ADCs, district level) around enforcement of fisheries regulations?	0= <b>no</b> cooperation; 1 = <b>low</b> level of cooperation; 2 = <b>moderate</b> level of cooperation; 3 = <b>high</b> level of cooperation	0.00	33.33	0.00	0.00	0.00	0.00
31	Are penalties for violations strong enough to serve as a deterrent? (i.e., penalties applied by traditional and local government authorities)	0= <b>no</b> cooperation; 1 = <b>low</b> level of cooperation; 2 = <b>moderate</b> level of cooperation; 3 = <b>high</b> level of cooperation	33.33	0.00	0.00	66.66	0.00	0.00
2.3	Awareness of Laws		33.33	83.33	66.67	83.33	33.33	83.33
Ar	e the fisheries laws and regulations known by the population	n?	33.33	03.33	00.07	05.55	33.33	03.33
32	Do fishing communities understand fisheries regulations?	0 = <b>no</b> understanding; 1 = <b>little</b> understanding; 2 = <b>moderate</b> understanding; 3 = <b>high</b> understanding	33.33	100.00	33.33	66.66	33.33	66.66
33	Do lake authorities raise awareness through public information campaigns (including through media) around regulations and enforcement for fisheries co-management?	0 = <b>no</b> efforts at awareness raising; 1 = <b>little</b> awareness raising; 2 = <b>moderate</b> levels awareness raising; 3 = <b>sufficient</b> awareness raising	33.33	66.66	100.00	100.00	33.33	100.00
2.4	Access to Justice		50.00	33.33	41.67	83.33	41.67	58.33
Do	fisheries stakeholders have access to justice?		30.00	33.33	41.07	65.55	41.07	30.33
34	Are fisheries cases settled fairly and efficiently by the magistrate courts?	0 = cases <b>never</b> settled fairly/efficiently; 1 = cases <b>rarely</b> settled fairly/efficiently; 2 = cases <b>often</b> settled fairly/efficiently; 3 = cases <b>always</b> settled fairly/efficiently	33.33	0.00	33.33	100.00	0.00	33.33
35	Are fisheries disputes settled fairly and efficiently by the department of fisheries?	0 = cases <b>never</b> settled fairly/efficiently; 1 = cases <b>rarely</b> settled fairly/efficiently; 2 = cases <b>often</b> settled fairly/efficiently; 3 = cases <b>always</b> settled fairly/efficiently	66.66	66.66	100.00	33.33	33.33	66.66
36	Are fisheries cases settled fairly and efficiently in customary courts?	0 = cases <b>never</b> settled fairly/efficiently; 1 = cases <b>rarely</b> settled fairly/efficiently; 2 = cases <b>often</b> settled fairly/efficiently; 3 = cases <b>always</b> settled fairly/efficiently	66.66	33.33	33.33	100.00	33.33	33.33
37	Is there political interference in the course of justice in decisions on fisheries cases?	0 = <b>high</b> degree of interference; 1 = <b>moderate</b> degree of interference; 2 <b>low</b> degree of interference; 3 = <b>no</b> interference	33.33	33.33	0.00	100.00	100.00	100.00

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
	Incidence of Corruption		25.00	16.67	8.33	8.33	8.33	8.33
W	nat is the degree of corruption in fisheries co-management?							
38	What is the level of corruption in fisheries co-management?	0 = <b>high</b> level of corruption; 1 = <b>moderate</b> level of corruption; 2 = <b>low</b> level of corruption; 3 = <b>no</b> corruption	33.33	0.00	0.00	0.00	0.00	0.00
39	Do people who violate fisheries regulations pay bribes to avoid sanctions?	0 = bribes/payments <b>highly common</b> ; 1 = bribes/payments <b>moderately</b> common; 2 = bribes/payments <b>uncommon</b> ; 3 = <b>no</b> bribes/payments	33.33	33.33	0.00	0.00	0.00	0.00
40	Are tributes commonly paid to secure fishing rights?	0 = tributes <b>highly common</b> ; 1 = tributes <b>moderately</b> common; 2 = tributes <b>uncommon</b> ; 3 = <b>no</b> tributes	0.00	0.00	0.00	0.00	33.33	0.00
41	Do lake authorities work to combat corruption?	0 = <b>no</b> effort to combat corruption; 1 = <b>low</b> effort; 2 = <b>moderate</b> effort; 3 = <b>high</b> level of effort	33.33	33.33	33.33	33.33	0.00	33.33
3.	Accountability		44.44	50.00	16.67	55.56	47.22	36.11
W	nat is the degree of accountability of lake authorities in fish	eries co-management?	44.44	50.00	10.07	55.50	47.22	30.11
3.1	Transparency							
	information related to lake authority performance in fisher cessible to stakeholders?	ies co-management (budgets, achievements, etc.)	22.22	33.33	33.33	11.11	11.11	22.22
42	Do lake authorities share reports, plans, budgets, and information regarding activities with local stakeholders? (i.e., FA/BVC members, fishing communities)	0 = lake authorities <b>never</b> share reports/plans/budgets; 1 = <b>rarely</b> share; 2 = <b>often</b> share; 3 = <b>always</b> share	33.33	33.33	0.00	33.33	0.00	33.33
43	Are BVCs and FAs democratically elected in a way that is open and transparent?	0 = BVCs/FAs <b>never</b> elected openly/transparently; 1 = BVCs/FAs <b>rarely</b> elected openly/transparently; 2 = BVCs/ FAs <b>often</b> elected openly/transparently; 3 = BVCs/FAs <b>always</b> elected openly/transparently	33.33	66.66	100.00	0.00	33.33	33.33
44	Do stakeholders understand how BVC/FA fees and penalties are used?	0 = <b>no</b> understanding; 1 = <b>little</b> understanding; 2 = <b>moderate</b> understanding; 3 = <b>high</b> level of understanding	0.00	0.00	0.00	0.00	0.00	0.00

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
3.2	Checks and Balances		50.00	33.33	66.67	66.67	0.00	25.00
Do	lake authorities share and effectively balance each other's	power in fisheries co-management?	30.00	33.33	00.07	00.07	0.00	23.00
45	Is there sharing of power between BVCs, FAs, local government and traditional authorities in fisheries comanagement?	0 = <b>no</b> sharing; 1 = <b>little</b> sharing; 2 = <b>moderate</b> levels of sharing; 3 = <b>high</b> levels of sharing	66.66	33.33	100.00	100.00	0.00	50.00
46	Is local government (district council, ADCs, VDCs) effectively supporting co-management? (e.g., approval of bylaws, supporting the development of constitutions for BVCs)	0 = <b>no</b> support; 1 = <b>little</b> effective support; 2 = <b>moderate</b> level of effective support; 3 = <b>high</b> level of effective support	33.33	33.33	33.33	33.33	0.00	0.00
	Recourse		33.33	77.78	55.55	44.44	33.33	44.44
Do	stakeholders have the means for making complaints and fo	or communicating them to lake authorities?						
47	Do FA/BVC members and fishing communities have means for making complaints to lake authorities?	0 = <b>no</b> means; 1 = <b>little</b> means; 2 = <b>moderate</b> means; 3 = <b>sufficient</b> means	33.33	100.00	66.66	33.33	33.33	33.33
48	Do lake authorities follow up on stakeholder complaints?	0 = <b>no</b> follow up; 1 = <b>little</b> follow up; 2 = <b>moderate</b> degree of follow up; 3 = <b>high</b> degree of follow up	33.33	100.00	66.66	100.00	33.33	66.66
49	Do stakeholders feel comfortable issuing complaints to lake authority leadership?	0 = stakeholders do <b>not</b> feel comfortable; 1 = <b>low</b> level of comfort; 2 = <b>moderate</b> level of comfort; 3 = <b>high</b> level of comfort	33.33	33.33	33.33	0.00	33.33	33.33
3.4	Government Responsiveness		33.33	20.00	20.00	26.67	26.66	16.67
W	hat is the level is local government responsiveness in fisheric	es co-management?	33.33	20.00	20.00	26.67	26.66	10.07
50	What is local government's (ADC/VDC/DFO) responsiveness in terms of providing conflict resolution in fisheries co-management?	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	33.33	33.33	33.33	0.00	33.33	16.67
51	What is the DFO's responsiveness in terms of providing extension services in fisheries co-management?	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	66.66	33.33	33.33	33.33	33.33	33.33
52	What is local government's (DFO/enforcement officers) responsiveness in terms of enforcing regulations in fisheries co-management?	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	66.66	33.33	33.33	100.00	33.33	33.33

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
53	What is local government's (DFO, ADC/VDC) responsiveness in addressing beach development needs? (e.g., providing sanitation facilities, building landing facilities, building drying facilities)	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	0.00	0.00	0.00	0.00	33.33	0.00
54	What is local government's (DFO, ADC/VDC) responsiveness in providing budget support for fisheries comanagement?	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	0.00	0.00	0.00	0.00	0.00	0.00
3.5	Integrity		66.66	66.66	0.00	100.00	83.33	50.00
WI	nat is the level of integrity within lake authorities?		00.00	00.00	0.00	100.00	63.33	50.00
55	What is the level of political influence in decisions made by lake authority leadership? (e.g., decisions over enforcement, lake access)	0 = <b>high</b> influence; 1 = <b>moderate</b> level of influence; 2 = <b>low</b> level of influence; 3 = <b>no</b> level of influence	66.66	66.66	0.00	100.00	100.00	33.33
56	To what extent is lake authority leadership undermined by "traditional" influence?	0 = <b>high</b> influence; 1 = <b>moderate</b> level of influence; 2 = <b>low</b> level of influence; 3 = <b>no</b> level of influence	66.66	66.66	0.00	100.00	66.66	66.66
4. ]	Participation and Engagement of Fishing Communities		29.63	30.55	47.22	37.96	17.59	34.26
Is t	there effective participation in fisheries co-management?		29.03	30.33	47.22	37.90	17.59	34.20
4.1	Institutional Framework		22.22	33.33	44.44	44.44	22.22	22.22
Is t	there an effective institutional framework for participation	in fisheries co-management?	22,22	33.33	44.44	44.44	22,22	22,22
57	Do BVC/FA leaders consult the local fishing community in their decision making in fisheries co-management?	0 = BVCs/FAs <b>never</b> consult; 1 = <b>rarely</b> consult; 2 = <b>often</b> consult; 3 = <b>always</b> consult	0.00	33.33	66.66	33.33	33.33	33.33
58	Do traditional authorities consult BVCs/FAs in their decision making in fisheries co-management?	0 = BVCs/FAs <b>never</b> consult; 1 = <b>rarely</b> consult; 2 = <b>often</b> consult; 3 = <b>always</b> consult	0.00	0.00	33.33	0.00	0.00	0.00
59	Do DFOs consult BVCs/FAs in their decision making?	0 = BVCs/FAs <b>never</b> consult; 1 = <b>rarely</b> consult; 2 = <b>often</b> consult; 3 = <b>always</b> consult	66.66	66.66	33.33	100.00	33.33	33.33
4.2	Stakeholder Engagement		22.22	25.00	41.67	25.00	0.22	25.00
Wl	nat is the level of stakeholder engagement in fisheries co-ma	nnagement?	33.33	25.00	41.67	25.00	8.33	25.00
60	Are stakeholders (FA/BVC members, fishing communities) able to speak freely to lake authorities about fisheries comanagement?	0 = <b>no</b> ability to speak freely; 1 = <b>little</b> ability; 2 = <b>moderate</b> ability; 3 = <b>high</b> degree of ability	33.33	33.33	33.33	100.00	0.00	33.33

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
61	Do FA/BVC members actively participate in enforcing their group's bylaws/regulations?	0 = <b>no</b> participation 1 = <b>little</b> participation; 2 = <b>moderate</b> participation; 3 = <b>high</b> degree of participation	33.33	66.66	100.00	0.00	33.33	66.66
62	Do stakeholders (BVC/FA members, fishing communities) participate in the monitoring of fish catches?	0 = <b>no</b> participation 1 = <b>little</b> participation; 2 = <b>moderate</b> participation; 3 = <b>high</b> degree of participation	33.33	0.00	33.33	0.00	0.00	0.00
63	Do communities participate in the monitoring and evaluation of lake authority performance in fisheries comanagement? (e.g., are their forums where communities can <u>formally</u> tell authorities that they are doing well or not well?)	0 = <b>no</b> participation 1 = <b>little</b> participation; 2 = <b>moderate</b> participation; 3 = <b>high</b> degree of participation	33.33	0.00	0.00	0.00	0.00	0.00
	Civic-ness hat is the level of civic mindedness among key stakeholders	toward fisheries co-management?	33.33	33.33	55.55	44.44	22.22	55.55
64	Are key stakeholders (BVC/FA members, fishing communities) aware of their rights and responsibilities as co-managers? (e.g., rights to enforce the law, exclude entrants, set fees and fines)	0 = <b>no</b> awareness; 1 = <b>little</b> awareness; 2 = <b>moderate</b> awareness; 3 = <b>high</b> degree of awareness	33.33	66.66	100.00	100.00	33.33	100.00
65	Are local stakeholders (BVC/FA members, fishing communities) involved in the development and management of beach facilities? (e.g., public toilets, wash rooms)	0 = <b>no</b> involvement; 1 = <b>little</b> involvement; 2 = <b>moderate</b> involvement; 3 = <b>high</b> degree of involvement	33.33	33.33	66.66	0.00	33.33	33.33
66	Do fishing businesses (fishers, fish traders, fish processors, etc.) invest in the welfare of their beach? (support for sanitation and beach infrastructure like landing facilities and smoking kilns)	0 = <b>no</b> investment; 1 = <b>little</b> investment; 2 = <b>moderate</b> investment; 3 = <b>high</b> degree of investment	33.33	0.00	0.00	33.33	0.00	33.33
5. 1	Equity		65.28	54.86	68.05	68.75	90.28	55.55
	hat is the level of equity among key stakeholders in fisheries co-management?		05.20	21.00	00.00	00.75	70.20	
	1 Equal Access to Basic Services		33.33	58.33	50.00	58.33	100.00	16.67
Is 1	there equal access to basic services in fisheries co-managem							
67	Do stakeholders have equal access to extension services in fisheries co-management?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	33.33	100.00	33.33	100.00	100.00	33.33

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
68	Is enforcement and regulation applied equally to all stakeholders in fisheries co-management?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	33.33	33.33	33.33	100.00	100.00	0.00
69	Do stakeholders have equal access to savings and loan schemes in fisheries co-management?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	0.00	33.33	100.00	0.00	100.00	0.00
70	Do lake authorities make effort to extend services to vulnerable groups, including women, youth and people with physical challenges? (training, awareness programs, etc.)	0 = <b>no</b> effort; 1 = <b>little</b> effort; 2 = <b>moderate</b> effort; 3 = <b>high</b> degree of effort	66.66	66.66	33.33	33.33	100.00	33.33
5.2	<b>Equal Opportunity to Power</b>		83.33	50.00	66.67	16.67	83.33	50.00
Is	there equal opportunity to gain political and social represen	tation in fisheries co-management?	03.33	30.00	00.07	10.07	03.33	30.00
71	Are women and other vulnerable groups represented on FAs/BVCs in fisheries co-management?	0 = <b>no</b> representation; 1 = <b>little</b> representation; 2 = <b>moderate</b> degree of representation; 3 = <b>high</b> degree of representation	66.66	33.33	33.33	33.33	66.66	33.33
72	Are fishery industry stakeholders along the value chain (e.g., fishers, traders, processors) adequately represented on FAs/BVCs in fisheries co-management?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	100.00	66.66	100.00	0.00	100.00	66.66
5.3	<b>Equal Access to Resources</b>		100.00	100.00	100.00	100.00	100.00	100.00
Is	there equal access to resources in fisheries co-management?		100.00	100.00	100.00	100.00	100.00	100.00
73	Do stakeholders (including women and other marginalized groups) have equal access to fishing resources?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	100.00	100.00	100.00	100.00	100.00	100.00
5.4	<b>Equal Opportunity to Livelihoods</b>		44.44	11.11	55.55	100.00	77.78	55.55
Is	there equal opportunity to livelihoods in fisheries co-manag	ement?	77.77	11.11	33.33	100.00	77.70	33.33
74	Do stakeholders (including fishers and fish processors) have equal access to improved fisheries technology?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	33.33	0.00	33.33	100.00	100.00	33.33
75	Do stakeholders have equal access to climate-smart agriculture technologies? (i.e. conservation agriculture)	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	33.33	0.00	66.66	100.00	33.33	33.33
76	Do women and other marginalized groups have access to improved technologies and support for alternative livelihoods? (e.g., fish farming, VSLAs)	0 = very low equality; 1 = low equality; 2 = moderate equality; 3 = high degree of equality	66.66	33.33	66.66	100.00	100.00	100.00
		Total Score	38.76	44.57	42.34	48.27	41.57	38.41

## **Annex 6: Detailed Scores – Lake Chiuta**

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus
1	Effectiveness	Score Criteria	DVCS	DIO	FAS	T ISHEIS	IAS	Score
	hat is the effectiveness of lake authorities in advancing fishe	ries co-management?	42.22	27.44	41.00	42.33	45.00	28.22
	Vision and Planning	ries co-management.						
Do	lake authorities have a clear vision that translates into strastainable fisheries co-management?	tegic and operational plans to achieve	33.33	8.33	41.67	41.67	41.67	11.11
1	Is there an existing Lake Fisheries Management Plan (LFMP) that articulates a clear vision and strategy for comanaging fisheries resources?	0 = <b>no</b> LFMP exists; 1 = exists but <b>low</b> level of clarity; 2 = exists and <b>moderately</b> clear; 3 = exists and <b>high</b> level of clarity	0.00	0.00	33.33	66.66	33.33	0.00
2	Are FAs/BVCs included in the development of that LFMP?	0 = BVCs/FAs <b>never</b> included; 1 = <b>rarely</b> included; 2 = <b>often</b> included; 3 = <b>always</b> included	100.00	0.00	100.00	100.00	100.00	
3	Do BVCs create effective operational plans that address priorities such as enforcement patrols?	0 = BVCs do <b>never</b> create operational plans; 1 = BVCs <b>rarely</b> create effective operational plans; 2 = BVCs <b>often</b> create effective operational plans; 3 = BVCs <b>always</b> create effective operational plans	33.33	33.33	0.00	0.00	33.33	33.33
4	Are participatory fisheries management priorities reflected in Village and District Development Plans?	0 = LFMP priorities <b>never</b> reflected in VDPs/DDPs; 1 = priorities <b>rarely</b> reflected in VDPs/DDPs; 2 = priorities <b>often</b> reflected in VDPs/DDPs; 3 = priorities <b>always</b> reflected in VDPs/DDPs	0.00	0.00	33.33	0.00	0.00	0.00
1.2	Financial Management							
	there effective and efficient management of financial resour anagement?	rces by lake authorities for fisheries co-	16.67	33.33	25.00	16.67	25.00	25.00
5	Do lake authorities prepare an annual budget to run its fisheries co-management activities?	0 = lake authorities <b>never</b> prepares budgets; 1 = <b>rarely</b> prepare budgets; 2 = <b>often</b> prepare budgets; 3 = <b>all</b> prepare budgets	0.00	33.33	0.00	0.00	0.00	0.00
6	Do lake authorities have sufficient funds to support their operations?	0 = lake authorities have <b>no</b> funds; 1 = lake authorities have <b>low</b> level of funds; 2 = <b>moderate</b> level of funds; 3 = <b>sufficient</b> funds	33.33	33.33	33.33	0.00	33.33	33.33

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
7	Do lake authorities have the capacity to manage finances effectively?	0 = lake authorities do <b>not</b> have capacity to manage funds effectively; 1 = <b>low</b> capacity; 2 = <b>moderate</b> capacity; 3 = <b>high</b> capacity	0.00	33.33	33.33	0.00	33.33	33.33
8	Do lake authorities have sufficient processes for generating revenue for fisheries co-management? (e.g., through enforcement penalties, licensing, benefit sharing)	0 = <b>no</b> processes established for generating revenue; 1 = <b>few</b> have sufficient processes; 2 = <b>many</b> have sufficient processes; 3 = <b>all</b> have sufficient processes	33.33	33.33	33.33	66.66	33.33	33.33
1.3	Decision and Info							
	the decision making of lake authorities on fisheries co-mana ormation?	gement based on reliable and updated	66.66	40.00	46.66	53.33	66.66	46.66
9	Are there effective information sources for supporting management of the lake? (i.e., frame surveys, updated registry)	0 = <b>no</b> information sources exist; 1 = exists but <b>low</b> effectiveness; 2 = exists and <b>moderately</b> effective; 3 = exists and <b>highly</b> effective	66.66	33.33	33.33	33.33	66.66	33.33
10	Are lake authorities informed about the legal framework, such as fisheries act and relevant bylaws?	0 = <b>not</b> informed; 1 = <b>a little</b> informed; 2 = <b>moderately</b> informed; 3 = <b>highly</b> informed	100.00	33.33	100.00	100.00	100.00	100.00
11	Is decision making based on available information related to fisheries? (e.g., based on frame survey)	0 = decisions <b>never</b> based on available information; 1 = decisions <b>rarely</b> based on available information; 2 = decisions <b>often</b> based on available information; 3 = decisions <b>always</b> based on available information	66.66	33.33	33.33	33.33	33.33	33.33
12	Do BVCs/FAs maintain reliable, up-to-date registries of fishers?	0 = BVCs/FAs <b>never</b> have reliable registries; 1 = <b>rarely</b> reliable registries; 2 = <b>often</b> have reliable registries; 3 = <b>always</b> have reliable registries	33.33	66.66	33.33	33.33	33.33	33.33
13	Are BVC/FA members consulted before new entrants are allowed to fish in the lake?	0 = BVC/FA members <b>never</b> consulted; 1 = <b>rarely</b> consulted; 2 = <b>often</b> consulted; 3 = <b>always</b> consulted	66.66	33.33	33.33	66.66	100.00	33.33
1.4	Satisfaction with services							
	What is the degree of stakeholder satisfaction with the quality and accessibility of service delivery in fisheries o-management by lake authorities?			22.22	33.33	66.67	33.33	33.33
14	What is the degree of stakeholder (i.e., BVC/FA members, fishing communities) satisfaction with the delivery of	0 = <b>no</b> satisfaction; 1 = <b>low</b> level of satisfaction; 2 = <b>moderate</b> level of satisfaction; 3 = <b>high</b> level of	33.33	33.33	33.33	100.00	33.33	33.33

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
	services in fisheries co-management by lake authorities?	satisfaction						Score
15	Are there effective feedback mechanisms established for stakeholders (i.e., BVC/FA members, fishing communities) to share input with these lake authorities? (i.e., are there ways of communicating concerns to necessary authorities)	0 = effective feedback <b>never</b> mechanism exist; 1 = mechanisms exists but <b>rarely</b> effective; 2 = exist and <b>often</b> effective; 3 = exist and <b>always</b> effective	66.66	33.33	66.66	100.00	33.33	33.33
16	What is the level of stakeholder satisfaction in their involvement in planning and budgeting by lake authorities?	0 = <b>no</b> satisfaction; 1 = <b>low</b> level of satisfaction; 2 = <b>moderate</b> level of satisfaction; 3 = <b>high</b> level of satisfaction	33.33	0.00	0.00	0.00	33.33	33.33
D	5 Leadership Des the leadership of lake authorities have the ability to mobitivities?	ilize stakeholders for fisheries co-management	50.00	33.33	58.33	33.33	58.33	25.00
17	Is lake authority leadership capable of mobilizing material and financial resources for fisheries co-management activities? (e.g., through confiscations and fines, membership dues)	0 = authorities <b>not</b> capable; 1 = <b>low</b> level of capability; 2 = <b>moderate</b> level of capability; 3 = <b>high</b> level of capability	66.66	33.33	66.66	33.33	66.66	33.33
18	Is lake authority leadership able to mobilize joint action for fisheries co-management activities? (e.g., joint enforcement exercises, inter-BVC meetings to discuss issues, joint licensing efforts)	0 = authorities <b>not</b> capable; 1 = <b>low</b> level of capability; 2 = <b>moderate</b> level of capability; 3 = <b>high</b> level of capability	66.66	33.33	100.00	33.33	66.66	33.33
19	Has there been positive change in fisheries co-management within the previous two years? (e.g., reduction in use of illegal gear, increased compliance with closed season, increased enforcement of sanctuaries)	0 = <b>no/negative</b> change; 1 = <b>low</b> level of positive change; 2 = <b>moderate</b> level positive change; 3 = <b>high</b> level of positive change	66.66	33.33	66.66	66.66	100.00	33.33
20	Do lake authorities consult with local stakeholders (i.e. BVC/FA members, fishing communities) on use of financial and other material resources for fisheries comanagement activities?	0 = <b>never</b> consulted; 1 = <b>rarely</b> consulted; 2 = <b>often</b> consulted; 3 = <b>always</b> consulted	0.00	33.33	0.00	0.00	0.00	0.00
	Rule of Law			40.00	56.66	44.66	58.00	47.00
	oes rule of law for fisheries co-management exist?  1 Existence of Institutional Legal Framework	53.33	33.33	93.33	20.00	40.00	33.33	

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
Is	there an adequate institutional legal framework for fisherie	s co-management?						
21	Are FAs/BVCs registered with the Department of Fisheries with an established constitution?	0 = <b>no</b> LFMAs are registered; 1 = <b>few</b> registered; 2 = <b>many</b> registered; 3 = <b>all</b> registered	66.66	33.33	100.00	33.33	100.00	66.66
22	Are FAs/BVCs legally registered as a community-based organization with the Registrar General?	o= Not registered; 1=few registered; 2=Registered; 3=All registered	0.00	0.00	100.00	0.00	0.00	0.00
23	Is there established and functional FAs/BVCs on your lake body? (i.e., it meets regularly, members come to meetings, able to enforce regulations)	0 = FAs/BVCs <b>never</b> functional; 1 = FAs/BVCs <b>rarely</b> functional; 2 = FAs/BVCs <b>often</b> functional; 3 = FAs/BVCs <b>always</b> functional	33.33	66.66	66.66	33.33	0.00	33.33
24	Are there effective fisheries co-management bylaws for your waterbody approved by the district council?	0 = <b>no</b> bylaws approved; 1 = bylaws approved but <b>rarely</b> effective; 2 = bylaws approved and <b>often</b> effective; 3 = bylaws approved and <b>always</b> effective	66.66	33.33	100.00	0.00	66.66	33.33
25	Does the local magistrate court understand its role in upholding fisheries law?	0 = court does <b>not</b> understand its role; 1 = <b>low</b> level of understanding; 2 = <b>moderate</b> level of understanding; 3 = <b>high</b> level of understanding	100.00	0.00	100.00	33.33	33.33	33.33
26	Does the local customary court understand its role in upholding fisheries law?	0 = court does <b>not</b> understand its role; 1 = <b>low</b> level of understanding; 2 = <b>moderate</b> level of understanding; 3 = <b>high</b> level of understanding	33.33	33.33	33.33	33.33	100.00	66.66
2.2	Application and Effectiveness of Laws		40.00	33.33	6.67	20.00	33.33	26.66
Ar	e fisheries laws and by-laws enforced?		40.00	33.33	0.07	20.00	33.33	20.00
27	How effective is the department of fisheries in enforcing fishery regulations? (e.g., size limits, closed seasons, sanctuary areas/no-take zones)	0 = <b>not</b> effective; 1 = <b>low</b> level of effectiveness; 2 = <b>moderately</b> effective; 3 = <b>highly</b> effective	66.66	33.33	0.00	33.33	33.33	33.33
28	How effective are traditional authorities in enforcing fisheries regulations? (e.g., size limits, closed seasons, sanctuary areas/no-take zones)	0 = <b>not</b> effective; 1 = <b>low</b> level of effectiveness; 2 = <b>moderately</b> effective; 3 = <b>highly</b> effective	33.33	66.66	0.00	0.00	66.66	33.33
29	How effective are FAs/BVCs at self-policing? (i.e., are FAs/BVCs able to enforce adherence to regulations by their members and local fishers, including through use of community police to enforce regulations?)	0 = <b>not</b> effective; 1 = <b>low</b> level of effectiveness; 2 = <b>moderately</b> effective; 3 = <b>highly</b> effective	33.33	33.33	33.33	33.33	33.33	33.33

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
30	What is the level of FA/BVC cooperation with local government across all levels (VDCs, ADCs, district level) around enforcement of fisheries regulations?	0= <b>no</b> cooperation; 1 = <b>low</b> level of cooperation; 2 = <b>moderate</b> level of cooperation; 3 = <b>high</b> level of cooperation	33.33	0.00	0.00	0.00	0.00	0.00
31	Are penalties for violations strong enough to serve as a deterrent? (i.e., penalties applied by traditional and local government authorities)	0= <b>no</b> cooperation; 1 = <b>low</b> level of cooperation; 2 = <b>moderate</b> level of cooperation; 3 = <b>high</b> level of cooperation	33.33	33.33	0.00	33.33	33.33	33.33
2.3	Awareness of Laws		83.33	33.33	33.33	33.33	66.67	50.00
Ar	e the fisheries laws and regulations known by the population	n?	00.00	00.00	20.00	00.00	00.07	20100
32	Do fishing communities understand fisheries regulations?	0 = <b>no</b> understanding; 1 = <b>little</b> understanding; 2 = <b>moderate</b> understanding; 3 = <b>high</b> understanding	66.66	33.33	66.66	33.33	100.00	66.66
33	Do lake authorities raise awareness through public information campaigns (including through media) around regulations and enforcement for fisheries co-management?	0 = <b>no</b> efforts at awareness raising; 1 = <b>little</b> awareness raising; 2 = <b>moderate</b> levels awareness raising; 3 = <b>sufficient</b> awareness raising	100.00	33.33	0.00	33.33	33.33	33.33
2.4	2.4 Access to Justice			50.00	75.00	83.33	83.33	66.67
Do	Do fisheries stakeholders have access to justice?			50.00	75.00	65.55	65.55	00.07
34	Are fisheries cases settled fairly and efficiently by the magistrate courts?	0 = cases <b>never</b> settled fairly/efficiently; 1 = cases <b>rarely</b> settled fairly/efficiently; 2 = cases <b>often</b> settled fairly/efficiently; 3 = cases <b>always</b> settled fairly/efficiently	33.33	0.00	66.66	66.66	66.66	33.33
35	Are fisheries disputes settled fairly and efficiently by the department of fisheries?	0 = cases <b>never</b> settled fairly/efficiently; 1 = cases <b>rarely</b> settled fairly/efficiently; 2 = cases <b>often</b> settled fairly/efficiently; 3 = cases <b>always</b> settled fairly/efficiently	100.00	66.66	100.00	100.00	100.00	100.00
36	Are fisheries cases settled fairly and efficiently in customary courts?	0 = cases <b>never</b> settled fairly/efficiently; 1 = cases <b>rarely</b> settled fairly/efficiently; 2 = cases <b>often</b> settled fairly/efficiently; 3 = cases <b>always</b> settled fairly/efficiently	33.33	33.33	33.33	66.66	66.66	33.33
37	Is there political interference in the course of justice in decisions on fisheries cases?	0 = <b>high</b> degree of interference; 1 = <b>moderate</b> degree of interference; 2 <b>low</b> degree of interference; 3 = <b>no</b> interference	100.00	100.00	100.00	100.00	100.00	100.00

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
	2.5 Incidence of Corruption			50.00	75.00	66.66	66.66	58.33
W	nat is the degree of corruption in fisheries co-management?		50.00	20100	7000	0000	00.00	
38	What is the level of corruption in fisheries co-management?	0 = <b>high</b> level of corruption; 1 = <b>moderate</b> level of corruption; 2 = <b>low</b> level of corruption; 3 = <b>no</b> corruption	0.00	33.33	66.66	66.66	66.66	33.33
39	Do people who violate fisheries regulations pay bribes to avoid sanctions?	0 = bribes/payments <b>highly common</b> ; 1 = bribes/payments <b>moderately</b> common; 2 = bribes/payments <b>uncommon</b> ; 3 = <b>no</b> bribes/payments	33.33	33.33	66.66	33.33	66.66	33.33
40	Are tributes commonly paid to secure fishing rights?	0 = tributes <b>highly common</b> ; 1 = tributes <b>moderately</b> common; 2 = tributes <b>uncommon</b> ; 3 = <b>no</b> tributes	100.00	100.00	100.00	100.00	100.00	100.00
41	Do lake authorities work to combat corruption?	0 = <b>no</b> effort to combat corruption; 1 = <b>low</b> effort; 2 = <b>moderate</b> effort; 3 = <b>high</b> level of effort	66.66	33.33	66.66	66.66	33.33	66.66
3.	3. Accountability			57.77	58.44	57.33	47.55	56.44
$\mathbf{W}$	What is the degree of accountability of lake authorities in fisheries co-management?		56.66	31.11	30.44	31.33	47.33	30.44
3.1	Transparency							
	nformation related to lake authority performance in fisher essible to stakeholders?	ies co-management (budgets, achievements, etc.)	55.55	55.55	55.55	55.55	11.11	44.44
42	Do lake authorities share reports, plans, budgets, and information regarding activities with local stakeholders? (i.e., FA/BVC members, fishing communities)	0 = lake authorities <b>never</b> share reports/plans/budgets; 1 = <b>rarely</b> share; 2 = <b>often</b> share; 3 = <b>always</b> share	0.00	33.33	0.00	33.33	0.00	0.00
43	Are BVCs and FAs democratically elected in a way that is open and transparent?	0 = BVCs/FAs <b>never</b> elected openly/transparently; 1 = BVCs/FAs <b>rarely</b> elected openly/transparently; 2 = BVCs/ FAs <b>often</b> elected openly/transparently; 3 = BVCs/FAs <b>always</b> elected openly/transparently	100.00	100.00	100.00	100.00	33.33	100.00
44	Do stakeholders understand how BVC/FA fees and penalties are used?	0 = <b>no</b> understanding; 1 = <b>little</b> understanding; 2 = <b>moderate</b> understanding; 3 = <b>high</b> level of understanding	66.66	33.33	66.66	33.33	0.00	33.33

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
3.2	3.2 Checks and Balances		50.00	50.00	(( (7	50.00	50.00	50.00
Do	lake authorities share and effectively balance each other's	power in fisheries co-management?	50.00	50.00	66.67	50.00	50.00	50.00
45	Is there sharing of power between BVCs, FAs, local government and traditional authorities in fisheries comanagement?	0 = <b>no</b> sharing; 1 = <b>little</b> sharing; 2 = <b>moderate</b> levels of sharing; 3 = <b>high</b> levels of sharing	66.66	66.66	100.00	66.66	33.33	66.66
46	Is local government (district council, ADCs, VDCs) effectively supporting co-management? (e.g., approval of bylaws, supporting the development of constitutions for BVCs)	0 = <b>no</b> support; 1 = <b>little</b> effective support; 2 = <b>moderate</b> level of effective support; 3 = <b>high</b> level of effective support	33.33	33.33	33.33	33.33	66.66	33.33
3.3	Recourse		77.77	66.66	66.66	77.77	66.66	77.77
Do	stakeholders have the means for making complaints and for	or communicating them to lake authorities?		00,00	00,00		0000	
47	Do FA/BVC members and fishing communities have means for making complaints to lake authorities?	0 = <b>no</b> means; 1 = <b>little</b> means; 2 = <b>moderate</b> means; 3 = <b>sufficient</b> means	66.66	66.66	66.66	66.66	33.33	66.66
48	Do lake authorities follow up on stakeholder complaints?	0 = <b>no</b> follow up; 1 = <b>little</b> follow up; 2 = <b>moderate</b> degree of follow up; 3 = <b>high</b> degree of follow up	66.66	66.66	66.66	66.66	66.66	66.66
49	Do stakeholders feel comfortable issuing complaints to lake authority leadership?	0 = stakeholders do <b>not</b> feel comfortable; 1 = <b>low</b> level of comfort; 2 = <b>moderate</b> level of comfort; 3 = <b>high</b> level of comfort	100.00	66.66	66.66	100.00	100.00	100.00
3.4	Government Responsiveness		22.22	22.22	20.00	20.00	26.66	26.66
W	hat is the level is local government responsiveness in fisheric	es co-management?	33.33	33.33	20.00	20.00	26.66	26.66
50	What is local government's (ADC/VDC/DFO) responsiveness in terms of providing conflict resolution in fisheries co-management?	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	33.33	33.33	33.33	33.33	33.33	33.33
51	What is the DFO's responsiveness in terms of providing extension services in fisheries co-management?	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	66.66	66.66	33.33	33.33	33.33	66.66
52	What is local government's (DFO/enforcement officers) responsiveness in terms of enforcing regulations in fisheries co-management?	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	66.66	33.33	33.33	33.33	66.66	33.33

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
53	What is local government's (DFO, ADC/VDC) responsiveness in addressing beach development needs? (e.g., providing sanitation facilities, building landing facilities, building drying facilities)	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	0.00	0.00	0.00	0.00	0.00	0.00
54	What is local government's (DFO, ADC/VDC) responsiveness in providing budget support for fisheries comanagement?	0 = <b>no</b> responsiveness; 1 = <b>low</b> level of responsiveness; 2 = <b>moderate</b> level of responsiveness; 3 = <b>high</b> level of responsiveness	0.00	33.33	0.00	0.00	0.00	0.00
3.5	Integrity		66.67	83.33	83.33	83.33	83.33	83.33
W	nat is the level of integrity within lake authorities?		00.07	03.33	03.33	65.55	63.33	83.33
55	What is the level of political influence in decisions made by lake authority leadership? (e.g., decisions over enforcement, lake access)	0 = <b>high</b> influence; 1 = <b>moderate</b> level of influence; 2 = <b>low</b> level of influence; 3 = <b>no</b> level of influence	100.00	100.00	100.00	100.00	100.00	100.00
56	To what extent is lake authority leadership undermined by "traditional" influence?	0 = <b>high</b> influence; 1 = <b>moderate</b> level of influence; 2 = <b>low</b> level of influence; 3 = <b>no</b> level of influence	33.33	66.66	66.66	66.66	66.66	66.66
4. ]	Participation and Engagement of Fishing Communities		37.96	45.37	47.22	23.15	27.78	36.57
Is	Is there effective participation in fisheries co-management?		37.90	45.57	77.22	23.15	21.10	30.57
4.1	Institutional Framework		33.33	44.44	33.33	33.33	33.33	33.33
Is	there an effective institutional framework for participation	in fisheries co-management?	33.33	44.44	33.33	33.33	33.33	33.33
57	Do BVC/FA leaders consult the local fishing community in their decision making in fisheries co-management?	0 = BVCs/FAs <b>never</b> consult; 1 = <b>rarely</b> consult; 2 = <b>often</b> consult; 3 = <b>always</b> consult	33.33	33.33	66.66	66.66	0.00	33.33
58	Do traditional authorities consult BVCs/FAs in their decision making in fisheries co-management?	0 = BVCs/FAs <b>never</b> consult; 1 = <b>rarely</b> consult; 2 = <b>often</b> consult; 3 = <b>always</b> consult	0.00	33.33	0.00	0.00	33.33	33.33
59	Do DFOs consult BVCs/FAs in their decision making?	0 = BVCs/FAs <b>never</b> consult; 1 = <b>rarely</b> consult; 2 = <b>often</b> consult; 3 = <b>always</b> consult	66.66	66.66	33.33	33.33	66.66	33.33
4.2	4.2 Stakeholder Engagement			50.22	75.00	25.00	16.67	5116
W	What is the level of stakeholder engagement in fisheries co-management?		58.33	58.33	75.00	25.00	16.67	54.16
60	Are stakeholders (FA/BVC members, fishing communities) able to speak freely to lake authorities about fisheries comanagement?	0 = <b>no</b> ability to speak freely; 1 = <b>little</b> ability; 2 = <b>moderate</b> ability; 3 = <b>high</b> degree of ability	66.66	100.00	100.00	66.66	66.66	83.33

	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Consen -sus Score
61	Do FA/BVC members actively participate in enforcing their group's bylaws/regulations?	0 = <b>no</b> participation 1 = <b>little</b> participation; 2 = <b>moderate</b> participation; 3 = <b>high</b> degree of participation	66.66	66.66	100.00	0.00	0.00	66.66
62	Do stakeholders (BVC/FA members, fishing communities) participate in the monitoring of fish catches?	0 = <b>no</b> participation 1 = <b>little</b> participation; 2 = <b>moderate</b> participation; 3 = <b>high</b> degree of participation	33.33	33.33	33.33	0.00	0.00	33.33
63	Do communities participate in the monitoring and evaluation of lake authority performance in fisheries comanagement? (e.g., are their forums where communities can <u>formally</u> tell authorities that they are doing well or not well?)	0 = <b>no</b> participation 1 = <b>little</b> participation; 2 = <b>moderate</b> participation; 3 = <b>high</b> degree of participation	66.66	33.33	66.66	33.33	0.00	33.33
	4.3 Civic-ness  What is the level of civic mindedness among key stakeholders toward fisheries co-management?		22.22	33.33	33.33	11.11	33.33	22.22
64	Are key stakeholders (BVC/FA members, fishing communities) aware of their rights and responsibilities as co-managers? (e.g., rights to enforce the law, exclude entrants, set fees and fines)	0 = <b>no</b> awareness; 1 = <b>little</b> awareness; 2 = <b>moderate</b> awareness; 3 = <b>high</b> degree of awareness	66.66	33.33	100.00	33.33	100.00	66.66
65	Are local stakeholders (BVC/FA members, fishing communities) involved in the development and management of beach facilities? (e.g., public toilets, wash rooms)	0 = <b>no</b> involvement; 1 = <b>little</b> involvement; 2 = <b>moderate</b> involvement; 3 = <b>high</b> degree of involvement	0.00	33.33	0.00	0.00	0.00	0.00
66	Do fishing businesses (fishers, fish traders, fish processors, etc.) invest in the welfare of their beach? (support for sanitation and beach infrastructure like landing facilities and smoking kilns)	0 = <b>no</b> investment; 1 = <b>little</b> investment; 2 = <b>moderate</b> investment; 3 = <b>high</b> degree of investment	0.00	33.33	0.00	0.00	0.00	0.00
5. ]	5. Equity		83.33	68.05	63.88	36.80	75.00	77.08
	What is the level of equity among key stakeholders in fisheries co-management?			00.00	02.00	20.00	72.00	7,100
	5.1 Equal Access to Basic Services		83.33	50.00	50.00	58.33	66.67	66.67
	Is there equal access to basic services in fisheries co-management?							
67	Do stakeholders have equal access to extension services in fisheries co-management?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	100.00	66.66	100.00	66.66	100.00	100.00

	O		DIV	DEO	7.	71.1	<b></b>	Consen -sus
	Question	Score Criteria	BVCs	DFO	FAs	Fishers	TAs	Score
68	Is enforcement and regulation applied equally to all stakeholders in fisheries co-management?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	66.66	66.66	66.66	66.66	66.66	66.66
69	Do stakeholders have equal access to savings and loan schemes in fisheries co-management?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	66.66	33.33	0.00	33.33	0.00	0.00
70	Do lake authorities make effort to extend services to vulnerable groups, including women, youth and people with physical challenges? (training, awareness programs, etc.)	0 = <b>no</b> effort; 1 = <b>little</b> effort; 2 = <b>moderate</b> effort; 3 = <b>high</b> degree of effort	100.00	33.33	33.33	66.66	100.00	100.00
5.2	<b>Equal Opportunity to Power</b>		50.00	66.66	50.00	33.33	33.33	41.67
Is	there equal opportunity to gain political and social represen	tation in fisheries co-management?	50.00	00.00	50.00	33.33	33.33	41.0/
71	Are women and other vulnerable groups represented on FAs/BVCs in fisheries co-management?	0 = <b>no</b> representation; 1 = <b>little</b> representation; 2 = <b>moderate</b> degree of representation; 3 = <b>high</b> degree of representation	33.33	66.66	33.33	33.33	66.66	33.33
72	Are fishery industry stakeholders along the value chain (e.g., fishers, traders, processors) adequately represented on FAs/BVCs in fisheries co-management?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	66.66	66.66	66.66	33.33	0.00	50.00
5.3	5.3 Equal Access to Resources			100.00	66.66	33.33	100.00	100.00
Is	there equal access to resources in fisheries co-management?		100.00	100.00	00.00	33.33	100.00	100.00
73	Do stakeholders (including women and other marginalized groups) have equal access to fishing resources?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	100.00	100.00	66.66	33.33	100.00	100.00
5.4	<b>Equal Opportunity to Livelihoods</b>		100.00	55.55	88.89	22,22	100.00	100.00
Is	there equal opportunity to livelihoods in fisheries co-manag	ement?	100.00	33.33	00.09	22,22	100.00	100.00
74	Do stakeholders (including fishers and fish processors) have equal access to improved fisheries technology?	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	100.00	66.66	100.00	0.00	100.00	100.00
75	Do stakeholders have equal access to climate-smart agriculture technologies? (i.e. conservation agriculture)	0 = <b>very low</b> equality; 1 = <b>low</b> equality; 2 = <b>moderate</b> equality; 3 = <b>high</b> degree of equality	100.00	66.66	100.00	0.00	100.00	100.00
76	Do women and other marginalized groups have access to improved technologies and support for alternative livelihoods? (e.g., fish farming, VSLAs)	0 = very low equality; 1 = low equality; 2 = moderate equality; 3 = high degree of equality	100.00	33.33	66.66	66.66	100.00	100.00
		Total Score	55.77	47.73	53.44	40.85	50.66	49.06