

Building Adaptive Fisheries Governance Capacity

Proceedings of the 2nd National Stakeholders' Workshop to Dissemination of Preliminary Findings on Assessment of Adaptive Fisheries Governance Capacity to National Stakeholders



**Venue: Ridar Hotel, Mukono
19th -20th February 2025**

Table of contents

Acknowledgment.....	iii
About NaFIRRI.....	iv
Summary.....	v
Introduction.....	1
Workshop proceedings.....	1
Welcome and official opening remarks.....	1
Reminder of the project and overview of field work carried out.....	2
Results from assessment of fisheries governance capacity.....	3
Reactions of stakeholders to results.....	4
<i>Enforcement and co management</i>	4
<i>Information generation, knowledge and communication</i>	5
<i>Biodiversity protection presentation</i>	6
Group discussions.....	8
<i>Enforcement and co-management</i>	8
<i>Co-management and adaptive governance</i>	12
<i>Information generation, knowledge and communication</i>	14
<i>Protecting the environment</i>	17
Closing remarks.....	18
Appendix.....	20

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About NaFIRRI

NaFIRRI is one of the seven public National Agricultural Research Institutes (NARIs) under the policy guidance and coordination of the National Agricultural Research Organisation (NARO) with a mandate to conduct basic and applied research of national and strategic importance in Aquaculture, Capture fisheries, Water environment, Socio-economics and Marketing, and Information Communication Management, and emerging issues in the fisheries sector.

NaFIRRI is also an African Union Centre of Excellence for Research and Training in Aquaculture, Inland Capture Fisheries, and Climate Change, endorsed at the Third Session of the African Union Specialized Technical Committee on Agriculture, Rural Development, Water, and Environment (STC-ARDWE) in October 2019 and upheld by the Thirty-Sixth Ordinary Session of the African Union Executive Council in February 2020.

Summary

NaFIRRI in partnership with other institutions is implementing a project, *Building Adaptive Fisheries Governance Capacity* to strengthen adaptive governance capacity. This is intended to enable fisheries deliver positive impacts on biodiversity, poverty alleviation and improved ecosystem resilience. The project is investigating how adaptive fisheries governance could be developed and aims to produce national plans and guidance to incorporate adaptive fisheries governance in fisheries management in Uganda.

This report is of proceedings of a workshop held on 19th and 20th February 2025 to disseminate preliminary results from assessment of adaptive fisheries capacity to national stakeholders. The stakeholders include representatives of fishing communities, political and technical leaders in district local governments, civil society organizations, and representatives of government agencies including the Directorate of Fisheries Resources (DiFR). Feedback on the results was obtained from the stakeholders through reactions to the results and group discussions to fill data gaps on selected pertinent issues to enrich the data to inform the development of the national guidelines and plans for developing adaptive fisheries governance.

Introduction

This report presents proceedings of a national stakeholders' workshop facilitated to disseminate preliminary results on the assessment of adaptive fisheries governance capacity that incorporates biodiversity conservation, poverty alleviation and climate resilience in Uganda. The workshop was held on 19th and 20th of February 2025, at Ridar Hotel in Mukono, Uganda. The workshop focused on the dissemination of results from the assessment of adaptive fisheries governance capacity at the community, district, and national levels. The objectives of the workshop were to highlight key findings and obtain feedback to develop actionable and sustainable strategies to build adaptive fisheries governance capacity to address increasing concerns in enforcement and co-management, information generation, knowledge and communication, and protecting biodiversity and ecosystems.

Participants included representatives from fishing communities, local government, civil society organizations, Uganda Fish Processors, and Exporters Association (UFPEA), Ministry of Water and Environment (MWE), Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), specifically the Directorate of Fisheries Resources (DiFR), media, researchers from the National Fisheries Resources Research Institute (NaFIRRI), Professor Fiona Nunan from the University of Birmingham, United Kingdom, and Professor Hara Mafaniso from the University of Western Cape, South Africa.

This diverse participation ensured a comprehensive dialogue on the issues and strategies to develop capacity for adaptive fisheries governance for improved biodiversity conservation, poverty alleviation, and climate resilience within the fisheries of Uganda.

Workshop proceedings

Welcome and official opening remarks

The official welcome and opening remarks were then given by Dr. Nalukenge Winnie Nkalubo, Director of Research, NaFIRRI, Mr Andrew Alio, Assistant Commissioner (Aquaculture), MAAIF, and Professor Fiona Nunan.

Dr. Nkalubo recognized everyone present and welcomed everyone on behalf of NARO and NaFIRRI. She emphasized the vital role of the fisheries sector as a key source of livelihood, food and foreign exchange, particularly through Nile perch exports. She also acknowledged some of the sector's challenges, including overexploitation, climate change, and biodiversity loss. She highlighted the need for adaptive fisheries governance to address these realities. She called for active participation in the workshop and wished all participants fruitful deliberations.

Professor Nunan thanked and welcomed everyone for making the time to attend the workshop. She highlighted that the stakeholders were to talk about the potential of adopting a more adaptive approach to governing fisheries in Uganda. She observed that there is a lot going on in the fisheries sector in Uganda although many of the challenges faced by the sector have been there for a long

time. Professor Nunan advised that the project team would be sharing research findings and then encourage discussion on what solutions can be applied to overcome identified challenges. She urged participants to feel free to share experiences and views during the workshop.

Mr. Alio Andrew, the Assistant Commissioner (Aquaculture), representing the Chief Fisheries Officer and Commissioner (Aquaculture), welcomed everyone to the workshop on behalf of the DiFR. He noted that fisheries cannot be neglected since it is of benefit to the country and citizens in terms of employment and source of livelihood. He appreciated the funders for putting in a hand to ensure that the sector solves some of the challenges it is facing. He noted that the findings from this research would be helpful to the directorate in decision making. He emphasized that for the findings of the research to be widely shared, there was need for collaboration. As a result, he was happy about the representation of all key stakeholders. He urged every stakeholder to play their roles respectively in accordance with the law since some of the challenges were as a result of some stakeholders not doing their work diligently. He called for active participation of everyone to enable the achievement of the objective of the workshop which is to find strategies strengthen the capacity of adaptive fisheries governance in Uganda. He declared the workshop open.

Reminder of the project and overview of field work carried out

Professor Fiona Nunan introduced the project to the stakeholders. She observed that the research project is taking place in Malawi as well as Uganda, and noted that like in Uganda, co-management has been implemented in Malawi since the 1990s, with different approaches taken between lakes, though consistently involving the formation of Beach Village Committees (BVCs).

The project is funded for three years through a programme called the Global Centre on Biodiversity for Climate (GCBC), with funds from the International Climate Finance of the UK Government through the Department of Environment, Food and Rural Affairs (DEFRA). The project was awarded under the theme of 'Natural resource management approaches resilient to climate change'. The project aims to strengthen adaptive governance capacity of inland fisheries in Malawi and Uganda to deliver positive impacts on biodiversity, poverty alleviation and improved ecosystem resilience. To do this it will: assess adaptive fisheries governance capacity; address key challenges to developing adaptive capacity for climate resilience in fisheries governance and how those challenges could be overcome; and develop communities of learning for inclusive and sustainable adaptive fisheries governance.

Professor Nunan defined governance and explained how governance is different from management. She explained that the research is interested in the whole of the governance system, which can be fragmented, uncoordinated and not that effective, including between different parts and levels of government. Professor Nunan then introduced the idea of adaptive governance, which implies that governance needs to respond in a timely and effective way to new information and change, needs to be flexible and able to cope with uncertainty. Therefore, information use is critical for adaptive governance.

The project intends to develop plans for progressing towards adaptive fisheries governance, inform systems and structures for inclusive adaptive fisheries governance and deliver on reduced drivers of biodiversity loss and strengthened protection of biodiversity. She reported that the project also aims to support greater integration of biodiversity protection, climate resilience measures and poverty alleviation in fisheries governance and the departments of fisheries and other organizations in securing government funding and applying for donor funding.

Professor Nunan then introduced the three work packages of the project: assessment of adaptive governance capacity at national, district and community levels; addressing challenges to inclusive adaptive governance capacity, through studies on information generation, flows, use and gaps, and on changing fishing practices; and pilot interventions and network meetings. She noted that activities of the project will also include an exchange workshop between Malawi and Uganda in 2026 to share knowledge and information.

Results from assessment of fisheries governance capacity

The presentation of results was led by Dr. Laban Musinguzi and Mr. Bwambale Mbilingi of NaFIRRI. This begun by the explanation of the approach used to obtain the results. The project adopted a co-production approach in the assessment of adaptive fisheries governance capacity to determine the challenges and how they can be addressed. Assessments were conducted at community, district, and national levels. Two water bodies, Lake Victoria and Lake Kyoga, were selected. From each water body, two districts were sampled for the study. Two fishing communities were picked from each district making a total of 8 fishing communities. At the community level, fisherfolk including fishers, traders and fish processors were interviewed in focus group discussions. At district level, key informant interviews were conducted with political leaders (secretaries for finance, production and in some districts, the LCV Chairperson) and technical staff responsible for fisheries, production, environment, natural resources, planning, and administration. At national level, different stakeholders from the DiFR, MWE, National Environment Management Authority (NEMA), and civil society organizations were interviewed.

The results, organized within four main themes: enforcement; co-management; information generation; knowledge and communication; and protecting the environment are summarized in a related report of a workshop also facilitated by NaFIRRI in February, 2025 (Nansereko et al., 2025). The presentation of the results was followed by reactions from stakeholders and group discussions focusing on each main theme to obtain feedback and more information on selected issues.

Reactions of stakeholders to results

Enforcement and co management

The Secretary for Production, Amolatar district local government appreciated the diverse selection criteria of stakeholders that participated in the research. He emphasized and assured everyone that it is true that the FPU is corrupt and mistreating fishermen during enforcement. He further suggested that the findings be shared with the ministry responsible for fisheries so that a fisheries management system that comprises all stakeholders is developed. The Chairperson Association of Fishers and Lake Users of Uganda (AFALU) when reacting called for more consultations for the ongoing development of co-management regulations. He explained that there is still a lot that is lacking in the draft of the regulations for co management. For instance, the power to select the elders to head the co-management structure have been given to the chairperson LC 1 chairperson which he thought is not good with the current. He further said that the regulation on the fisheries enforcement task force also needs to be looked into. 'It might come up very quickly trying to address the presence of FPU on the lake but whatever system we bring up, we need to think about empowering the fishing communities and the local government system so that they can be able to superintend over the enforcement of fishing laws and regulations.' He ended by stressing that the consultation to develop the regulations should be more than what is being done so that the challenges being faced in enforcement as presented in the results are addressed fully.

The District Chairperson, Buyende District Local Government hinted on the need for the government to restore trust in her technical staff. He mentioned that the government had lost trust in the technical fisheries officers in favor of soldiers that do not have any technical knowledge on fisheries and this has rendered the fisheries officers useless and idle since everything on the lake is now done by the FPU. He also suggested that the findings from the research be shared with policy makers so that they are incorporated in the laws of the land.

One of the stakeholders proposed that civil society organizations like Lake Kyoga Integrated Management Organization (LAKIMO) take lead in enforcement on Lake Kyoga accompanied by the Fisheries Protection Unit (FPU) to offer security, guided by intelligence information so that the name of FPU is not spoiled. He went on to explain that for Lake Kyoga, they have been discussing and doing pilots in some districts. They are looking at the district security council, district steering committees, zonal committees, elders' council, landing site committees and fisheries cooperatives as structures to improve enforcement. They believe if all these arms work together with the FPU as the security wing, they will be able to fight the 'Big network'. "The big network to extort money is real and well organized. 'You may not know it or may know it but it is there. They first disarm you, you don't look at the officer in the eye, they take you to a hut, and they put a curtain in the middle. You go without a phone or anything apart from money and photos of your boat and crew members. You pay according to the time you want to fish for: one week you pay 1 million shillings; two weeks you are required to pay 1.5 million; and for one month, you are required to pay 2.5 million shillings. Once you have paid, you fish 24 hours.' 'How much havoc are these people creating? 'With adaptive fisheries governance if adopted, schemes such as we shall be able to end

this big network issue’, narrated one of the stakeholders in the workshop. The presence of big network, first denied by the representative of the FPU, was confirmed by a representative of UFPEA stating that, ‘You must have heard about what they call the “big network” right? It is also in Lake Kyoga. Intelligence information is not a problem in this sector, information is everywhere. Everything is done in the open, people are collecting money and they are known.’

The DFO for Buyende district highlighted that 25% of the revenues generated from licensing is supposed to be remitted back to the landing sites as a way of motivating fishing communities to pay. Instead, the 25% ends at the sub-county and does not reach the landing sites. This is a challenge they are experiencing in mobilizing fishing communities to pay for these licenses and as a result, compliance rates are reducing. For instance, in 2023, 69% boats obtained licenses. This reduced to 19% in 2024 because people did not see the 25% remitted back to the landing sites. With adaptive fisheries governance, the hope is that the bureaucracy that they are currently going through in the licensing process will reduce.

The FPU representative in his remarks noted that most of the discussion had been centered on their work with a lot of blame piled on the FPU for working in isolation during enforcement.

He observed that this is not true because the FPU has committees in fishing communities that they work with and that the FPU works with DFOs to secure court orders to destroy illegal gears. He noted that differences in personal interests among DFOs are a source of the problem where the FPU does not work with them. He encouraged participants to accept that they are all part of the problem but can be part of the solution if co-management is properly implemented. ‘We are part of the problem and we can be part of the solution and co management is the way to go.’ He also noted that stakeholders should know that co-management is adequately covered in the new fisheries and aquaculture act. ‘We are talking about co management, I don't know how this is different from what is already in the Act’. He noted that the Act defines the functions of many actors like the minister, the director, fishing communities, local governments, DFOs. He explained that co-management has already been provided for in the Act and noted that the challenge is putting this into practice. His submission that ‘each and everybody has different interests, politicians have their own, DFO’s have their own interests as well, and associations also have theirs’ suggested that the success of co-management will depend on the harmonization of interests of different stakeholder groups.

Information generation, knowledge and communication

Important issues emanating from the assessments of adaptive fisheries governance capacity are limited communication to resource users before decisions that affect them are made, limited funding for information generation, and comprehensive data gaps. The limited engagement of resource users limits their involvement in decision making. The stakeholders observed that the failure to define and engage the resource users has been a mistake for along time. ‘Many people are lost when they do not understand who a resource user is and this has implications when it comes to who should be involved in decision making. People think that everybody is a resource user which

is not correct'. Resource users are those who directly invest in the direct capture of fish, the traders in the fishing community interacting directly with the resource and people involved in the fishing activities like net menders.

Stakeholders believed that limited funding is a common problem. Stakeholders suggested that the government should be main funder for information generation and other management activities, and that it is capable to do. 'The community can contribute about 30% and the government about 70%'. The underfunding of fisheries compared to other sectors is seen as dilemma and stakeholders ask why since the significance or contribution of fisheries to employment, food security, GDP is enormous. The sector required commensurate funding. It was suggested that there is need to generate enough information for instance on the role and contribution of fisheries to national and local economies. With that information in qualitative and quantitative terms, stakeholders would be able to build the case with the Ministry of Finance, Planning, and Economic Development and other government agencies to increase funding allocation. and inform them how much we are contributing in (politicians understand figures). 'Therefore, using this project, we would like to see this kind of information and use it to engage these politicians with the information.'

To fill data gaps, it was suggested that fisheries officials harness different levels of the value chain to obtain data. These include revenue collection roadblocks along highways. These sources could be used to build on available data if it is not available at source. It was also highlighted that available data should be used for meaningful decision making to encourage data sharing and acquisition as well as the participation of fishing communities in data collection. Data gaps in fishing enterprises was also highlighted as a challenge for very many government initiatives. Due to information gaps, it has been difficult to fund fishers properly for example through *Emyooga* due to uncertainty of the enterprises. Apparently, this makes it difficult to assess fishers on how they are performing in order to be given financial support.

Biodiversity protection presentation

We had reactions of different stakeholders in relation to biodiversity protection. The FPU representative on whether they do anything related to protection of the environment said that as FPU, they only focus on fish and nothing to do with the environment even when they are aware that it is part of the ecosystem. The DFO for Mayuge district said that the protection of the environment makes sense to them as fisheries officers but indicated that it is not their primary role. 'It is the responsibility of the environment officer or natural resources department to protect the environment'.

The representative of the MWE mentioned that the challenges of pollution of water bodies from fisheries activities are mostly human induced, requiring us to start looking at fisheries in a more holistic manner. 'You cannot address fisheries issues by attending to fisheries alone'. He informed the workshop that MWE has adopted a framework for water resources management that is embedded in the catchment based integrated water resources management. This is about ensuring that the management of the resource is spearheaded by stakeholders and the resource users

themselves and this is heavily stakeholder driven by ensuring that everybody who has any responsibility in the resource is brought on board to harness all the competencies from the different players to ensure that all the ideas are adopted to ensure good health and quality of our water resources. He invited the fisheries officers not to leave the issues of biodiversity conservation and pollution to the offices of natural resources and environment alone. This resonated with the suggestion by Dr. Mark Olokutum, the Program Leader, Fish Habitat Management at NaFIRRI that the management of fisheries resources is a collective responsibility and that environmental protection cannot be left to one agency. He called for a deliberate effort in enforcement of environmental protection and this could only be achieved when there is a sense of belonging amongst all the stakeholders.

Mr. Geoffrey Dheyongera, a Principal Fisheries Officer at DiFR mentioned that pollution was more serious than the fishing illegalities because if pollution is not addressed, we could reach a level where we have lakes without fish. ‘With illegalities, people can fish up to a certain level where they cannot get enough catch to cater for the input and they will eventually stop, but with pollution, all the fish whether mature or immature will all die’. He highlighted the pollution from infrastructure associated with riparian cities on Lake Victoria, indicating that pollution is reducing the area of the lake that can support the survival of fish. In the end, if nothing is done to protect the environment, ‘we are going to have a depression full of water that cannot grow fish because of pollution’. He stressed that fighting pollution requires empowering people in local communities to understand that pollution has a negative impact on fish catches. One of the stakeholders suggested that knowledgeable scientists should help with the empowerment of the communities and the general public. This is because most of the communities are illiterate and are not informed and end up polluting the environment that affects everybody. Just like the traffic with the *twebereremu* program, there is need to tailor something so that information is often thrown to the communities. ‘Some people do not believe information because it comes from sources that they think they do not trust’. For example, people may not believe a scientist who they think may just be validating his or her research. ‘People believe in radio and TV presenters more than they will believe scientists.’ Therefore, the information should be taken where people can easily find and trust it.

Group discussions

Enforcement and co-management

Issue 1: Who should be involved in enforcement and for what roles?

Stakeholders defined enforcement as the activities undertaken to ensure compliance with the fisheries laws and regulations. It is important for the enforcer to have background information or knowledge on what they are enforcing. In the table below, stakeholders defined stakeholders that should be involved in enforcement and their corresponding their roles.

Stakeholder	Proposed role
Technical staff (Fisheries officers)	<ul style="list-style-type: none"> ● To inspect, monitor and coordinate government initiatives and policies in the fisheries and aquaculture sub-sector and also coordinate with line ministry and agencies purposely for support and reporting. ● To carry out data collection and analysis ● To ensure quality standards and quality assurance. ● To conduct monitoring, control and surveillance of the resource. ● To plan, organize, lead and conduct enforcement and report on enforcement. ● Support in training of landing site management committees. ● Mobilization of resources. ● Provision of feedback reports. ● To strengthen networks among local management committees.
Local leaders (religious and local council leaders)	<ul style="list-style-type: none"> ● Self-policing and regulation. ● Sensitization of communities. ● Providing community intelligence information to agencies involved in enforcement of regulations.
Community members through landing site committees	<ul style="list-style-type: none"> ● To provide information and manpower to the enforcement team. ● Sensitization on the laws and regulations pertaining to enforcement ● Identification of illegal fishers. ● Protection of the breeding and nursery zones ● Participate in monitoring, control and surveillance of the resource. ● Participate in the collection of revenue for the government. ● To register the fishers at their landing sites. ● Ensure that fishers are licensed, data is correctly collected and reported to the district fisheries

	<p>officer.</p> <ul style="list-style-type: none"> ● To collect data on the number of fishing boats in their area of jurisdiction. ● Ensuring that fish traders have fish movement permits.
Resource users (boat owners/fish traders - agents and collection centres, truck owners, processors)	<ul style="list-style-type: none"> ● Making local co-management plans and implementation. ● Ensuring implementation of policies and rules at local level. ● Sensitization of fishers to adhere to fishing rules and regulations. ● Self-policing culprits put to check. ● Sharing of intelligence information on fishing irregularities committed by colleagues with security to cause arrests.
Fisheries Protection Unit and Marine police	<ul style="list-style-type: none"> ● To arrest whoever is found violating fishing laws and regulations. ● To respond to calls from various stakeholders ● To conduct investigations and respond to reported crime. ● To network with other stakeholders in enforcement ● Ensure safety on the lake by conducting rescue and lifesaving operations in times of accidents. ● Regular feedback reporting. ● To offer backstopping to the enforcement ● Ensure security of fishers and their gears on the water.
Local government	<ul style="list-style-type: none"> ● Formulation of ordinances, bye laws and administrative rules ● Enforcement of the ordinances and bye laws ● Offering technical guidance and building capacity in relation to fisheries enforcement
Central government (and agencies like Uganda Revenue Authority and Uganda National Bureau of standards)	<ul style="list-style-type: none"> ● Develop appropriate sector policies, standards, regulations, laws, guidelines for use during enforcement. ● Advise local authorities and enforcement agencies on appropriate protection and management measures. ● Central government through her agencies like URA and UNBS should be responsible for setting standards and ensure that these set standards are adhered to by those in the fish value chain.

Lake Management Organizations like LAKIMO	<ul style="list-style-type: none"> ● Participate in monitoring control and surveillance activities ● Provide inputs for enforcement ● Participate in making laws and regulations ● Collecting data ● Collaboration with other enforcement organs ● Cause for awareness about bad fishing. ● Developing lake wide management plans. ● Resolving conflicts among fishing communities and enforcement organs.
Civil Society Organizations	<ul style="list-style-type: none"> ● Advocate and mobilize resources for facilitation of enforcement. ● Sensitization / awareness creation to communities about their rights and obligations. ● Conduct regular reporting and documentation about actions being undertaken.

Issue 2: What challenges are experienced in enforcement and how could they be overcome?

Stakeholders discussed the following as the challenges experienced in enforcement and proposed measures that can be taken to overcome them.

- Most of the stakeholders highlighted inadequate funding as one of the biggest challenges experienced in enforcement. It hinders regular surveillance and monitoring patrols hence leading to an increase in fishing irregularities going undetected. There is also a challenge of limited facilitation and inadequate staffing as a result of the inadequate funding.
- Widespread corruption which includes extortion (e.g., ‘big network’) of money from fishers by officials of the Fish Protection Unit (FPU).
- Excessive force used by the FPU leading to drowning and loss of lives due to fear of being harshly arrested.
- Institutional weaknesses like lack of sensitization of fishers on compliance to regulations, and poor funding and logistics.
- False reporting due to poor data collection and connivance.
- There is limited justice, prosecution and rights protection.
- Less involvement of other stakeholders.
- There is a challenge of role and power conflict where different stakeholders do not know the exact roles that they are supposed to do in management and enforcement of fishing laws and regulations.
- Lack of proper accountability.
- Political interference in enforcement of fishing laws and regulations.
- Inadequate technical knowledge on illegal gears by some FPU staff that are responsible for enforcement.

- The public has a negative perception on enforcement of fishing laws and regulations and some are hostile to enforcement officers.
- There is poor coordination among enforcement stakeholders.
- Poor reporting mechanisms.
- There is no clear definition of fines for offenders.
- Open access of fisheries.

Proposed solutions to the above challenges.

- Regular and frequent transfers of enforcement officers within 3-6 months to prevent corruption.
- Create an effective enforcement system which is all inclusive of the resource users.
- The funding gap can be solved by enabling community contributions for sustainability and enhancing government contribution.
- The issue of corruption can also be addressed by promoting community self-regulation and enhancing civic vigilance through sensitization of fishers about their rights and the dangers of corruption.
- Sensitization of the fishers and enforcement officers.
- Establish multiple checkpoints/enforcement units to reduce connivance.
- Deploy technology for surveillance e.g., camera and ladder technologies.
- Ensure fast, fair, and open prosecution.
- There is a need to strengthen the capacity of stakeholders and clearly streamline and define their roles and responsibilities in fisheries management and enforcement.
- Involve all stakeholders in enforcement.
- Conduct regular stakeholders' engagements and continuous creation of awareness among the different stakeholders involved in the management of fisheries.
- Politicians should be made ex-official members of the management committees to reduce their interference in enforcement.
- Effective legislation and good political will from the government to reduce fishing irregularities.

Issue 3: Where should funding to sustain enforcement come from?

Stakeholders suggested that funding to sustain enforcement should come from revenue from boat licenses and fines, income from licensing fees, fines collected from illegal activities (e.g., use of illegal fishing gears and catching of immature fish), and a 25% share of funds collected by management committees at landing sites. They also suggested district local government funding and central government contributions plus donations from individuals, development partners and civil society organizations.

Issue 4: The use of monofilament nets seems to be a significant challenge. Do you think it would ever be possible to remove monofilament nets?

Different stakeholders had mixed reactions over whether it would ever be possible to remove monofilament nets or not with some saying it is possible and others saying it is not. Those that were in favor said that to remove monofilament nets required government to strengthen border inspections against illegal fishing gear on both land and water so that these nets are eliminated at source and not imported into the country. They went on to suggest introduction of stiff penalties to dealers found with these nets, involvement of fishing communities through giving incentives to whistle blowers and continued creation of awareness on the dangers caused by use of monofilament nets. Other suggestions included the need to license fishers in groups to foster community policing, sensitize the fishers to know that the resource belongs to them and take primary role to protect it from any destructive gears, strengthen enforcement, and invest more in research to come up with better fishing technologies that are effective and less destructive.

Co-management and adaptive governance

Issue 1: What structures could be formed for fisheries, the environment, and others to work together for adaptive fisheries governance?

Stakeholders put more emphasis on the creation of fisher groups to aid in registration and licensing for fishing operations at district local government level. Even the individual license should be given only when one is part of a group. The stakeholders also suggested landing site management committees that are composed of fisher groups, local council one (LCI), and parish chiefs. These should be constituted with clear roles, disciplinary procedures and a specified term of service. Lake-wide or regional management organizations were proposed with representation of civil society organizations (CSOs), government agencies such as MWE and NEMA, local governments, and security operatives. The stakeholders also proposed district and sub-county structures or committees composed of selected leaders at each of the levels. In the district, the members could include the District Fisheries Officer (DFO), Residential district Commissioner (RDC), District Police Commander (DPC), District Internal Security Officer (DISO), technical staff responsible for the and Environment, and District Chairpersons. At the sub-county, membership could include Fisheries Officers (FO), officer in charge of police (OC), Local Council Three (LC3) Chairpersons, and Gombolola Internal Security Officer (GISO).

Issue 2: How do fishing communities work together with neighboring fishing communities for fisheries management?

No specific ways were given of how neighboring fishing communities work together. Collaboration among the fishing communities could be initiated by having the communities represented in fisheries management committees at different levels starting from parish to sub-county, district and eventually lake wide levels. Stakeholders perceive that fishing communities can work together by networking and collaborations through joint meetings for planning and implementation; benchmarking and exchange visits for information; data, and knowledge sharing;

harmonization of local regulations; joint sensitization programs; and building smooth working relations such as rescue, recovery of stolen items, and apprehending suspects.

Issue 3: How can trust within communities and between stakeholder groups be built and maintained?

- Select leaders of integrity and eliminate untrusted persons. The selection criteria should be guided by law, and having clear disciplinary and removal procedures. There should be no favors and terms of office, where applicable should be short (about 2 years) and renewable only once.
- Ensure transparency and accountability in decision making and implementation among stakeholders– no dubious conduct.
- Open communication and continuous community engagements through meetings and barazas.
- Perform regular and proper reporting and feedback.
- Benchmarking visits, joint training and information sharing.

Issue 4: How could adaptive fisheries governance be funded?

- Government budget line through MAAIF, districts, sub-counties, and government funded projects.
- Donors through projects.
- Private sector, development partners and CSOs
- Landing site budget or communities such as fish levy and fisher contributions.

Information generation, knowledge and communication

Issue 1: How do people in fishing communities find out what’s happening in fisheries? Where do they get new knowledge from?

- By word of mouth and through sensitization, training, workshops and consultations meetings.
- Fisheries research through researchers who disseminate the findings to them as well as collect more information from them.
- Media such as websites, radios, TVs, social media platforms like WhatsApp.
- Fellow fishers and traders through exchanging knowledge and experience on new technologies and regulations they have heard about.
- From technical staff like local government staff including the fisheries officers who carry technical knowledge.
- Sub-county health officers sharing information about wastes and health hazards.
- Through government and local leaders who sometimes sensitize.

Issue 2: What are the best ways to communicate new information to communities and why?

- Face to face interactions/community engagement or direct engagement of everyone during community barazas. For example, government officials are brought to address the people or to target key informants.
- Using FM radios. These are cheap and easily accessible because most people carry mobile radios with them. People are always eager to listen to what is happening.
- Using TVs and video halls. Visual interaction attracts people.
- Social-media since most people possess phones
- Mobile communication vans and village mobile loudspeakers that target big congregations such as on market days. These are cheap as people are found where they are.

Issue 3: What are the pros and cons of different methods of sharing knowledge and experience?

Method	Pros	Cons
Radio-FM (Media)	<ul style="list-style-type: none"> ● Easily understood ● Wider coverage ● It is very affordable. ● Information spreads very fast usually through news bulletins and adverts. ● Easy access 	<ul style="list-style-type: none"> ● May not easily be possessed by everyone ● Limited network ● Delayed feedback, if at all ● It’s high cost (fuel, UCC approvals/broadcasting rights)
TV	<ul style="list-style-type: none"> ● Visual interaction with the listeners 	<ul style="list-style-type: none"> ● One sided, no feedback

Community Engagement/Face to face engagement like in the barazas	<ul style="list-style-type: none"> ● Instant feedback can be received because there are usually question-answer sessions. ● Easy mobilization ● Direct interaction ● Trust is well built. The members feel they are involved. It makes the community feel valued because their voices have been heard ● An opportunity to receive first-hand information that eliminates distortion by the people who have attended the barazas. 	<ul style="list-style-type: none"> ● Coverage is limited ● It is expensive due to related costs especially if the meeting point is very far. Costs may be high, such as refreshments and shelter. ● Some members may feel intimidated depending on the guest speaker for fear and personal concerns.
Village loudspeakers	<ul style="list-style-type: none"> ● Relatively cheap 	<ul style="list-style-type: none"> ● Use a lot of human effort to disseminate the communication i.e., using people to speak loudly using vehicles.
Mobile communication vans	<ul style="list-style-type: none"> ● There is no cost of moving people and places where to find them are known. 	<ul style="list-style-type: none"> ● Delayed feedback if at all ● High cost, you need the broadcasting rights

Issue 4: Fisherfolk could contribute more to policy-making, plans and management

What kind of knowledge and experience could they contribute?

- Local knowledge on climate change e.g., practical knowledge on weather and climate factors overtime.
- Biodiversity and conservation e.g., fish breeding and nursery grounds/areas
- Fish migration patterns/cycles, fishing seasons, and cycles.
- Specific fishing habitats for fish
- Terrain in the water
- Taboos e.g., women don'ts and dos
- Species and composition in lakes
- Effectiveness of fishing methods. They know what methods of fishing are more effective and why
- Knowledge on best tree species for making some fishing facilities
- The artisanal processors know what raw materials to use i.e., materials that are recyclable.
- Market information depending on who they sell to. They know what the market wants

Issue 4: How could they contribute more?

- Giving feedback to them so that they know how relevant their information was and the reason it was collected.
- By getting appreciated for their information e.g., whistleblowing incentives or awards for exceptional climate smart innovations
- Through focus group discussions
- Involvement in decision making and recognizing them in decision making, consultations and committees.
- Lobby to their community causes
- Have government offices at the landing site.

Issue 5: Are there any differences in the experience of men and women in relation to access to knowledge and data?

Stakeholders reported differences in the experience of men and women, with men getting more information. This is because unlike women, men have more access to social places such as video halls and bars, phones, and are more open minded. Women may miss out on information due to the nature of the work such as domestic work and working in the garden. This limits them mainly to the word of mouth.

Issue 6: How could data collection systems be sustained?

- Avail data collection and management tools for Catch Assessment Surveys, Frame surveys, and Hydroacoustic surveys.
- Increase funding.
- Building capacity of the people involved in the data collection.
- Adapt digital data collection tools to reduce costs and establish networks.
- Making data beneficial and giving feedback.
- Centralizing data management.
- Systemic dissemination through the right channels so that future additions to this data can seamlessly be merged.
- Co-management and collaborations across the value chain.
- Updating these technologies from time to time as the need arises.

Protecting the environment

Issue 1: What have fishing communities done to protect the environment in and around the lakes?

- In some landing sites, people collect plastics, polythene bags, and other solid waste to plastic collectors who sell to plastic companies.
- People in some fishing communities have planted trees.
- There are public pit latrines constructed at landing sites to maintain hygiene and sanitation.
- There is a prohibition of people from cultivating crops along lake shores.
- Some landing sites have set aside specific days for community members to do general cleaning.

Some stakeholders reported that the reason some fishing communities have not done anything to protect the environment is because there are gaps in legal and policy frameworks and protection of the environment is not emphasized in fisheries management.

Issue 2: Is there anything that could be done to motivate communities to protect the environment?

- Organize people in fishing communities in groups to ease information flow.
- Incorporate the environment management plans into fisheries management plans and local government plans.
- Strengthen enforcements on the gazetted landing sites
- Incorporating biodiversity and environmental issues into the fisheries policies, plans and budgets
- For the case of plastics, popularize recycling with some grant funding to kick start the process. Create governments projects to use recycled plastic.
- Strengthen the capacity of lake management organizations and districts to disseminate information.
- Protection and rewarding of whistleblowers.
- Sensitization of communities on the benefits of protecting the environment
- Come up with a clean environment slogan and elect community opinion leaders and ‘brand’ ambassadors to champion it.
- Subsidizing environment friendly products.
- Formation of conservation clubs in schools.
- Awards and other incentives for best environmentalists e.g., scholarships, T-shirts, books, pens, and aprons.
- Establish leadership structures
- Formulation of byelaws to protect the environment
- Promotion of afforestation by giving out tree seedlings to people to plant.

Issue 3: What practical ideas do you have for communities to protect the environment including shoreline areas, fish breeding and nursery areas, forests?

- Supply seedlings to the communities to plant more trees.
- Mapping and demarcation of breeding areas.
- Enforce the protection of buffer zones of the lake shores.
- Formation of local committees dedicated to environmental management.
- Assigning user rights and responsibilities
- Construction of pit latrines where necessary.
- Capacity building in fisheries management, biodiversity conservation, and climate smart adaptation strategies.
- Provision of legally accepted boats and gear to fishers on installment basis.
- Awareness creation and sensitization about environmental protection.

Closing remarks

Professor Nunan thanked the participants for their active participation during the workshop and wished everyone a safe trip back home. She appreciated the participants for their contributions and looked forward to working with them again. She emphasized that all the contributions from the discussions at the workshop would be added to the findings. She pledged total support to the stakeholders and looked forward to seeing them again in the next workshop where it is hoped that guidelines for adaptive fisheries governance will be presented.

Dr. Mark Olokotum who was representing the Director of Research, NaFIRRI in his closing remarks thanked the stakeholders for their commitment to the workshop. He appreciated the co-production approach for ensuring the representation of all key stakeholders in the sector. He mentioned that the participants had helped the project team in generating enough data that will help with the building of adaptive governance capacity in the sector. He ended by saying that NaFIRRI is committed and ready to work with everyone to ensure that the actual aim and objectives of this project are achieved.

References

Nansereko F., Dushimimana R., Uzabakiriho B., Mbilingi B., Kanya K., Baluku J., & Musinguzi L. 2025. Who is in charge of fisheries? Who should be in charge? What is the role of resource users? Proceedings of a workshop to introduce adaptive fisheries governance and present preliminary findings on assessment of adaptive fisheries governance capacity to fishery management staff in Uganda. National Fisheries Resources Research Institute, Jinja Uganda.

Appendices

Appendix 1: List of participants

SN	STAKEHOLDERS	Sex	Designation	Organisation/District
1	Mr. Patrick Byamukama	M	PFO	MAAIF/DiFR
2	Mr. Geoffrey Dheyongera	M	PFO	MAAIF/DiFR
3	Mr. Alio Andrew	M	Rep-Director	MAAIF/DiFR
4	Maj. JL Cherop	F	FPU	FPU-UPDF ARMY
5	Mr. Tibyansa William	M	CEO	UFPEA
6	Mr. Olet Emmaniel	M	Ag. Director	DWRM/MWE
7	Mr. Kanaku Micheal	M	LCV	Buyende-DLG
8	Ms. Sarah Ahmed Nalukwago	F	DFO	Buyende-DLG
9	Mr. Samuel Omoding	M	Fisher Rep	Bukungu Landing site- Buyende
10	Ms. Jennifer Namusisi	F	Fisher Rep	Kijinji landing-Buyende
11	Mr. Anthony Otunga	M	DFO	Amolatar-DLG
12	Mr. Tommy Ogwang	M	Fisher rep	Namasale landing- Amolatar
13	Ms. Catherine Akello	F	Fisher Rep	Bangala Landing site- Amolatar
14	Mr. Eumu Patrick kauma	M	Sec for production	Amolatar-DLG
15	Mr. James Katali	M	DFO	Buikwe-DLG
16	Mr. Asad Lutale	M	Fisher Rep	Ssenyi Landing site- Buikwe
17	Ms. Caroline Nakintu	F	Processor	Kiyindi-Buikwe
18	Ms. Nggesa Zainabu	F	V/LC5	Buikwe-DLG
19	Ms. Sarah Nakaziba	F	DFO	Mayuge-DLG
20	Mr James Yoki Akol	M	Fisher	Bwondha Landing site- Mayuge
21	Ms Kauma Nabuwati	F	CP/LC1	Bugoto Landing site- Mayuge
22	Mr. Owori Isaac	M	Secs for production	Mayuge-DLG
23	Ms. Rita Amolo Kintu	F	General Secretary	NGO-UNWFO
24	Mr. Ssenyonga Godfrey Kambugu	M	CP/LC1	NGO-AFALU
25	Mr. Kamaturaki Seremos	M	Executive Director	NGO-UFFCA
26	Mr. Felix Maginot	M	Executive Director	NGO-LAKIMO
27	Ms. Kayisinga joan	F	Programs officer	NGO-KWDT
28	Ms. Lominda Afedraru	F	Media officer	Daily Mornitor
29	Dr. Nalukenge Winnie Nkalubo	F	Director of Research	NaFIRRI

30	Dr. Laban Musinguzi	M	SRO/Co-PI	NaFIRRI
31	Mr. Mbilingi Bwambale	M	SRO/Co-PI	NaFIRRI
32	Mr. Johnson Baluku	M	RA	NaFIRRI
33	Mr. Ashiraf Kanya	M	RA	NaFIRRI
34	Ms. Agness Nabuufu	F	IT	NaFIRRI
35	Barnabas Uzabakiriho	M	RA	NaFIRRI
36	Ms. Alice Endra	F	SDCO	NaFIRRI
37	Dr. Bassa Samuel	M	SRO/PL-CFBC	NaFIRRI
38	Mr. Aggrey Isabirye	M	IT	NaFIRRI
39	Dr. Olokotum Mark	M	PL-FH	NaFIRRI
40	Ms. Frank Nansereko	F	RA	NaFIRRI
41	Ms Dushimimana	F	RA	NaFIRRI
42	Prof. Fiona Nunan	F	rofessor/PI	University of Birmingham
43	Prof. Hara Mafaniso	M	DPC	PLAAS, UWC

Appendix 2: Workshop gallery



Dr. Winnie Nkalubo, the Director of Research, NaFIRR, giving her opening remarks at the workshop



Prof. Fiona Nunan, University of Birmingham, giving her opening



Mr. Alio Andrew, the Assistant Commissioner, Aquaculture, DiFR giving official opening remarks at the workshop



The Executive Director, UFPEA reacting to one of the presentations on the dissemination of preliminary results for assessment of adaptive fisheries governance capacity



Stakeholders in group discussions of the findings from the assessment of adaptive fisheries governance capacity



The District Chairperson, Buyende district reacting to the presented results on assessment of



The Vice Chairperson, Buikwe district making a presentation of what was discussed in her group on biodiversity protection.