AGI Uganda Study

Stakeholder Workshop Report

July 9th, 2024 Kampala

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About the Aquaculture Governance Indicators (AGI)

The Aquaculture Governance Indicators (AGI) research project is aimed to enhance understanding of the ways in which regulatory systems, voluntary codes and standards, joint projects and activities are organized around identification of environmental issues and response to solving challenges in the aquaculture sector. The AGI project is based on collaborative research that is co-ordinated by academics from the Environmental Policy group (ENP) at Wageningen University (the Netherlands).

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About this report

A Stakeholders' meeting was held on the 9th July 2024 at the Hotel Golden Tulip Canaan in Kampala, Uganda. This meeting brought together policy experts, stakeholders, and researchers from Uganda to discuss preliminary findings from the AGI Uganda study on governance for sustainable aquaculture development in Uganda. This report summarizes key topics discussed and main messages at this workshop, that was attended by fourteen participants. The aim is not to provide a detailed and in-depth description of the conversations. Instead, the goal is to offer a comprehensive overview of the workshop and working sessions. Sandra Langi (Muni University, co-lead AGI Uganda study), Hilde Toonen (Wageningen University, coordinator AGI project) and John Walakira (National Agricultural Research Organisation, co-lead AGI Uganda study) facilitated the workshop and co-authored the report.

Acknowledgement

We thank all participants for positively sharing their time and insights. We would also like to extend our gratitude to the rapporteurs Joan Mundua and Muntu Mugisha Faraho. Photo credit goes to Ismail Hassan.

Ethical statement

All participants gave their informed consent before they participated in the workshop and consented to use and publication of photos. The workshop was conducted as part of the AGI Uganda study within the AGI project. The AGI project is guided by the Data Management Protocol of the Environmental Policy group in accordance with Research Integrity Code of Wageningen University and Research.

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Executive summary

Uganda is one of the largest aquaculture producers in Africa with a remarkable growth attributed to a private sector led industry. However, current aquaculture production cannot meet the national and regional demand of food fish mainly due to limited access to: i) affordable quality feed and seed, and ii) knowledge or technologies. Several efforts are set to drive aquaculture into a sustainable and equitable sector through participatory innovations and governance. Governance is a pivotal transformer for aquaculture's growth but there is limited information on Africa's landscape. On 9 July 2024, the AGI project held a stakeholders' consultative workshop in Kampala to present preliminary findings of the Uganda study. Participants included policy experts, producers, development partners, academia, Government planners/regulators, extension agents and researchers who are key stakeholders in governance of sustainable aquaculture in Uganda. Three dimensions were discussed: that is, legislation, partnerships and capabilities. Stakeholders agreed that Uganda has strong legislative framework covering major industry issue areas. There is needed to enhance cross-sector coordination and strengthen extension support to increase compliance. The key collaborative processes are project dependent, and this creates concerns about sustainability. While they address the main industry issue areas there is need to enhance the visibility of their deliberative processes, strengthen coordination and learning processes within and between collaborative arrangements. This study provides insights to foster learning, better understanding of the challenges within the sector and a starting point for engagement among different stakeholders around identified gaps to ensure sustainable development. The Uganda AGI assessment will contribute to the better understanding of aquaculture governance on the African continent and provide opportunity for shared lessons.

Contents

1. Introduction

Uganda is one of the largest aquaculture producers in Africa with a remarkable growth attributed to a private sector led industry[1]. The sector has the potential to enhance food & nutrition security and boost economic growth. The Uganda government plans to produce 1 million tons from aquaculture to meet the recommended per capita consumption of 25 kg per person per year, and for export market[2]. However, producers are challenged with limited access to; i) affordable quality feed and seed, and ii) knowledge technologies[3]. Governance is a pivotal transformer for the sector growth, providing context, and mechanisms needed to promote an environmentally sustainable aquaculture industry that is socially equitable. Limited information is available to understand governance factors that drive sustainable aquaculture growth in Uganda and Africa. Through collaborative research efforts between Wageningen University, Muni University and the National Agricultural Research Organization (NARO), a study was conducted to explore the knowledge gap that exists in aquaculture governance in Uganda. Preliminary findings were presented and validated in a consultative Stakeholders' workshop in Kampala.

This report provides an account of the workshop held on the 9th of July 2024, highlighting key points from the presentations, different working sessions (Section 4), and providing concluding remarks (Section 5).

2. Overview of the day

The main objectives for this workshop were to share and discuss the preliminary findings of the AGI Uganda study. There were three main objectives:

- Introduce the Aquaculture Governance Indicators (AGI) framework;
- Share and discuss the preliminary findings from the Uganda aquaculture governance assessment;
- Receive input from the experts regarding the study to strengthen our findings (accuracy, relevance and applicability).

The day started with an opening speech by Mr Joseph Bwanika, Director of Fisheries Resources at the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF). Mr Bwanika welcomed all participants. For the Government of Uganda aquaculture governance being discussed is pertinent as it relates to the systems and processes to ensure that the three linkages that involve different stakeholders such as farmers, researchers, government workers, development workers, and the policy makers complement each other. The government is implementing a market-driven value chain development strategy anchored on three pillars i.e., addressing production and productivity, harvest and post-harvest handling, processing

[1] Netherlands Enterprise Agency. (2022). Aquaculture Road Map Uganda Opportunities in the aquaculture value chain (RVO-120-2022/RP-INT). https://www.rvo.nl/files/file/2022-05/Aquaculture-Road-Map-Uganda-Opportunities-in-the-aquaculture-value-chain.pdf

[2] MAAIF. (2016). Agriculture Sector Strategic Plan 2015/16-2019/20 (Draft). https://agriculture.go.ug/wp-content/uploads/2019/05/Agriculture-Sector-Strategic-Plan-ASSP.pdf

[3] Adeleke, B., Robertson-Andersson, D., Moodley, G., & Taylor, S. (2020). Aquaculture in Africa: A Comparative Review of Egypt, Nigeria, and Uganda Vis-À-Vis South Africa. Reviews in Fisheries Science and Aquaculture, 29(2), 1–31. https://doi.org/10.1080/23308249.2020.1795615

and value chain that are targeting the market. The government sees the three pillars are closely interlinked by knowledge, technology and policy frameworks. Recently, the government passed a comprehensive Fisheries and Aquaculture Act 2023 and are in the process of developing regulations and other frameworks, guidelines etc to make sure that the law becomes operational. Mr Bwanika indicated that while the government is interested in knowledge generation, they are keen on how knowledge can influence actions in the drive to promote sustainable market driven aquaculture i.e., produce sufficient quantity and quality aquaculture produce that meets the Uganda development objectives in the fight for food security, addressing household incomes and promotion of national incomes through exports.

All participants introduced themselves personally and were invited to share their expectations about the day. Project coordinator, dr Hilde Toonen, introduced the AGI research project. Sandra Langi, co-lead AGI Uganda study, gave a content presentation highlighting the main study findings. This content presentation consisted of two parts, after each part participants were provided with the opportunity to ask and respond to questions.

To jointly explore the extent to the study findings are accurate and relevant, the research team had designed three working sessions. In the first session, the participants worked in two groups, based on a mix of affiliation (state, industry, civil society group, academia, donor organization) and gender. They discussed the preliminary findings of the study. A group representative reported back to the plenary. After lunch, participants started a second session, again in the two groups, to map out existing and desirable collaborations for improving environmental performance of aquaculture in Uganda. In the third session, participants worked in pairs on a quick assessment of the capabilities of the various actors to co-govern the sector. Feedback from these sessions was then integrated into the concluding plenary session. The workshop was closed by Ms. Joyce Nyeko.

3. Aquaculture governance: introduction of the AGI framework

The key question(s) of the AGI Uganda study are "What is good aquaculture governance?", "How do we measure good governance?" and "Where does Uganda currently stand as we try to achieve good aquaculture governance?".

The research team uses the Aquaculture Governance Indicators (AGI) to assess governance performance in Uganda. The AGI are an analytic framework that provide a social-scientific assessment basis for measuring performance of environmental governance related to aquaculture production on a country/species level. The AGIs follow Kooiman et al's definition of governance, so governance referring to a range of social processes and practices involved "in solving societal problems and creating societal opportunities through interactions among civil, public and private actors". This definition is specified for aquaculture via four dimensions and three cross-cutting principles. The dimensions provide guidance for a descriptive analysis of governance, while the three principles define what "good governance" is. Figure 1 summarizes the AGI framework.

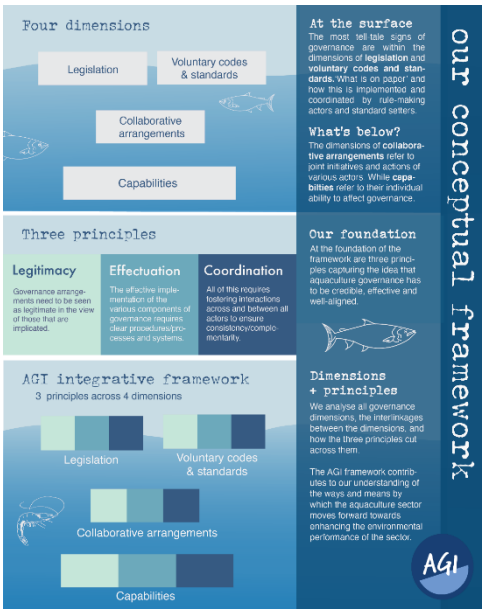

Figure 1: the AGI framework.

The AGI is an indicator framework: Indicators provide a tool to organize more narrowly defined aspects. Indicators allow for a systematic assessment, so aquaculture governance performance in any given country can be assessed, as well as for a systematic comparison between countries and species groups.

The AGI are based on a mixed-methods approach, using qualitative and quantitative methods. Data collection is via qualitative methods: desk study of relevant, publicly available documents and interviews. Analysis is based on scoring (quantitative assessment) of aspects that is guided by predefined categories, ranging from 1 to 5: 1 stands for a lower performance, and 5 for higher performance. These scores are ordinal not nominal and are therefore only useful when combined with a qualitative assessment, that is, by good understanding of the scored category and the justification which is a detailed description from the assessor. Through interpretative analysis, a synthesis on the levels of indicators, dimensions and principles is generated, showing the general tendency of governance performance.

Until now, there are several AGI assessments finalized, ranging from a pilot study on shrimp farming in Myanmar to assessments of key globally exported species like salmon from Norway, Chile and Canada, and shrimp produced in Southeast Asia (Indonesia, Vietnam, Thailand, India). Also, studies include Chinese aquaculture and US salmon farming. Ongoing assessments are on shellfish farming in Europe (the Netherlands, Belgium, UK) and aquaculture systems in Nigeria and Senegal. From the previous country

assessments, some lessons can be drawn as Uganda's industry is emerging. For example, Norwegian legislation is very elaborate and specific. However, collaborations are mainly bilateral between state and industry. A more open and inviting attitude towards civil society actors can be observed in Southeast Asia. Also in shrimp production there are more small (-er) scale producers, which asks for specific platforms for communication, like the Shrimp Day Fairs in Thailand. Indonesia provides interesting lessons too, as the assessment shows a rather high level of farmer inclusion in decision-making, yet mostly on operational issues.

In their responses, the participants sought clarity on the following aspects:

- The AGI focus on environmental governance, taking social sustainability under the umbrella of environmental sustainability. *Dr Toonen explained the environmental focus is mostly a matter of scope. Governance of environmental issues is not given priority over the need to address social issues related to aquaculture. Rather, reducing environmental risks and enhancing ecosystem protection are seen to be of key importance for human health and wellbeing. Emphasizing the need to improve environmental governance is in support of both people and the planet. However, this is not to deny that there are potential trade-offs: the AGI point out such challenges, for example by assessing the extent to which regulations are deemed appropriate for the actors that are targeted, the extent to which actors with different opinions and perspectives are included in discussions and the extent of openness and willingness of key actors to engage with others who might have different views.*

- Voluntary codes and standards are one of the four governance dimensions in the framework. The international voluntary standards are cost-driven and driven by countries that export aquaculture produce. In Africa, the international standards are not in place. Also, they may not be relevant for short aquaculture chains. *Dr Toonen agreed that the dimension of Voluntary codes and standards lacks relevance in (some/most) African countries. The AGI do not hold an intrinsic, normative judgment to this: if there are no voluntary codes and standards, they cannot be described, analysed and assessed. Yet the fact that a country's sector does not draw on voluntary codes and standards is one of the characteristics, for which there might be good reasons. Dr Toonen emphasized that the AGI allow to see the diversity in aquaculture governance around the world.*

- There is a broad range of uses of the AGI, e.g., as a tool, a brand, or an internationally recognized standard. What is the ambition/goal? *Dr Toonen explained that the AGI has been designed as a tool for analysis and for deliberation between stakeholders in the sector. The AGI help to organize information and provide a language to have a discussion and share viewpoints, they are not designed to be (come) a model of how each country should govern its aquaculture sector.*



4. Assessing aquaculture governance performance in Uganda

4.1 Legislation

The participants agreed with the assessment findings which showed that the legislation to support the development of aquaculture in Uganda was available and comprehensive but scattered. The most notable achievement for the industry was the recent passing of the Fisheries and Aquaculture Act 2023 with special focus on aquaculture. However, the participants pointed out the weak compliance to the new legislation attributed to several factors including limited knowledge about the legislation, weak government extension system, weak collaboration and weak cross-sectoral coordination. The stakeholders agreed that while the mechanisms for monitoring of legislation are in existence, monitoring was not periodic for timely decision making. From the environmental point of view, the environmental risk monitoring and compliance to the legislation was higher for the mid/large-scale farmers for whom it was mandatory prior to having operating permits renewed. Participants also mentioned collaborations at regional level through the Lake Victoria Fisheries Organisation (LVFO) and continental level in collaboration with the African Union Interafrican Bureau for Animal Resource (AU-IBAR) that support countries (including Uganda) to harmonize and domesticate international/regional regulations and policies.

4.2 Collaborative arrangements

The participants agreed that the collaborative developments in the aquaculture sector in Uganda were majorly project driven. As such, the scope, degree of inclusion and learning processes involved mainly the implementing partners and implementation was dependent on the approved project design in line with the donor interests. Projects addressed the main industry issue areas at different levels however, it was indicated that there were limited collaborative arrangements addressing compliance gaps. The stakeholders were concerned about the sustainability of initiatives started through projects. While sustainability plans were included in proposals, these are not always implemented. With limited examples of success, there is need to strengthen the capacity of actors to ensure continuity even after the closure of the projects. Project donors should ensure integrated and innovative project design and allocate resources for implementing the sustainability plans. As part of the discussion, members identified possible modes of collaboration around identified challenges such as data availability and access, aquatic health and biosecurity. There is need to dive deeper into the past and current collaborative arrangements to better analyse the under lying issues like trust and capabilities of actors at different scales.

4.3 Legislation and collaborative arrangements: cross-cutting issues

a) Organisation

The participants strongly agreed that there were overlaps of responsibilities that affected the implementation and monitoring of legislation. A notable example concerning monitoring was of the fisheries extension personnel at the local levels (District and sub county) who are supervised under the Ministry of Local Government but should be under the Directorate of Fisheries resources under the Ministry of Agriculture Animal Industry and Fisheries (MAAIF). Thus, creating [potential] challenges during reporting and monitoring. Another example was overlap in the role of ministries e.g., Ministry of Water and Environment and MAAIF with regard to permitting. It was also noted that some of the extension personnel who interact with farmers had technical/ knowledge capacity gaps. Collaborative arrangements have attempted to address this gap. For instance, the PESCA project developed a specific module on aquaculture that can be delivered to extension personnel who might have limited technical capacity in aquaculture.

b) Informational processes

The participants strongly agreed that there was a big challenge regarding the Informational processes within the industry. Most notably the poor quality and quantity of information that is not readily available to stakeholders. This was attributed to gaps at different levels i.e., small scale farmers, large scale farmers, and the ministry. Most notably, participants indicated the lack of open functional systems/ platforms where actors could share the information as a major gap. Participants agreed that there was need to build trust

and develop mechanisms to facilitate efficient data/ information sharing tailored to the needs of target actors for example legislation/ compliance requirements, project outcomes and reports, research findings, market information and environmental performance data etc. As aquaculture is an economic activity, information needs of market actors should also be prioritized. However, participants highlighted those efforts to develop a functional one stop centre for aquaculture information including legislation for farmers has still not yet materialised.

4.4. Capabilities

In a quick assessment exercise, participants looked into the extent to which governing organizations are able to identify, engage and resolve problems. The governance actors that were discussed, were: the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)/ Directorate of Fisheries Resources (DiFR), National Agricultural Research Organisation (NARO), Makerere University, the European Union, the Uganda Commercial Fish Farmers Association (UCFFA), and GIZ. The participants indicated that actors are generally open to discuss issues and uncertainties. There is overall awareness and recognition of important industry challenges and issues however, the goals and solutions developed by actors are not always translated into concrete action. According to the participants this can be attributed to either limited resources or poor implementation of plans by some of actors.

5. Conclusions and next steps

The stakeholder workshop on aquaculture governance proved to be an invaluable platform to ignite in-depth reflection on the current state of governance and how to advance collaboration among actors in the aquaculture industry in Uganda. The experts provided valuable context and insights on key dimensions notably the collaborative arrangements and capabilities of actors in the industry. The workshop also served to validate preliminary findings from the Uganda assessment. Key outcomes and follow up actions from the workshop included:

- The workshop was closed by Ms. Joyce Nyeko (Deputy Executive Director, Lake Edward & Albert Fisheries and Aquaculture Organisation) who commended the participatory approach used to validate the findings where actors assessed the country or 'stakeholder performance'. This allowed for deeper reflection and better understanding of the framework.
- The overall findings of the Uganda study/ assessment were confirmed and validated indicating that the analyses were reflective of the industry dynamics. The next step is for the team to finalize the assessment and use the results for engagement ensuring findings are useful to wider stakeholders, researchers and policy makers
- The gap in data/ informational processes was one of the most tangible industry issue areas that should be further unpacked.
- Stakeholders made a recommendation for the discussion on aquaculture governance to be continued. Recommended opportunities to expand the discussion included the East African aquaculture conference in Mwanza, Tanzania (August 2024) and the World Aquaculture Society meeting scheduled to take place in Entebbe, Uganda (June 2025).

- A general recommendation was made to make use of cross-country learnings to inform governance developments within the country, region and continent. Workshop participants welcomed the idea of additional country assessments carried in Africa, seeing much merit in the way in which the AGI would facilitate regional learning, e.g. by country comparison with Zambia, Kenya.

The AGI Uganda research team extend their gratitude to all participants for their generous contributions and time to attend this workshop. Their inspiration can be drawn from a participant's statement:

> *"Definitely we have been looking at our governance thinking that it was complete because we had policies and laws in place. But going through this exercise, I realized there were gaps. If you look at the legislation part, how much do we go to assess the implementation of this legislation? When I looked at the data, I realized yes, we are having the legislation the farmers should provide us data but I realized we did not guide the farmers fully on what type of data to collect, so you find different farmers are collecting different data. And if you have the data collected with different parameters and in different methodologies then correlation of this data to have a national picture becomes a problem. So, I am seeing a lot of areas that can be improved upon. I always ask the question, how does this study you're doing benefit Uganda? I now know that through collaboration, we can reach far".*

Participant list

Name	**Title**	**Organisation**
Mr. Joseph Bwanika	Director of Fisheries Resources	Ministry of Agriculture, Animal Industry and Fisheries
Mr. Charles Oberu	Senior Fisheries officer	Ministry of Agriculture, Animal Industry and Fisheries
Dr. Papius Tibihika	Director of Research	Aquaculture Research and Development Center, Kajjansi
Dr. Nasser Kasozi	Director of Research	Buginyanya Zonal Agriculture Research and Development Institute
Dr. Gladys Bwanika	Director	Pearl Aquatics Ltd
Mr. Jose Parajua	Chief Technical Advisor	Food and Agriculture Organisation
Mr. Luttamaguzi Abdul Noor	Fisheries Officer	Luwero District Local Government
Dr. Athanasius Ssekyanzi	Researcher	Mountains of the Moon University
Dr. Jackson Effitre	Senior Lecturer	Makerere University
Ms. Joyce Nyeko	Deputy Executive Director	Lake Edward & Albert Fisheries and Aquaculture Organisation
Ms. Faith Atukwatse	Technical Advisor – Fisheries and Aquaculture	GIZ
Mr. Joseph Byabashaija	Representative UNWFO	Uganda National Women Fish Organisation
Ms. Gertrude Atukunda	Researcher	Aquaculture Research and Development Center, Kajjansi
Mr. Etienne Hinrichsen	Business Development Expert	True Fish Project