

ADAPTIVE FISHERIES MANAGEMENT OR GOVERNANCE

More facts

What is adaptive fisheries management or governance?

Adaptive fisheries management or governance or (AFMG) is a form of management that is dynamic and recognises that fisheries are complex and have uncertainty. Uncertainty in fisheries refers to sudden and unexpected events that occur and interfere with the exploitation and management of fisheries. Unlike traditional management that is static, AFMG emphasizes flexibility and learning from experience. This form of management is based on known goals, indicators, and fisheries management reference points (FMRP) in relation to available information and needs of all stakeholders. Monitoring is a vital element of AFMG to evaluate progress and provide a basis for adjusting management measures to achieve the known goals.

What are the key elements of AFMG?

- Recognizes risks, uncertainties, and that fisheries are complex.
- Utilises available scientific information to support decision making.
- Is based on pre-set goals, indicators, and FMRP.
- Continuous monitoring of fish populations, environmental factors, and fishing activities is essential.
- Regular evaluation of management actions and their outcomes to identify what works and what doesn't.
- Proactive, not reactive.
- Considers multiple measures and goals.
- Sets harvest control rules based on scientific evidence.
- It is flexibility and management measures are adjusted in response to new information and changing conditions.
- Emphasizes learning to incorporate lessons from past experiences into management decisions.
- Is collaborative and ensures that all stakeholders, including fishermen, scientists, and policymakers, are engaged in the management process.

To what extent is fisheries governance or management in Uganda AFMG?

Experience shows that fisheries management in Uganda is, to a large extent, not AFMG. Enforcement of, and compliance to fishing regulations is poor, and so is the attitude of most stakeholders towards the prevailing fisheries management regime and most of its management measures.

What is Uganda losing or facing for not implementing AFMG?

- Catches are sub-optimal i.e., less catches of fished species than can be supported naturally.
- Ineffective regulations and management especially towards uncertainties, and complex issues.
- Conflicts among fish communities
- Poor social and economic opportunities for fishery dependent communities.
- Poor response to climate change impacts on fisheries.
- Lack of long term sustainability that comes from the learning and adaptive nature of AFMG.
- Limited buy-in to management measures by stakeholders due to their limited engagement.
- Absence of a good management approach may hinder progress on the desired certification of the fisheries of Nile perch and Nile tilapia by the Marine Stewardship Council (MSC) to enable access to more foreign markets.

What are the challenges to implementing AFMG?

1. It requires sufficient and high-quality data for effective monitoring and evaluation. This may not be available because collecting data can be expensive.
2. Engaging diverse stakeholders, including fishermen, scientists, policymakers, and community members, can be challenging due to conflicting interests and priorities.
3. Implementing adaptive management requires skilled personnel, adequate resources, and supportive institutional structures which may be lacking.
4. Uncertainty in fisheries may make it difficult to make informed decisions.
5. Requires significant financial resources and commitment from management agencies.
6. Limited livelihood diversification among fishers that makes some management decisions unapplicable.

Does the new Fisheries and Aquaculture Act support AFMG?

Yes. The act, in the preamble recognises the need of integrated management which is an attribute of AFMG. It also provides for the strengthening of management institutions such as the Directorate of Fisheries Resources (DiFR), landing sites, and lake management organisations. Thus, in the act, in implemented establishes a strong institutional framework which is vital for implementing AFMG. It is also noticeable that the act recognises the complexity of fisheries resources because it tables many issues such as conservation, fish farming, fish processing, and equitable sharing of benefits from fisheries by all stakeholders.

Conclusion

With diverse fisheries resources and multiple threats such as fishing, invasive species, excess nutrients (eutrophication), pollution, and climate change, Uganda needs to implement AFMG fully to realise the full potential of fisheries resources and sustain the benefits. Opportunities within the sector such as proper licensing and penalties for practices contrary to the best practices could help tackle the lack of resources which may be a significant challenge to AFMG.

Bibliography

1. The fisheries and aquaculture act, 2022.
2. Edmondson E. & Fanning L. Implementing Adaptive Management within a Fisheries Management Context: A Systematic Literature Review Revealing Gaps, Challenges, and Ways Forward(2022). *Sustainability*, 14(12), 7249.
3. Wilson, J., McDonald, G., Fujita, R. & Karr, K. Adaptive Fisheries Management for Nearshore Fisheries. Accessed, August 2024.



Stakeholder engagement is a key element of adaptive fisheries management or governance (AFMG). However, balancing their needs is a challenge (Image generated by AI).

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