CONCEPT NOTE

Aquaculture working group for CIS delivery and CSA scaling in Zambia

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CGIAR | AICCRA
Accelerating the Impact of CGIAR Climate Research for Africa

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INTRODUCTION

This concept note describes the strategy for setting up a Community of Practice (CoP) for Climate Information Services (CIS) delivery and climate-smart agriculture (CSA) Scaling for Zambia for Integrated agriculture aquaculture systems under the AICCRA project in Zambia. This document gives a background to climate change issues in the aquaculture sector in Zambia. It also explains what the bundle seeks to achieve, the objective of the CoP, its membership, expected results, and how the CoP will be set up.

Background to climate change and aquaculture

The aquaculture sector has recently received attention in high-level food systems discussions due to its essential role in providing cheaper animal-source protein for nutrition, its role in improving livelihoods of smallholder farmers and its contribution to national development (FAO, 2013). However, the sector faces significant challenges that prevent it from achieving its potential to alleviate poverty and improve nutrition among the vulnerable. These challenges include lack of feed, lack of seed, lack of information and training, including climate information. These challenges are exacerbated by climate change and weather variability (Kakwasha et al., 2020; Ministry of National Development Planning, 2017; FAO, 2013; CSO, 2010; & Trinh & Cao, 2004).

In Zambia's Northern and Luapula provinces, aquaculture and fisheries have been affected by climate-related extreme weather events such as floods, rising temperatures, and unpredictable rainfall patterns (Ministry on National Development, 2017:35). These climatic hazards 'have adversely impacted food and water security, water quality, and livelihoods, especially in rural communities' dependent more on aquatic food systems' (National Fisheries and Aquaculture Policy, Zambia). The efforts to promote resilience to climate change among farmers have been hampered by a lack of relevant technologies, knowledge and skills, and access to relevant financial products and supportive policies.

Aquaculture farmers often lack the resources and information they need to adapt to the effects of climate change. With the frequency and intensity of adverse climate events rising, stakeholders in the sector must take proactive measures to address climate-related challenges to ensure resilience for smallholder farmers, hence the need for Community of Practice.

Integrated Aquaculture Agriculture System

In response to these challenges facing the smallholder farmers and business people, AICCRAs CSA bundle 2 Integrated Aquaculture Agriculture System will bring together stakeholders in a working group to discuss challenges and solutions to climate-related challenges facing aquaculture today. The bundle seeks to promote integrated aquaculture agriculture and livestock and provide access to improved/quality and resilient fish seed by linking farmers to trained seed producers in their communities. This CSA bundle will (i) promote the integration of aquaculture with small livestock, particularly dual-purpose (village) chickens; (ii) promote access to improved/quality and resilient fish seed by linking farmers to trained seed producers in their communities; (iii) strengthen existing fish hatchery operations to ensure availability of high-quality seed/fingerlings of local

fish species; (iv) pilot nutritious ponds and training for a greener environment; (iv) strengthen collaboration with feed companies to bring commercial nutritious pond feed closer to farmers; (v) link farmers with off-takers to ensure market access to sell their fish; and (vi) improve farmer access to climate-smart information services through the integration of aquaculture into the agriculture data hub such as iSAT.

OBJECTIVES

The CSA bundle 2 will create a working group/ community of practice. A Community of Practice is a group of people 'who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis' (Etienne Wenger). The purpose of setting up CSA scaling and CIS delivery community of practice for the CSA Bundle 2 (Integrated agriculture aquaculture systems) is to:

1. To create a platform where stakeholders can share knowledge about CIS and CSA practices concerning aquaculture.
2. Develop approaches and strategies to promote CIS and CSA among smallholder aquaculture farmers
3. Remove the systemic barriers in scaling climate aquaculture services/products/data to de-risk food systems.
4. Build capacity to scale the CSA technology packages for aquaculture and strengthen the aquaculture value chain

Expected outputs

1. An assessment and inventory of existing and required climate services delivery models that can effectively serve smallholder fish farmers
2. Relevant information identified and integrated into the agdata hub and analyzed and distilled for easy use by stakeholders
3. Success stories under the aquaculture thematic area documented and submitted to the AICCRA newsletter
4. Meeting reports
5. An evaluation report of the platform

Expected results from the CoP

- Influence agri-business SMEs and farmers to monitor and use CIS information on the ag-data tools in their daily farming activities. The information ranges from changes in temperature, drought, flooding, crops and fish disease outbreaks etc.
- Monitor the data usage in the ag-data hub and advise ways for improving and adding CIS data for other agriculture value chains
- Scaling the ag-data hub in other regions in Zambia

CoP membership

Initial members will include the following organizations, although we anticipate expanding membership once the platform is fully functional.

- SMEs implementing the aquaculture accelerator grant mechanism, and other SMEs and private sector players in aquaculture.
- Department of Fisheries
- Academia (University of Zambia, Natural Resources Development College)
- WARMA
- WWF and other conservation organizations.

WorldFish is a member of the National Fisheries Multi-Stakeholder Platform led by the Ministry of Livestock and Fisheries, WorldFish, GIZ and GIZ. The CoP members will also be represented at the National Fisheries Multi-Stakeholder Platform to influence CIS and CSA policy at the national level. WorldFish will ensure that discussions at the CoP are escalated to the policymakers through the National Fisheries Multi-Stakeholder Platform.

Setting up the CoP and meeting schedule

The initial meeting will be about setting up the working group. While there will be a preference to meet once every month, the working group members will decide the meeting schedule, which will also consider the meeting schedule for the larger AICCRA working group. The working group members will develop a calendar of activities. The calendar will outline when seminars are hosted and include the activities of the main AICCRA CIS/CSA CoP, which members will be expected to attend from time to time. The working group will also engage members of the thematic group in email and other online discussions to discuss topics relevant to the theme. The aquaculture thematic group will host an annual physical meeting every year. The group moderators will decide scheduling of the CoP annual meeting in coordination with CoP members.

The initial meetings will also decide on the following:

- Identify capacity building needs for working group members
- Emphasize the role of the Working Group as a mutual learning tool where members learn from each other or identify external resources and experts if these are not found around.
- The role of the working group facilitators will be discussed and explained. The roles could include linking members to news, announcements, newsletters, responding to requests and giving feedback to colleagues.
- The group will also discuss etiquette and other rules that will govern the CoP.
- Introduce blogging as a way of sharing best practices, sharing stories and creating excitement within the group
- Discuss a tentative schedule of meetings
- Discuss and decide what should be considered to evaluate the effectiveness of the community of practice

Knowledge management

The aquaculture CIS/CSA working group will 'identify the new knowledge that emerges and curate the content into follow-up blogs or quick-fire tips' (Foreman, 2020). To allow proper curation and documentation, the team will use googlesite platform as a public-facing website to share the achievements of the workgroups. Documents, tools, calendar of events and other relevant information will be posted on googlesite.

CoP members will be able to share stories via blogs, vlogs and these will be posted on the AICCRA website pages and cross-posted on the WorldFish site and other sites. The team will work closely with the WorldFish communication team to make this possible.

Evaluation

During the initial set-up meeting, members will suggest evaluation criteria for the platform. As suggested by Adapt Methodology (nd), the evaluation will also include determining the level of participation of members, their attendance in meetings, outputs achieved, uptake and usage of tools, and member satisfaction.

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