Multi-stakeholder Dialogue Space Together Scaling Climate Smart Agriculture and Climate Information Services in Zambia Concept Note

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1. Background

Climate change impacts are disproportionately affecting Zambia's agriculture and health sectors in the forms of water stress, food insecurity, health risks, loss of biodiversity, economic production, and livelihoods (Hamududu and Ngoma 2019). Climate change is projected to increase the poverty gap, increase incidents of crop failure, change the length of the growing season and lead to a 13% reduction in water availability by 2050 (Hamududu and Ngoma 2019; Verhage et al. 2018). The impacts of climate change on the agricultural sector may reduce national GDP by 4% (Mulungu et al. 2021; Braimoh et al. 2016). Therefore, more focus and effort are required to build resilience and enhance adapt capacity to climate change of vulnerable stakeholders along key agri-food value chains. This also requires multiple sectors and actors to work together seamlessly to address the multi-dimensional challenges posed by climate change and variability.

AICCRA Zambia funded by World Bank aims to improve water security in the drylands of Southern Africa through access to knowledge, technologies and decision-making tools to strengthen climate resilience in Zambia's agriculture and food systems in the face of a hotter and drier climate. AICCRA is carried out by a consortium of CGIAR, the International Water Management Institute (IWMI), the international Institute of Tropical Agriculture (IITA), the World Fish and the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT). AICCRA works with Zambian partners to scaling actionable CIS and CSA innovation bundles that will achieve water and food security and build resilience. AICCRA Zambia work with several local partners and stakeholders to operate at different scales which allows multiple pathways to scaling climate smart agriculture (CSA) and climate information services (CIS) innovation bundles. The project provides accelerator grants for SMEs/entrepreneurs to invest in off-grid solar-powered irrigation, fish seed, seed, integrated mixed chicken/goats–legume and gender equality and social inclusion.

The project strengthens institutional capacities by training intermediaries to communicate climate services as well as implementing an internship and innovation grant (I2G) program. The project facilitates multistakeholder dialogues to scaling CSA-CIS (CSA-CIS MSDs), enhancing partners' ability to assess and address systemic barriers and opportunities for start-ups doing business in CIS and CSA areas. Finally, it contributes to agriculture and natural resource policy formulation in the drought declaration process and enhance investment plans by identifying suitable financing mechanisms and using fiscal tools to de-risk private sector investments in food value chains.

Multi-stakeholder platform and process (MSPs) landscape analysis highlighted that MSPs in Zambia are unique in both role and composition. Four types of MSPs are existing in Zambia, public led, development led, public and development led and development and private sector led. They differ in the governance structure, type of stakeholder and focus issues, objectives and life cycle, the operational mechanism and activities and type of relationship among the members. They also evolve over time due to changes in priorities, challenges and resource availability. For instance, the public led are very formalised and professional in organisations with defined hierarchy of authority from district to national level. Development led MSPs are the most common and are mainly about finding innovative ways to pool resources, core designed project and programmes to address specific or systematic development in manner the deliver mutual benefits to all collaborating parties and stakeholders.

Multiple lessons have been documented in leading and facilitating the multi-stakeholder dialogues across MSPs. The landscape indicated that MSPs' real practice and policy influence is achieved when they have clearly specified goals and objectives, collaboration with relevant government ministries and departments is pursued and established early. Early government engagements showed willingness of MSPs to work together with government and observe all political protocol and institutions of the country. This helped reduce antagonism from key public and private institutions. The development led MSPs that are successful in influencing practice and policy have well developed theory of change, strategy, operational, monitoring and evaluation framework, employ a range of coordination and communication strategies.

The landscape analysis also highlighted that addressing institutional capacity and information gaps in the public led MSPs influence practice and policy positively. Also, MSPs that contribute to building local institutional capacity and improve information access through upgrading existing infrastructure or services gain recognition and are easily integrated in the sectoral policy decision making process. The review also demonstrated that limited diversity of partnerships and membership in the development and private led, restricted coordination and communication strategies and scaling of proven CSA options. Experience from other countries such as South Africa have shown that mainstreaming climate adaptation and resilience into development requires pro-active engagement of the private sector and cross-sectoral coordination for effectiveness and sustainability. These findings suggest that considerable investments are required to bring on board the private sector in the scaling of the climate smart agricultural technologies.

2. Proposing CSA-CIS Dialogue Space

Leveraging these lessons, AICCRA's approach to facilitating **CSA-CIS MSDs** in Zambia is to interact with existing and relevant MSP through AICCRA CSA-CIS MSD Space at the regional, national level and sub national level. The CSA-CIS MSD Space is a physical and institutional space where members come together to exchange ideas and jointly explore opportunities to scale CSA-CIS innovations in specific agro-ecological contexts (Minh et al. 2020). Together, members in the CSA-CIS MSD Space enable the sustainable and inclusive scaling of CSA-CIS innovation bundles in key CSA value chain to benefit particularly lower part of the pyramid. Figure 1 illustrates the CSA-CIS MSD Space, presenting objectives, operational mechanism and thematic focus of collaboration with the intended new and existing groups of MSPs.

2.1 Stakeholders in CSA-CIS MSD Space

Different groups of participants engaging in the CSA-CIS MSD Space, as follows:

- **Private sector entities** consist of agri-businesses, technologies and service distributors undertaking functions in agricultural value chains. It also includes financial, insurance, logistics, networking, incubation and climate information services and digital innovation providers as they support agribusinesses in investing into the value chain chains.
- Farmers and farmer-based organizations represent a significant segment of the community in respect of climate smart agriculture. They include smallholder farmers, women's groups, youth's unions, farmer organizations, farmer cooperatives and producer associations.
- Government agencies and departments with mandates for agricultural development responsible for policy making on agricultural water management (e.g., Ministry of Agriculture, Ministry of Green Economy, Ministry of Small and Medium Enterprise, Ministry of Commerce, Ministry of Finance, Zambia Metrological Department, Zambia Agriculture Research Institute, Zambia Chamber of Small Business Associations, Zambia Chamber of Commerce and Industry).

- Non-Government Organizations (NGOs) consist of international and national NGOs that are contributing to agricultural development, including climate smart agriculture (e.g., CARE International, World Vision, Action aid, Grassroots trust, COMACO, Musika, Oxfarm, Youth alive Zambia, Clean Environment Zambia, Seed for Life Zambia, Catholic Relief Services, Khulisa).
- **Donors and development partners** are donors and international development and research organizations, who are active in the country, including, USAID, World Bank, SIDA, FAO, GIZ, CGIAR, and Alliance for Green Revolution in Africa, as well as the CGIAR Centers, UNDP.
- Universities and research organizations for enhancing innovation and capacity development in agriculture development and climate smart agriculture sub-sector (e.g., Copperbelt University, University of Zambia, Mulungushi University, Zambia Agricultural Research Institute (ZARI)).

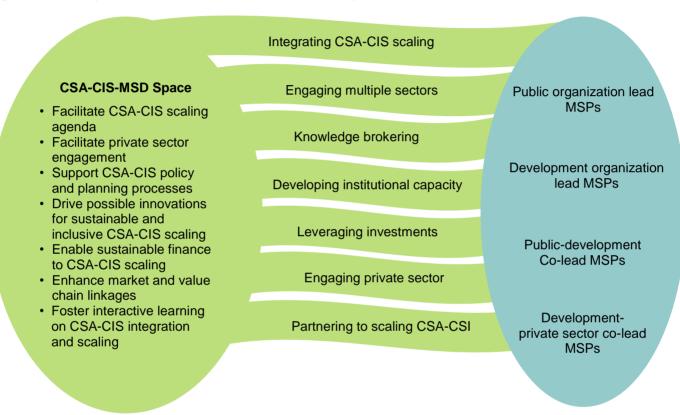


Figure 1. Conceptualization of AICCRA CSA-CIS MSD Space in Zambia

2.2 Thematic areas of CSA-CIS MSD Space

- Facilitate CSA-CIS scaling agenda through identifying potential pathways towards implementation of CSA- CIS at scale. This involves strategic mapping of different scaling approaches for the different value chain actors (especially lower bottom), clarifying stakeholder roles, entry points and exit strategies and employing adaptive strategies to drive transitions at different scales and support 'spontaneous' scaling up.
- **Facilitate private sector engagement** defined as the deliberate, systematic collaboration of the government development organizations NGOs research organizations and the private sector to move CSA- CIS priorities forward, beyond individual interventions and programs. Based on the issues to be addressed and the objective, three models of engaging the private sector in CSA- CIS scaling were identified. Public-Private Interaction focus on information and knowledge sharing among the entities (value chain actors). Representative and relevant private sector organization should participate in task forces, leadership committees, sharing of information, participate in policy change and priorities setting forum for CSA-CIS innovation. **Public- Private Dialogue** cooperation around issue of mutual interest in the CSA- CIS scaling such as meteorological infrastructure upgrade. **Private-Public Agreement** collaboration formalized in a contract that is jointly designed and implemented.

- Support CSA-CIS policy and planning processes through dialogue, information sharing facilitate
 establishment of an enabling environment for all the climate smart agri-food systems actors (farmers
 private sector stakeholders, financing institutions and civil society) to scale up CSA-CIS innovations.
 Working together governments and other key stakeholders to adapt existing policies and regulations;
 design new coherent policies, strategies, plans and programmes for CSA and CIS scaling; and allocate
 sufficient resources for their implementation.
- Drive possible innovations for sustainable and inclusive CSA-CIS scaling through reflecting, discussing and adapting CSA-CIS innovations to different needs and contexts use, identify novel scaling approaches that are gender sensitive and can reach most of the targeted population (leave no one behind) including vulnerable groups (women and youth).
- **Catalyze sustainable finance to CSA-CIS scaling** through innovative business models facilitate and pull new public and private financial capital investments in CSA -CIS scaling. Strengthen linkages between financial institutions and climate smart agri-foods value chain actors (focus particularly on the bottom of the pyramid). Build capacity of the financial institutions to provide services to the diverse smallholder farmers and SMEs. Also build the capacity of the smallholder farmers and SMEs to enhance their access to financial capital through formal channels. This will include reducing the financial risk profiles.
- Enhance market and value chain linkages through creation of demand for climate smart agri-food products using digital platform, increased market information access and exploring new market opportunities.

Foster interactive learning and raise awareness on CSA-CIS integration and scaling through participatory learning supported by improved access to reliable and real time weather and seasonal forecast information for informed selection of CSA options to manage and adapt to climate change at scale. This will also include leveraging media and communication as a pathway to support the learning and adoption of CSA-CIS innovations.

CSA-CIS MSD space will engage with relevant existing CSA MSPs operating at different levels. CSA-CIS MSD will work with existing and relevant CSA MSPs to integrate CSA-CIS scaling in the agriculture, natural resources management, health, nutrition, and other relevant sectors. Systemic, adaptive scaling approach will be employed and tailored to specific socio-economic context. Existing public led MSD will facilitate multi-sectoral engagements and capacity need assessment of key government institutions and research organisations. It will also collaborate with relevant development organisations, other government ministries, private sector and NGOs to build technical and institutional capacity of both public and private CIS providers, leverage private sector engagements and accomplishments. Engagement mechanisms used by CSA-CIS MSD space include, but not limited to, integrating CSA-CIS scaling, engaging multiple sectors, knowledge brokering, developing institutional capacity, engaging private sector, and partnering to scaling CSA-CSI.

CSA-CIS MSDs seek to institutionalize sustainable and inclusive CIS-CSA scaling pathways based on evidence from the research for development, interactive learning, and scaling/accelerating partnerships. This approach also develops capacity to build and enhance trust, while fostering a sustainable network across sectors. The CIS-CSA MSD space contributes to a resilient agricultural innovation system whilst building a sustainable innovation scaling culture in the agricultural sector that will continue after the project exits.

Acknowledgement

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world's 76 poorest countries, 39 of which are in Africa. Annual IDA commitments have averaged about \$21 billion over circa 2017-2020, with approximately 61 percent going to Africa.

Furthermore, AICCRA Zambia multi-stakeholder dialogue space approach is building on approaches and methodologies from the Feed the Future Innovation Lab for Small Scale Irrigation (ILSSI) project. ILSSI is working to identify the best ways to expand the use of, and inclusive access to, small scale irrigation within environmentally sustainable limits. ILSSI was established at the Norman Borlaug Institute for International Agriculture Development at Texas A&M University in 2013 through the U.S. Agency for International Development (USAID). ILSSI works to contribute to the mission of USAID's Feed the Future Initiative and improve progress on the Global Food Security Strategy.

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