Transforming Agricultural Extension through Bottom-up Climate-Resilient Farmer Field Schools



RESEARCH PROGRAM ON Climate Change, Agriculture and Food Security







Joab Osumba and John Recha

THE HORN OF AFRICA AND SAHEL VIRTUAL KNOWLEDGE SHARE FAIR Promoting innovation to build resilience against climate shocks

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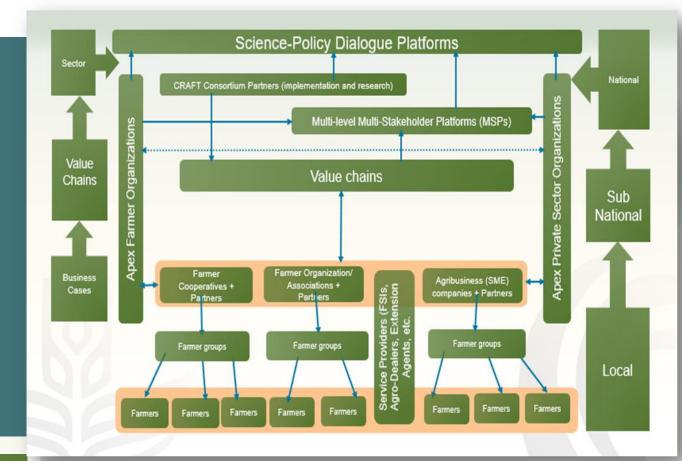


Introduction and contextual background



- Climate change is adversely impacting agricultural production and food security in Eastern Africa
- Climate Smart Agriculture (CSA) has been proposed as an approach to address climate change response for sustainable food security
- Actionable climate information is critical for the achievement CSA's triple-win objectives (i.e., increasing agricultural productivity and incomes; adapting and building resilience to climate change; and reducing and/or removing GHG emissions where possible)
- Currently most farmers are not receiving actionable climate information for effective decision making
- CCAFS EA is working with partners to integrate climate resilience into FFS approach for CSA in Eastern Africa

Introduction and contextual background



CRAFT project entry points:

- Business cases (SMEs/Coops),
- Selected crop value chains
- · Farming systems,
- Institutional environment

Schematic framework for CRAFT consortium capacity building operations



Introduction and contextual background

- WMO promotes Climate Field School (CFS) approach based on FAO's Farmer Field School (FFS) model but the two are operated in separate silos
- Major distinguishing features of FFS and CFS

Factor	Principal emphasis	
	FFS (FAO)	CFS (WMO)
Approach	 More bottom-up 	More top-down
Key feature	 Field site (e.g., farm) 	Agro-met Station
Modules	 Agro-Enterprise 	Meteo-hazard
Major focus	AESA/IPPMExperiments	Agro-met analysisAdvisories
Key message	 Observations 	Dissemination

CRAFT bring the two approaches under one roof

Methodology



- FFS approach with CFS climate change-based modules
- Training focused on integrating climate information into planning for selected crop VCs (1 week for ToFs, and 3 weeks for master ToTs)
- Participants business cases, government, extension services
- Problem identification was based on local climatic experiences
- CCAFS co-generated climate information/prediction
- Focal enterprise was based on VCs selected by business champions
 - Training followed mixed method approach involving brainstorming, presentations, group work, plenary sessions, and field visits

Methodology



- Pre- and post-test for participants at the beginning and end of the process
- Record how much the group has learned/gained from the process
 - Process includes semi-structured quiz and/or mood meters, "most significant change" story at regular intervals to capture change
 - Crop-water-weather calendar monitoring and recording provision in the climate change modules to assist in AGROMETA besides AESA
 - * Data collection is done at predefined intervals using AESA/AGROMETA data sheet
 - Indigenous (using agreed local indicators) and conventional/ scientific weather information is observed, recorded, analyzed and reported
- Participants reflect on evidence of key observed changes what changes occurring? How they are occurring? What is working or not working?
- Discussion to blend both indigenous and conventional weather information for better decision making and action
- Storytelling used as a way of communicating and influencing others, and as a qualitative monitoring tool to track change

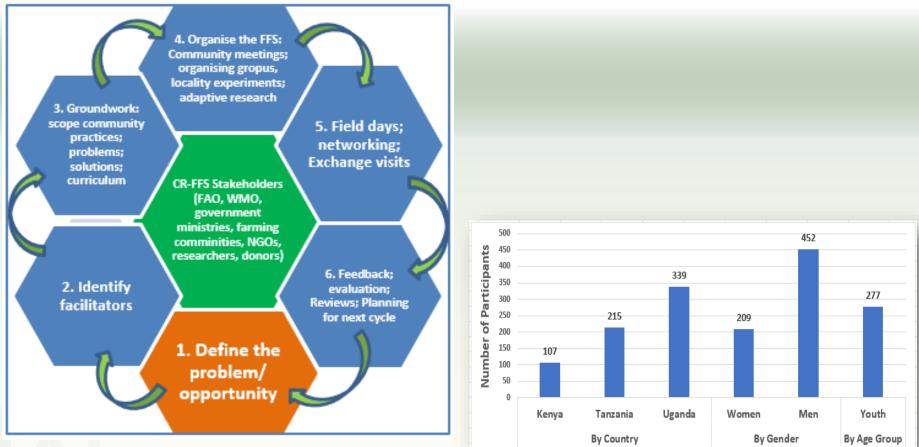
TOC/ impact pathway for outcomes



Impact	Contribution to resilience of agriculture, food systems and livelihoods	
SLO	Food and nutrition security, enhanced income and gender equity, resilient food systems	
Intermediate Outcomes	Increased productive capacity, income, strengthened resilience Increased adoption, investments technologies and practices	
Immediate Outputs	Extension service providers incorporate climate risk considerations in their services and messages Climate risk knowledge and capacity of extension service providers in the value chains improved	
	Knowledge generation, service delivery to support CSA scaling improved	
Interventions & Processes	Trainers include CSA in training sessions for VC actors, service providers CR-FFS, CSA training materials developed and used for training of trainers	
Capacity building, GSI– research and dissemination of climate risk, vulnerability and impacts information, development of climate-smart training content and facilitation of CSA training workshops		

Results





The CR-FFS field school model with basic learning cycle presented and adopted for training

- 661 ToTs trained in the three countries in the first round
- 32% female and 42% youth



 Pre-and-post-training assessment indicated training enriched participants' knowledge of a blended CR-FFS with climate information and CSA

 Strong need to bring both agronomists and agro-meteorologists to jointly collaborate from start, instead of one of them being the main agent and merely inviting the other, as happens in the traditional FFS and CFS

Considerations for policy and scaling



- Farmer Field School (FFS) have not been formally integrated into Eastern African countries extension systems, although policy documents mention FS methodology as one of the known extension approaches
- Kenya has noted FFS as an extension method in its 2012 agricultural sector extension policy but not proceed to adopt it to promote in practice
- Uganda mentions FFS in its 2016 National Agricultural Extension Policy and extension guidelines and standards as one of the extension methods but does not expressly endorse it for promotion
- FFS methodology is one the extension methods in Tanzania but not yet endorsed by the government, although the 2013 agriculture policy states that "Junior Farmer Field and Life Schools (JFFLS) ... shall be promoted"
- Continue to engage policy makers to get their opinion on formal adoption of the FFS methodology in public agricultural system

FAO FFS guidelines on precautionary measures against COVID-19





 FAO guidelines on how to conduct FFS under of Covid19 rules

 Lessons from Covid19 calls for exploring possibility of developing digital, climate-oriented FFS using mobile ICT technologies





- ToFs are forming and facilitating CR-FFSs with recruited business case champions as and when they get on board
- Project teams will be documenting lessons after the covid19 pandemic to share it as the CRAFT experience in implementing the CR-FFS

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