

ICKM VIDEO PRODUCTION

IN THE CONTEXT OF THE RESEARCH TO EXTENSION CASE STUDY REPORT

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Introduction

In this case study, we explore a comprehensive video production training program organized by CCARDESA and designed to accomplish some of the R2E objectives while responding to some expectations from participants. The training employed a variety of approaches to ensure effectiveness and engagement. Furthermore, the study explains the data collection processes, participant profiles, and the dynamics of the training design and implementation.

This training program aimed to equip a group of 16 participants from nine Southern African Development Community (SADC) countries with the skills and knowledge required to enhance information and knowledge dissemination in agriculture through video production. The training materials were carefully tailored by Farming and Technology for Africa(FTA) to meet the specific needs of the multifaceted cohort.

This study will explore the flow of the training program from the planning phase to the field visits and video editing and will examine the methods used throughout the whole process.

The study offers valuable insights into the challenges and successes of a video production training initiative conducted in a dynamic and diverse context, shedding light on the importance of flexibility, adaptability, and innovation in training design.

Background

The R2E Agenda and Video Training

In the year 2022, the CAADP XP4 consortium convened for an inaugural meeting, marking the commencement of a pivotal journey. Under the leadership of the African Forum for Agricultural Advisory Services (AFAAS), the consortium embarked on an ambitious mission to chart a road map for the Research to Extension (R2E) agenda. This visionary initiative was conceived to address the pressing challenges that had long hindered effective collaboration and coordination among the research, extension, and farming communities in Africa.

At the core of the R2E agenda was the aspiration to bridge existing gaps, foster synergies, and harmonize the efforts of these vital stakeholders to maximize the impact of agricultural research on the livelihoods of farmers. One of the transformative endeavors arising from this collective vision is the R2E video training, an initiative organized by the Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA).

The Pioneering Role of CCARDESA

Although video production for (and by) farmers has already taught and practiced in the AFAAS community since the year 2022, CCARDESA was the first research network inside the CAADP-XP4 consortium to undertake a pioneering role by spearheading the inaugural Video Production Training with the ICKMs within the framework of the R2E Agenda. CCARDESA, founded by member states of the Southern African Development Community (SADC), stands as a beacon of regional collaboration in the field of agricultural research and development (R&D). With a mandate to harmonize and streamline the implementation of agricultural R&D programs across the SADC region, CCARDESA has steadfastly committed itself to tackling pressing agricultural issues.

The objectives of CCARDESA are multi-faceted and encompass various aspects of agricultural research, development, and technology adoption. These include the coordination of regional agricultural R&D programs, facilitation of collaboration among stakeholders within national agricultural research systems (NARS), promotion of public-private partnerships in regional agricultural R&D, and the enhancement of agricultural technology generation, dissemination, and adoption through collective efforts, training, and capacity building.

FTA's Commitment to Knowledge Dissemination

The Farming & Technology for Africa (FTA) has been a dedicated advocate and supporter of numerous continental and sub-regional organizations across the African continent since its first activities in 2012. FTA embarked on its journey to bridge the gap between research and practice in agriculture through innovative approaches, with a notable milestone being the launch of the first video competition in Madagascar in collaboration with the Forum for Agricultural Research in Africa (FARA) in 2012-2013.

Over the years, FTA has fostered meaningful partnerships and collaborations with various agricultural stakeholders running farming and digitalization projects including the African Forum for Agricultural Advisory Services (AFAAS), commencing in 2021. These partnerships have been instrumental in harnessing the power of video production to empower farmers, facilitate knowledge exchange, and bridge the information gap within the agricultural sector.

ARC-VIMP South Africa

ARC-VIMP was chosen by CCARDESA to serve as the fertile ground for the practical experimentation of video production within the context of the R2E video training. Nestled in the heart of South Africa, ARC-VIMP stands as a beacon of pioneering research, with a profound commitment to need-driven, environmentally sustainable research practices. This division within the Agricultural Research Council is renowned for its contributions to the agricultural industry. With a steadfast focus on plant-based research, technology development, and the transfer of cutting-edge innovations, ARC-VIMP has forged an illustrious legacy of service to the agricultural community.

The dedication to advancing sustainable agricultural practices, coupled with a robust record of achievement, makes ARC-VIMP a formidable partner in the endeavor to disseminate agricultural knowledge through video production.

The ICKMs (Information, Communication, and Knowledge Management Specialists)

Information, Communication, and Knowledge Management Specialists (ICKMs) serve as integral bridges, connecting the various actors of the Agricultural Research for Development (ARD) community. These dedicated professionals have been thoughtfully selected by member countries to collaborate closely with CCARDESA, functioning as vital conduits for information and knowledge exchange.



As researchers, communicators, and knowledge managers, ICKMs are tasked with the noble mission of harnessing the power of information and communication to drive innovation, enhance collaboration, and ultimately, uplift the agricultural sector. Their roles extend beyond mere information dissemination; they are the custodians of knowledge, entrusted with the responsibility of curating, preserving, and disseminating agricultural insights that have the potential to transform the lives of farmers and stakeholders alike.

Objectives

This case study is driven by a comprehensive set of objectives designed to encompass various dimensions of video production training within the Research to Extension (R2E) initiative. These objectives are structured to offer a thorough analysis and insight into the training initiative and its implications.

Objective 1: To comprehensively elucidate the challenges and difficulties encountered in the organization and execution of the video production training, while proactively identifying potential pitfalls and issues for future training planning.

Objective 2: To provide comprehensive documentation of the video production training program, from inception, and planning to implementation.

Objective 3: To critically examine the design, implementation, and outcomes of the video production training and the impact it has on participants (and potentially, the broader agricultural research and extension community)

Objective 4: To assess the broader impact and aspirations of the video producers within the context of the R2E initiative (examining how the training can contribute to bridging the research-to-extension gap and empowering farming communities with knowledge and innovation in future).

Objective 5: To distill key recommendations and insights from the case study, offering actionable guidance and motivation for similar initiatives (aimed at bridging the research-to-extension gap).

Some of these objectives can't be reached in the short term. However they provide a direction of where the R2E and the training are supposed to lead the Agricultural sector.

Methods

The video production training was designed and executed with a blend of approaches and methods, to make it effective, engaging, and tailored to the needs of the participants.

Data Collection

Data collection (for documentation and M&E) was facilitated through the use of digital tools, namely Whatsapp poll, Google Forms, and Mentimeter. These platforms allowed for structured data collection and real-time feedback occurring at various stages: before the training, during the training (evaluating progress), and at the end of the training (to measure satisfaction, outcomes, and lessons learned).

In addition to quantitative data collection methods, qualitative interviews were conducted to gather indepth insights from participants. These interviews were conducted at multiple points during the training process: before and at the beginning of the training (capturing expectations), during, and the evening after the training.

Training Design and Implementation

The foundation of the training design was built upon FTA's experience in conducting similar training in the past (but considering some serious time constraints).



Figure 1 - The usual training process proposed by FTA

Prior to the training, participants were requested to participate in a Whatsapp poll and to complete a pretraining questionnaire designed to know more about the participants' profiles and assess their familiarity with video production, their existing skills, existing equipment for video production, their ambitions and determination, their target group and their enthusiasm to participate in the video production training. See Annex 1. The responses served as a valuable baseline for tailoring the training content to the specificity of the participants.

Close collaboration with the key organizational partners, CCARDESA and ARC, also played a pivotal role in shaping the training design. Key information from ARC was expected at an early stage in the design stage. Although the information came a bit late, it influenced significantly the final structure and unfolding of the training. See Annex 2 to see more about the topics proposed by ARC.

The training was designed and conducted with flexibility, with an action-research mindset, encouraging active participation and collaborative learning fostering a sense of ownership among participants.

Practical application and experiential learning were emphasized with participants encouraged to do some simulations before applying what they learned to real-world scenarios.

The sessions were very interactive, with participants actively engaging in discussions, scripting, storyboarding, filming, interviewing, and editing among other group activities. The participant-paced approach contributed to an inclusive and effective learning experience with some advantages and challenges (mainly time constraints in this specific case).

Training Materials

The video training material was thoughtfully designed by translating, customizing, and adapting existing materials utilized by FTA based on feedback and the audience's profile.

One innovative aspect of the training material was the integration of artificial intelligence (AI) inputs in the translation and customization, taking advantage of the AI possibilities. AI-generated content was carefully incorporated into the material to enhance the training's specificity and relevance for the CCARDESA ICKM community.

More, to enhance attractiveness and understanding, the material incorporated some illustrative cartoons specially designed by the FTA graphical team. These cartoons serve as visual aids, often simplifying ideas and making the training more engaging.

Participants' Profile

The video training diverse and cohort nine countries in African Community This group with a



participants in production represent a dynamic drawn from different the Southern Development (SADC) region. multifaceted converged shared new

ambition to enhance information and knowledge dissemination in agriculture through video. See Annex 3 for more details about the participants' profile.

Demographic Composition:

- **Regional Diversity:** coming from nine distinct SADC countries, these participants brought a variety of experiences, perspectives, and regional insights to the training.
- **Gender Distribution:** Among the participants, 73% were male and 27% female, reflecting an imbalanced gender composition within the cohort.
- Age Range: The majority of participants were considered adults (36+), with only 16% falling within the youth category (below the age of 36).

Professional Background and Affiliations:

- **Institutional Affiliations:** A significant portion of the participants (60%) came from research organizations. Participants from the Ministry of Agriculture constituted the other 40%.
- **Diverse Profiles:** The participants encompassed a diverse spectrum of professional profiles, including researchers (53%), communication specialists (26%), knowledge management specialists (20%), and a smaller proportion who bridged the roles of both researchers and communicators (6%).
- **Common Purpose:** Regardless of their specific roles, all participants are ICKMs and they share a common professional commitment to research knowledge and information management and dissemination within the agricultural sector.

Video Production Skills, Ambition and Enthusiasm:

- Video Production Proficiency: The participants self-reported varying levels of video production proficiency, with 56% considering themselves beginners and novices in this domain. The remaining 44% identified themselves as having intermediate skills. (This was not confirmed during practice).
- **Determination:** An overwhelming 75% of the participants expressed a high level of determination to complete the training and successfully upload a video by the end of the workshop. This determination underscored commitment to acquiring new skills and achieving tangible outcomes.
- Enthusiasm: According to the survey result, an impressive 100% of the participants exhibited a level of enthusiasm and eagerness for the video training. Their collective enthusiasm served as a driving force throughout the training process, fostering a positive and collaborative learning environment.

This diverse and passionate group of participants, drawn from nine SADC countries with different professional backgrounds, formed the backbone of the video production training. Their shared commitment to advancing knowledge dissemination in agriculture through video production created a vibrant and collaborative learning atmosphere, paving the way for the transformative learning experience.

Training Program Flow

The planning and the pre-training phase

The inception phase of the video production training began approximately two months before the scheduled training dates. During this initial phase, concept notes outlining the objectives, scope, activities, and draft program were discussed and agreed upon by the key stakeholders, CCARDESA, ARC, FTA, and the ICKM specialists. It's noteworthy that the finalization of the program's details occurred mainly within the last week leading up to the training. While the concept was clear, the finer details required meticulous planning and input from the different stakeholders.

Five days before the training, the trainer initiated a poll to ascertain whether participants would be using smartphones or laptops for the video production training. This preliminary survey helped in customizing the training material and approach to cater to the specific devices that participants would be using.

After that poll, a Google pre-evaluation Form was sent to participants (see Annex 1). The form served as a valuable tool for gaining deeper insights into the participants' backgrounds,



their existing skills, the equipment they intended to use, their determination, their target group, and their enthusiasm for producing the videos. The information collected from this form was instrumental in tailoring the training content to suit the needs, capabilities, and ambitions of the ICKM specialists.

The training sessions were initially planned to take only 2 days and were revised in a flexible way to take more time for the theoretical preparations and two days taking place at ARC's laboratory and fields.

Despite all the efforts and anticipations, several challenges were encountered during the preparation phase. One significant challenge was the need to adapt to the bureaucratic pace of the organizations we are working with and their communication processes. This is not a big surprise but it leads to delays in some decision-making and coordination from time to time.

Another challenge was the need to strike a balance between the ambitions of the participants' expectations and the real environment and skills level. Ensuring that the training materials and plans were both comprehensive and achievable required careful consideration.

Time constraint was the most challenging, as the last-minute rush to finalize the training material left limited room for thorough adjustments. This time pressure added an extra layer of complexity to the preparation process for the trainer.

Probably the biggest pitfall lies in the lack of common understanding among all stakeholders regarding the details and practical implications of the R2E initiative. Bridging this gap in understanding was crucial

to ensure that the training aligned with the overarching objectives of the initiative and met the needs of the participants effectively. The R2E was internalized through learning by doing during the video training.

The training

In practice, the video training program was unfolded in 4 steps during the 4-day workshop, offering an overview of the video production process. A 28-page training manual was sent to ICKMs on the first day, just before the training started.

Half-day introduction

During the first half day of the training, the trainer presented key concepts related to the R2E and video production. This covered:

- An overview of the Video Training Process (page 3 of the manual): The training began with an
 introduction to the entire video production process, providing participants with a clue of the
 challenges ahead and a roadmap for their 2.5-day learning journey. The bar was put high but the
 participants were enthusiastic to take the challenge. t the end, we couldn't cover all the steps,
 especially the last steps of peer reviewing and dissemination.
- Why Research Results Dissemination Matters (page 4): Participants delved into the R2E concept, the discussion emphasized the importance of disseminating research results down to the field and how this should drive impact in the agricultural sector. Although everyone seems to understand and acknowledge the importance of the flow of information from research to the field, putting it into practice seems to present some challenges.
- The Characteristics of Sound Research Results and Impact (pages 5 6): This section explored a set of key characteristics that define good-quality (impact-oriented) research results, ensuring that participants (as researchers and civil servants) understood the value of their work looking at the potential impact. Participants discussed how research can translate into real-world impact within the agricultural sector. The importance of responding to the real needs of the farmers (demand-driven research) was stressed over and over during the workshop.
- Why it is Important to Use Video in Research Result Dissemination (page 7): The training highlighted the unique power of video as a tool for knowledge dissemination, explaining why it's a preferred medium. Most of the trainees had some experience with the use of video in extension and were convinced about the value of such a mean. The burning question at that stage was: how to get started in producing video material.

More practical steps were introduced and repeated during days 1 and 2 to prepare the participants for the fieldwork:

• Video Production Steps (page 8): Participants gained more insights into the various stages of video production, distinguishing the easy and the more complex pending tasks coming in the

following days. The trainer insisted on the importance of doing the right things from the beginning to avoid waste of time later (e.g. establishing a storyboard is critical).

- **Review of Realistic Video Production (page 9):** The exciting 2 days (limited timeframe) challenge invited participants to put their skills to the test. Different types, formats, and content lengths (2 to 7 minutes maximum) of videos were proposed and discussed.
- Importance of Storyboarding and Scripting (pages 10 11): Essential techniques for planning and scripting video content were covered, ensuring that participants would structure their narratives effectively. Participants received guidance on storyboarding, helping them to have a visual snapshot of their video content. Ideas on effective scripting techniques were shared, enabling participants to craft compelling narratives for their videos. Although this part of the training seemed to be well understood since the first day, concrete applications were required. It was unfortunate that the research result topics from ARC came a bit late and didn't provide enough details to allow the video producers to draft the storyboards sooner.
- Interviewing (pages 12 13): Participants also reviewed how to conduct interviews effectively. Two role-playing simulations were done on day 2 and although it was amusing to see members of the ICKM team playing different roles, it was noted that the participants had some difficulties in framing the interview and in preparing the questions in anticipation of the real-world situation that they will face later.
- **Preparing Quality Content (page 14):** This section emphasized the importance of capturing enough high-quality video content (rushes) that will help to structure the final video production. Content to be captured encompasses an introduction part, overviews, interviews visual illustrations, testimonials, key findings, calls to action, and conclusions.
- Filming Techniques with examples (Pages 15 16): Essential filming techniques were exposed (to be more precise, they were summarized, time being a constraint), equipping participants with the basic skills needed to capture essential visuals. Camera angle, lighting, framing, and the rule of thirds were something new for most of the participants. The trainer also insisted on the importance of capturing a variety of shots, and sound to constitute a bank of multimedia content for overlaying and animating the videos.

The diversity of equipment used by each individual participant (Android vs. IOS phones vs. laptops) didn't allow detailed step-by-step hands-on training. However, participants were invited to test the different techniques on their own devices and get prepared for the field day.

Many practices in video and photo shooting were done in the hotel venue during the 2 first days and photos were shared in the ICKM WhatsApp group.

Before closing the training session end of day one, participants were invited to download the video editing CapCut on their mobiles. Some curious participants (and more advanced than others) managed to test the app the same day and share something in the WhatsApp group.



I made this amazing video with CapCut. Tap the link to try it out! https://www.capcut.com/t/Zs8YrfY3P/

Figure 2 - First video using CapCut shared by Kellies at the end of Day 1

The last parts of the training manual were skipped as time was running out and participants wanted to go more into practice. However, they were invited to read the sections in the evening.

- Editing Step (page 17): The training material covers the post-production phase, teaching participants how to edit their videos to perfection. Instead of training theorizing again, a walkthrough through the CapCut software was done on day 2.
- Video Evaluation (page 18): The program concludes with a focus on video evaluation, ensuring that participants can assess the impact and effectiveness of their work. However, time was not enough, and only internal exchanges inside the ICKM working groups were done.

Two hours of preparation before the field trip

Two hours were allocated on day 2 to get better prepared for the upcoming field trip scheduled the next day. The aim was to provide ICKM with the final information, tools, and confidence to go into the field and effectively capture the necessary information for their video production.

• The representative from ARC (Agricultural Research Council) shared the final topic table, which outlined the specific research topics and areas of interest that participants could explore during the field visit. See Annex X. This table helped the participants to be more precise as they planned their storyboard and interviews for the next day.

A Mentimeter Survey was launched:

• A question on confidence in producing a video within the next 2 days was posed through Menti to the participants considering the training they had received thus far and their review of the training materials.

The responses showed a positive outlook, with 56% of participants expressing a high level of confidence, 38% falling in the middle range, and only 6% indicating a lower level of confidence. This demonstrated that the training had instilled a sense of readiness among the majority of participants but also revealed a more realistic perception from some of them.

How confident are you about producing your video in the next 2 days?



- The question of whether participants preferred to **produce videos individually or in groups** was posed. While the initial plan was for pairs to work together, the idea of group collaboration gained popularity. Ultimately, **five groups were formed**, with each group consisting of three-four participants. These groups would be responsible for covering specific topics during the field visit.
- Understanding the concerns and constraints of participants was crucial for addressing potential challenges during the video production process. When asked about their concerns, participants mentioned the keywords below. This valuable information helped in the next steps.

What stops you from producing a video right now?

3 keywords related to your concerns



 Interview is key: To assess the readiness of the groups to conduct quality interviews during the field visit, two interview simulations were conducted. These exercises allowed participants to practice their interviewing and filming techniques in a controlled setting, providing valuable feedback and guidance from trainers.

As the day came to a close, participants received last-minute recommendations and guidance on essential aspects of video production, including shooting techniques, capturing quality content, preparing storyboards, and maintaining focus during the field visit at



Figure 3 - Interview simulation

ARC-VIMP. These insights were designed to ensure that participants were well-prepared and equipped to make the most of their time in the field.

In the evening, the trainer also prepared some Video Tips to inspire the trainees on framing, video animation, narratives, and overlays.

Some links to training materials for CapCut were also shared for those who wanted to do some selfstudies.

A Visit to ARC-VIMP on Day 3.

Day 3 of the training proved to be an eventful and somehow unpredictable day, as the team ventured into unknown territory (for most of them) during their visit to the Agricultural Research Council (ARC).

The work began on arrival at ARC, just before 10:00 AM. The morning session kicked off with a series of informative presentations by the research lead persons at ARC. These presentations served as an introduction to the research focus areas and disciplinary domains at ARC-VIMP (Vegetable, Industrial Crops, and Medicinal Plants).



Figure 4 - Dr Mariette Truter introducing ARC-VIMP

Dr. Mariette Truter, representing ARC-VIMP on that day, provided a comprehensive overview of the well-structured research focus areas at the center. Following this, a series of presentations delved into specific research topics. Dr. Meshack Mofokeng presented medicinal plants and industrial crops, while Dr. Elsie Cruywagen covered leguminous, leafy, and fruit vegetables. Dr. Hintsa Araya provided insights into DIVAGRI

bio-based circular agricultural innovations, and

Dr. Willem Jansen Van Rensburg presented on cannabis and hemp.

Throughout these presentations, participants of the video production training had the opportunity to ask questions and engage in discussions. Questions about consent and authorization to disseminate

information were raised, highlighting the importance of ethical considerations in research dissemination.

After the informative morning session, the participants embarked on a field visit, organized into the five groups established the previous day. Each group had selected a specific research topic to explore during the visit.



The filming sessions during the field and lab visits took longer than planned, partly due to some lack of preparation (the storyboard issue) and the broad nature of the questions being asked. Lunchtime and the

day schedule were not strictly defined, allowing each group to operate independently, some groups managed to visit and get information about multiple research topics, while others focused on more extended discussions.



Figure 5 - Field and lab visits on day 3

Although all research results presented were interesting, it was noted during the field visit that very few of the research results presented and promoted had direct applications for the majority of farmers (scale small-scale farmers) in Africa. Much of the research was at the pilot stage and some were also inaccessible and not cost-affordable.

As the day progressed, with participants growing tired from the intense activities, the teams decided to return to the base around 4:15 PM. It was a busy and demanding day filled with valuable interactions and field experiences.

On the journey back, and during the debriefing that 3rd day, the team reached a consensus that there was no need to return to the research center the following day. Instead, the focus shifted to editing and working on the video products.

Although the trainer offered one-on-one or group assistance for those who wanted to advance in the evening, participants were understandably fatigued and preferred to take some time to rest and for reflection before the next busy day.

Editing and delivering the video-Day 4.

Progress

Progress update: day 4 marked the final stretch of the intensive video production training. Before the participants split into groups, a quick evaluation of the progress in the video production process was conducted. The results shed light on the status of the 5 video projects:

- the definition of video project ideas was done at 98%
- storyboarding and scripting were evaluated at 70% completion
- filming progress stood at 81% after the full day at ARC
- and editing was considered 44% done.

While returning to the Agricultural Research Council (ARC) for additional video shooting was no longer part of the program, storyboarding, scripting, and video editing became high-priority tasks for the remaining time of the last day.



Presentation of CapCut editing functionalities: After a brief discussion, the decision was made to focus primarily on video editing using CapCut. The trainer had to present CapCut in its Windows version rather than with the smartphone version due to some technical issues. Participants received an overview of the main functionalities, including adding videos and pictures and incorporating sounds, overlays, transitions, and effects, among other features. Some groups demonstrated a higher level of agility and tech-savviness in exploring and utilizing the extensive capabilities of CapCut.

Opening and Ending template: To ensure a uniform look, the trainer provided opening and ending templates that included logos of the organizers, partners, and funders. However, this didn't deter groups from exercising their creativity and producing their customized ending screens.

With time ticking away, each group faced the pressing challenge of finalizing their video projects within a tight timeframe of about 3-4 hours. Teams who were late hurriedly wrote scripts, recorded narrations, and selected videos, striving to complete their projects.

Storyboard template: After noticing some hesitations, the trainer shared a storyboard template. One group shared a completed storyboard to serve as an example to other groups.

Google Drive: To facilitate the sharing of files (videos, photos, and content) among the 5 groups, Google Drives were created by the trainer. Field photos continued to be shared on WhatsApp throughout the day.

Work output

- The first draft video to be delivered was on Crop Protection and Integrated Pest Management (IPM) and was shared by Group 1, the only group that had managed to share a storyboard by 12:43 on day 4.
- The second video was on Quality Control of Medicinal Plants and was shared with the group at 15:34.
- The third video, focusing on Enhancing Food Security through Plant Tissue Culture, was shared at 16:11.
- The fourth video on Medicinal Plants was shared at 17:20.
- The last video was on the "Magic Stove"

Group 1 which comprised more experienced individuals in the field of communication also shared a shorter version of their initial video at 17:24.

As the day came to an end, a mix of satisfaction and determination filled the room.

Participants who had successfully submitted their videos were proud of their accomplishments although more work needed to be accomplished, while those still working diligently promised to finalize their projects. One group, driven by their passion for video production, continued working late into the night to submit another "final version" of their work, showcasing their commitment to achieving something good.

Training evaluation

What went well and what didn't?

The video production training witnessed remarkable progress and noteworthy achievements, showcasing the ambition, determination, and spirit of collaboration among the ICKMs. Despite the demanding timeline, the team made substantial strides in various aspects of the learning process, including scriptwriting, video capturing, and editing.

One of the standout features of the training was the impressive performance and achievements of the participants, considering the tight deadline of just 2.5 days.

The participants exhibited remarkable adaptability and a willingness to learn, quickly grasping key concepts and applying them effectively. Their ability to define video project ideas, craft scripts, capture video footage, and engage in the editing process demonstrated their commitment to mastering video production within a limited timeframe.

The highlight of the training was undoubtedly the videos produced by each group. These videos, although not 100% finalized during the 2.5 days, not only showcased their newfound skills but also showed tangible outcomes of their hard work.

The sense of teamwork and collaborative work that emerged among the participants was also commendable. It is worth remembering that some individuals and some groups were more advanced than others, but they contributed to helping and inspiring others.

Despite coming from different backgrounds and countries, the ICKM collaborated seamlessly, working cohesively to achieve a common goal: each group managed to submit a video production before the end of the training workshop.

From another perspective, it became evident that more time should have been allocated to the practical aspects of video production, particularly storyboarding and the use of editing software like CapCut. While participants made commendable progress in editing their videos, the relative complexity of video editing tools and techniques required additional time for thorough exploration and practice. Providing a more extended training duration or follow-up sessions focused on advanced editing skills will further enhance participants' proficiency in video editing.

Based on the objectives defined at the beginning of this case study, below are some elements for reflection and improvement:

Objective 1: To comprehensively elucidate the challenges and difficulties encountered in the organization and execution of the video production training, while proactively identifying potential pitfalls and issues for future training planning.

Objective 2: To provide comprehensive documentation of the video production training program, from inception, and planning to implementation.

Objective 3: To critically examine the design, implementation, and outcomes of the video production training and the impact it has on participants (and potentially, the broader agricultural research and extension community)

Objective 4: To assess the broader impact and aspirations of the video producers within the context of the R2E initiative (examining how the training can contribute to bridging the research-to-extension gap and empowering farming communities with knowledge and innovation in the future).

Objective 5: To distill key recommendations and insights from the case study, offering actionable guidance and motivation for similar initiatives

Challenges, difficulties, pitfalls, and issues identified:

- Last-minute organization and rush.
- Bureaucratic slowness and slow response.
- Not enough preliminary interactions.
- Underestimation of some workload

The presentations, training manual, tips, templates, surveys and results, storyboards, photos, video rushes, video produced, etc ... are all available online.

The timeframe was too short for the design and the implementation.

The videos produced are "just good enough" as the first fruit of the training and need improvements.

The training has opened the eyes of many trainees and encouraged them to continue.

Participants in the training are progressing in understanding the stakes behind R2E and the implications. They understand the immense efforts required, especially on the work to be done for more demand-driven, applicable, and accessible research results.

Recommendations are provided in the next sections.

Impact

The acquisition of video production skills and the increasing involvement of ICKM specialists in concrete activities related to the Research to Extension (R2E) initiative holds tremendous potential for making a <u>long-term impact</u> in the agricultural sector. These developments can lead to widespread dissemination of research findings, enhanced knowledge transfer to extension workers and farmers, and ultimately result in increased agricultural production, productivity, food and nutrition security, and income generation. Here's how:

- 1. Widespread Dissemination of Research Findings:
 - **Amplified Reach:** With a growing number of ICKM specialists equipped with video production skills, research findings can be disseminated through engaging and easily accessible video content. This multimedia approach ensures that valuable knowledge reaches a broader and more diverse audience.
 - **Continuous Dissemination:** As explained in the training, videos can be archived and shared on various platforms, ensuring that research findings remain accessible over time. This continuous dissemination allows for the reutilization of knowledge in different contexts and across seasons. Customization might be required from time to time.

2. Enhanced Knowledge Transfer to Extension Workers and Farmers:

- Visual and Practical Learning: Videos provide a visual and practical learning experience, allowing viewers to observe research-based practices and techniques firsthand. This dynamic format enhances understanding and retention of knowledge. More applicable and accessible knowledge should be available to extension workers and farmers.
- Self-Paced Learning: Videos can be accessed at the convenience of extension workers and farmers, enabling self-paced learning. This flexibility accommodates varying learning styles and the busy schedules of agricultural practitioners.

3. Increased Agricultural Production and Productivity, Food Security and Income generation:

• With access to research findings through videos, extension workers and farmers can effectively implement best practices and innovative techniques. This leads to improved crop yields, livestock management, and overall agricultural productivity and production.

- Innovation Adoption: Videos can showcase innovations, cutting-edge technologies, and sustainable farming practices. As extension workers and farmers gain confidence in adopting these innovations, they can enhance the efficiency and resilience of their agricultural systems.
- Increased Crop Diversity: Access to research results can encourage farmers to diversify their crop choices, leading to a more varied and nutritious diet. Crop diversity contributes to improved food and nutrition security.
- **Higher Incomes:** Enhanced agricultural practices and productivity often result in higher incomes for farmers. Increased income levels can help improve living standards, access to healthcare, and education for farming communities.

In the long run, the combination of video production skills among ICKM specialists and their active involvement in the R2E initiative can create a ripple effect in the agricultural sector. As more applicable research findings are disseminated widely and effectively, and as extension workers and farmers gain access to valuable knowledge, the agricultural landscape can undergo a **positive transformation**.

Lessons Learned

These are some of the lessons learned from the CCARDESA ICKM video training:

- 1. Quick starting video production: While some professional training centers take weeks and months to train in video production, it is possible, as a starting point, to train novices and beginners in video production and "force" them to deliver something in 2-3 days. Of course, the quality of the video production will require continuous improvement.
- Video editing software/app: The choice of a video editing software/app is very important to bring everyone on the same page. A multifunctional, easy-to-use, multiplatform (Android, iOS, Windows, MacOS) and open-source solution is very important because of the diversity of people (and their devices) to be trained at the same time.
- 3. **Good Planning and Anticipation:** The importance of thorough planning and anticipation for video production training cannot be overstated. Last-minute rushes can lead to unnecessary stress and compromise the quality of training.
- 4. **Need for More Hands-On Training:** In this case, ICKM specialists were eager for hands-on training experiences. However, to meet such demand, future training sessions should allocate more time to practical exercises and skills development.
- 5. **Meticulous Preparation for Video Shooting:** Organizing video shooting in a research center requires meticulous preparation and clear communication. Organisers must ensure that all logistical aspects are addressed well in advance to maximize productivity during the field visit.
- 6. Project idea and storyboarding: The project idea must be well defined and storyboarding must be done before going to the field for shooting because it provides a visual plan for the entire project, ensuring that everyone involved knows what to expect and reducing the risk of wasting time on set by preventing confusion or uncertainty about shots and scenes.
- 7. **Production plan, interview questions, and script:** A well-prepared production plan and interview questions for all interviewees and scripts for the narratives are vital to prevent time wastage when onsite and to ensure interviewees stay on-topic, efficient, and relevant.
- 8. Working in Groups vs. Individual Work: While group work can facilitate co-learning, and synergy, often leading to more innovation, it can also slow down the production process and eventually have some negative results after the training for those who were just followers. It's essential to strike a balance between collaboration and efficiency to ensure that training objectives are met.

These are some specific recommendations based on the lessons above and feedback from the trainees:

- 1. **Planning and Anticipation:** Future video production training programs should be meticulously planned well in advance. This includes setting clear timelines, defining clear training goals, and ensuring that logistics and bureaucracies don't jeopardize the training program. Avoid last-minute preparations to ensure a smooth and effective training experience.
- Hands-On Training: Recognizing the preference for hands-on training among the trainees, it is wise to consider extending the duration of video production training to a minimum of one week. This additional time will allow participants to delve deeper into practical exercises, ensuring that they gain a strong grasp of video production techniques.
- 3. **Preparation for Video Shooting:** When organizing video shooting in a research center or any uncharted area, thorough preparation should be done. This includes coordinating with the entities' staff, ensuring access to necessary equipment, and clarifying the logistics of the field visit well in advance. A well-organized and well-prepared shooting environment will contribute to the successful execution of video projects. Preliminary visits to the shooting areas and pre-interviews of the researchers should be organized.
- 4. Storyboarding and scripting: knowing exactly the topics, the areas, and how they will be addressed helps a lot in storyboarding and script writing. Training organizers should insist more on the preparation and how to interview and guide all the shooting activities to avoid wasting time.
- 5. **Balancing Group Work and Individual Work:** While group work has its advantages, it's essential to ensure that each trainee masters the art and techniques of video production. Future training programs should consider the option of having participants work both individually and in groups to maximize learning opportunities and maintain a manageable pace.

More recommendations are provided for CCARDESA and the ICKMs:

- Video is the future: with 500 hours of video uploaded per hour on YouTube (Statista, 2023), ICKM should be aware that video production skills are increasingly valuable for professional advancement in the future because video has become the predominant and widely accessible medium of communication. Individuals who can create compelling video content are highly sought after in a world where visual communication holds tremendous influence.
- 2. Video topics and targets: Most of the ICKMs wanted to target extension workers and farmers with their video production. However, the video they produced was not really targeting these audiences. In the future, it is important to find the right place where innovations and techniques are implemented by farmers and extension workers for filming. Producing videos in research

centers will tend to focus on cutting-edge technologies or unapplicable techniques that researchers want to promote.

- 3. **It's all about practice**: Regular practice in video production is crucial to prevent the loss of skills because it helps ICKM maintain proficiency, stay up-to-date with evolving technology and trends, and refine creative abilities, ensuring that they remain competent. CCARDESA should find some ways to encourage ICKM to continue practicing R2E video production regularly.
- 4. **Audio editing training**: As requested by some ICKM, audio editing is also an important training topic because the sound quality is important in video and audio programs.
- 5. **Video production Competition:** video competition in the framework of R2E should be organized in the region to encourage ICKMs to continue producing videos.
- 6. **Training of trainers:** Video is becoming increasingly important. Training more trainers and producers in video production is strategic. CCARDESA can organize such training for the region.