



# DEVELOPMENT OF INFORMATION, COMMUNICATION & TECHNOLOGY BASED KNOWLEDGE PRODUCTS IN 3 SELECTED COUNTRIES

CONTENT ANALYSIS AND AUDIT REPORT OF THE  
CCARDESA KNOWLEDGE HUB AND TFCA PORTAL

Prepared by:



# INTRODUCTION

About the Assignment:

In line with CCARDESA's 5th thematic area: Knowledge and Information Management, Communication and Policy, CCARDESA has engaged Next Edition Media to develop ICT based or audio-visual knowledge products from three member states.

# PROBLEM STATEMENT

## Challenges with Knowledge Products

- Most of CCARDESA Knowledge Products (KPs) are paper-based.
- A gap exists for audio-visual inclined audiences.
- Lack of audio-visual content limits engagement with key demographics
- KPs are mostly inclined towards climate-smart agriculture

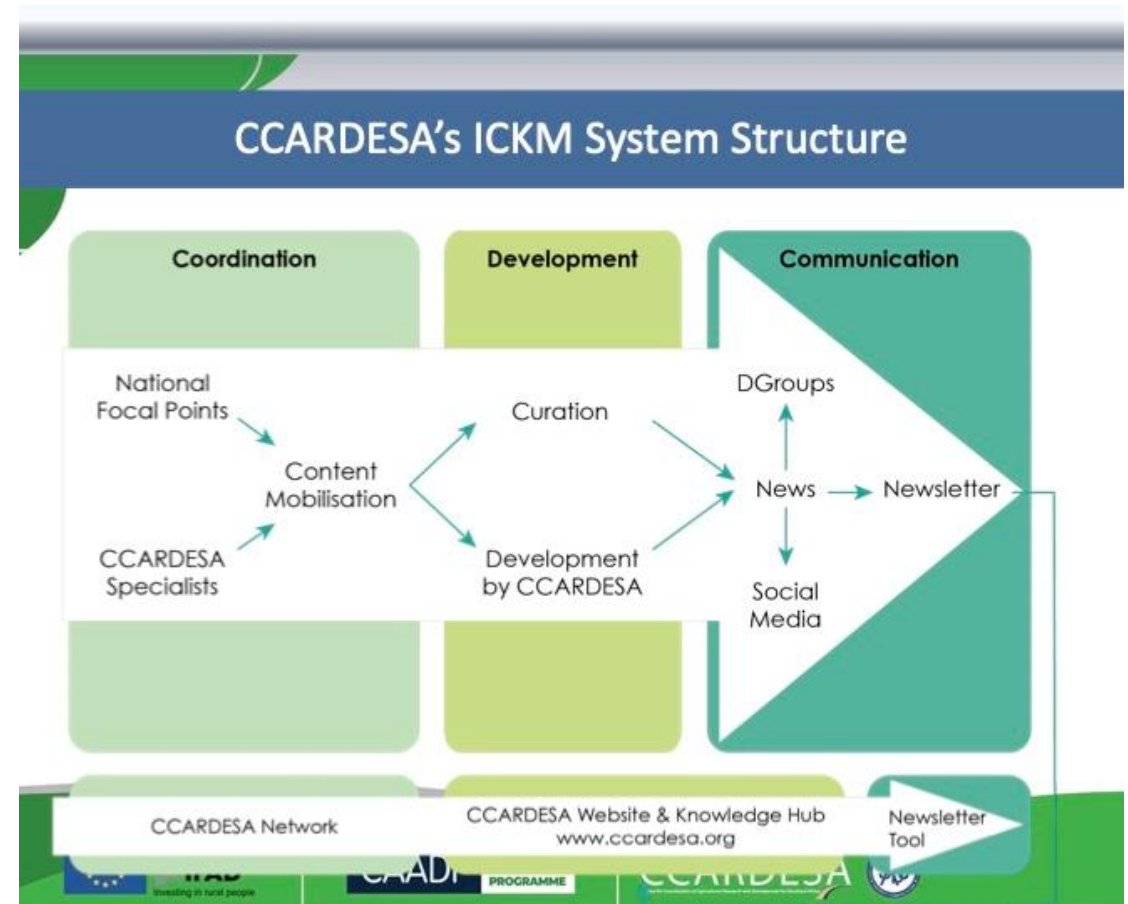
This has resulted in CCARDESA online channels having lesser users.

# METHODOLOGY

Approach for this assignment included:

## Situation analysis:-

- Desktop Study
- literature review
- Inception report meeting on 17 May 2023
- Content analysis and audit



# DESKTOP STUDY

## Research Topic:

Enhancing CCARDESA's interaction with individuals inclined towards audio-visual content through the utilization of ICT-based (audio-visual) knowledge products.



# DESKTOP STUDY

The desktop study sought to answer the following questions:

- What types of knowledge products does CCARDESA develop?
- Who are the audiences of CCARDESA's knowledge products?
- What are the specific challenges faced by the audiences?
- Do the knowledge products meet the audiences' agricultural-based information needs?
- How can CCARDESA broaden its themed content base?
- What type of ICT-Based (Audio-Visual) knowledge products can CCARDESA develop to increase audience engagement?
- How best can the developed ICT-Based (Audio- Visual) knowledge products be disseminated?

# LITERATURE REVIEW

- CCARDESA's Internal data sources were utilized for this purpose

Year	Document
2019	CCARDESA Long-Term Strategic Plan: 2020-2029.
2019	CCARDESA Long-Term Strategic Plan: 2020-2029 – A Synopsis.
2021	CCARDESA Regional Knowledge, Information & Data Capture Guidelines Regional Training Workshop: 22 – 25 November 2021, Workshop Report.





# CONTENT ANALYSIS AND AUDIT

Data collection, preparation and coding involving:

- URLs and corpus creation
- PDF inventory
- keyword selection for analysis within the CCARDESA and TFCA thematic areas



# CONTENT ANALYSIS AND AUDIT

- Phrases and Keywords for Coding



Microsoft Word  
Document

# FINDINGS - SITUATIONAL ANALYSIS

## Types of knowledge products CCARDESA develops

CCARDESA's knowledge hub has over 850 knowledge products that share agricultural information and research across the SADC region. The knowledge products:

- Are mostly paper-based formats of news and research publications
- Contain very technical or expert language
- Are inclined towards climate-smart agriculture and workshop reports or presentations
- Have gender and youth markers
- Have target audiences and categories listed

# FINDINGS - SITUATIONAL ANALYSIS CONT...

## **CCARDESA's target audience**

CCARDESA has indicated an urgency in meeting the knowledge needs of the following target audiences:

- Smallholder farmers
- Women and girls
- Youth
- Vulnerable groups
- Value chain actors such as technical officers, staff in the public and private sectors, input suppliers, farmers, local traders, processors, exporters etc.
- The general public / citizens of Member States

# FINDINGS - SITUATIONAL ANALYSIS CONT...

## The challenges faced by the target audiences:

The specific challenges faced by each of the audiences determine their knowledge needs and thus should inform the knowledge products that are to be developed:

### **Smallholder farmers**

- Rural dwellers
- Limited access to markets, resources and amenities.
- Technical and social-cultural challenges.
- Need skill improvement as they incorrectly use inputs, produce small quantities with low quality and they lack the commercial or business approach to production.

# FINDINGS - SITUATIONAL ANALYSIS CONT...

## **Women and girls**

- Mainly marginalised, face disempowerment and gender inequality
- Mostly rural dwellers
- Face barriers to trade

## **Youth**

- Mostly marginalised, unemployed and under-employed
- Tend to be urban migrants facing a lack of opportunities
- Need skill improvement, job opportunities and social inclusion
- Face barriers to trade

# FINDINGS - SITUATIONAL ANALYSIS CONT...

## **Vulnerable groups**

- Mostly unemployed
- Lack of opportunities
- Need skill improvement

## **Value chain actors**

- Faced with technical challenges
- Need capacity improvement, effectiveness and positioning.

## **The general public**

- lack information, knowledge and skills for venturing into agriculture

# FINDINGS - SITUATIONAL ANALYSIS CONT...

## **Whether the knowledge products meet the audiences' agricultural-based information needs**

- Weak linkage between research and extension (CCARDESA, 2019).
- Existing agricultural knowledge and statistics are mostly spotty and unreliable (CCARDESA, 2021).

Therefore audiences experience a knowledge gap and data inaccessibility.



# FINDINGS - SITUATIONAL ANALYSIS CONT...

## **Broadening CCARDESA's themed content base**

During the period of the 2020-2029 long-term strategic plan, CCARDESA's effort is being shifted to diversify themed content coverage in areas such as:

- Fisheries and non-timber forest products
- Sustainable utilization of agricultural production resources
- Application of digital and artificial intelligence for agricultural production
- Trans-boundary natural resources management issues

# CONTENT ANALYSIS AND AUDIT FINDINGS

## **CCARDESA's Knowledge system**

- First developed in 2014 and has undergone a series of improvements over time.
- Comprises of an active website and social media: Twitter, Facebook and YouTube.
- Regularly updated with news and knowledge products.
- Positive trend in the number of visitors in the first half of 2019
- Users have rated the system 3.5 on a scale of 1 to 5, with 5 being "very good"

# CONTENT ANALYSIS AND AUDIT FINDINGS CONT...

- Significant emphasis on climate change: “Climate,” appearing in 837 documents of the 1 188 analysed.
- The word “Climate” used in close proximity and context within other words like “Change, Smart, Agriculture, and Adaptation.”

It is clear that climate-related issues have been a major focus.



Document

# CONTENT ANALYSIS AND AUDIT FINDINGS CONT...

## Information accessibility

- Significant problems with the accessibility of CCARDESA's knowledge products
- The CCARDESA website has limited appearance in search engine results



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# CONTENT ANALYSIS AND AUDIT FINDINGS CONT...

## Information readability

Classification of the 5622 URLs or pages making up the CCARDESA knowledge hub in terms of ease of readability indicated that the content on the CCARDESSA knowledge hub falls in the categories of:

- Hard
- Fairly hard
- Uncategorised

Readability is therefore classified as difficult.

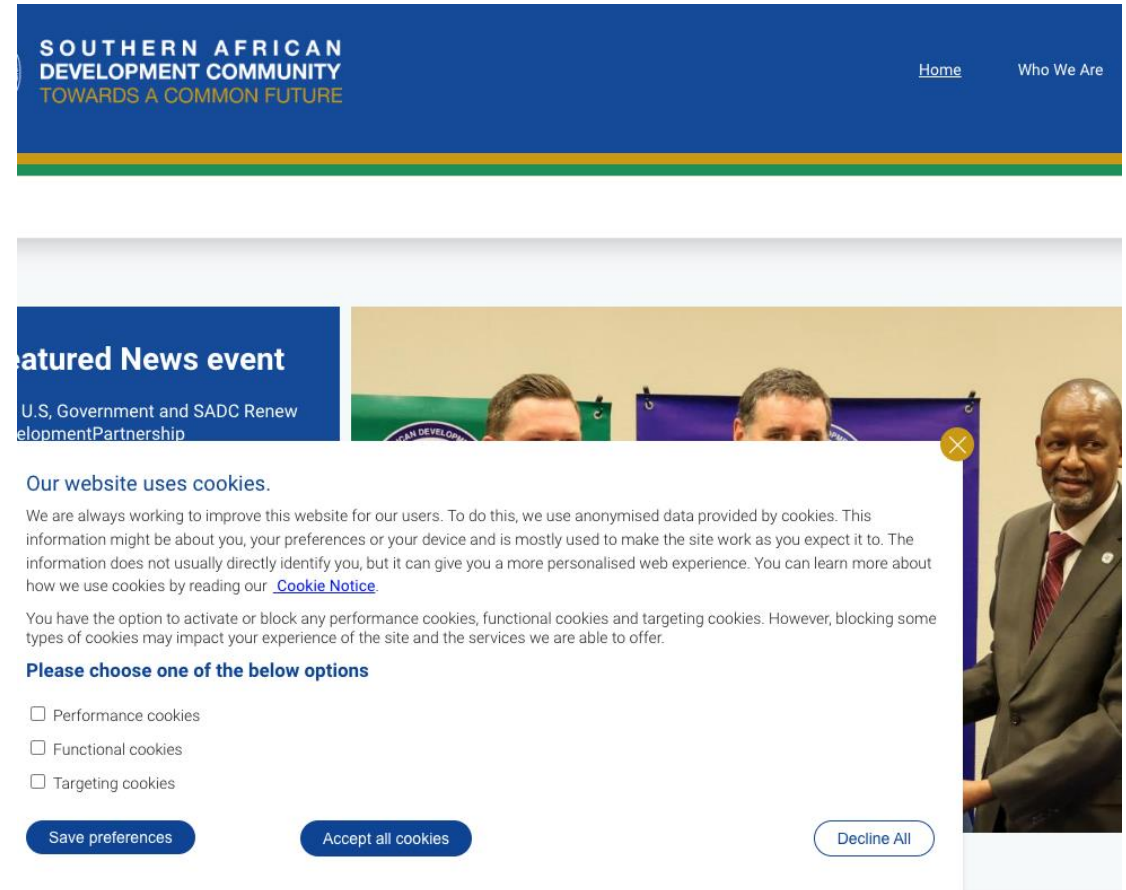
Table 5: Readability and number of URLs

Very Hard	Hard	Fairly Hard	Normal	Fairly Easy	Easy	Very Easy	Uncategorized
16	1921	1946	354	110	44	3	1228

# CONTENT ANALYSIS AND AUDIT FINDINGS CONT...

## User experience

- The knowledge hub does not have cookies which are crucial in improving user experience especially in form filling
- When a user first downloads a CCARDESA knowledge product, there is form filling
- The lack of cookies entails no future auto fill

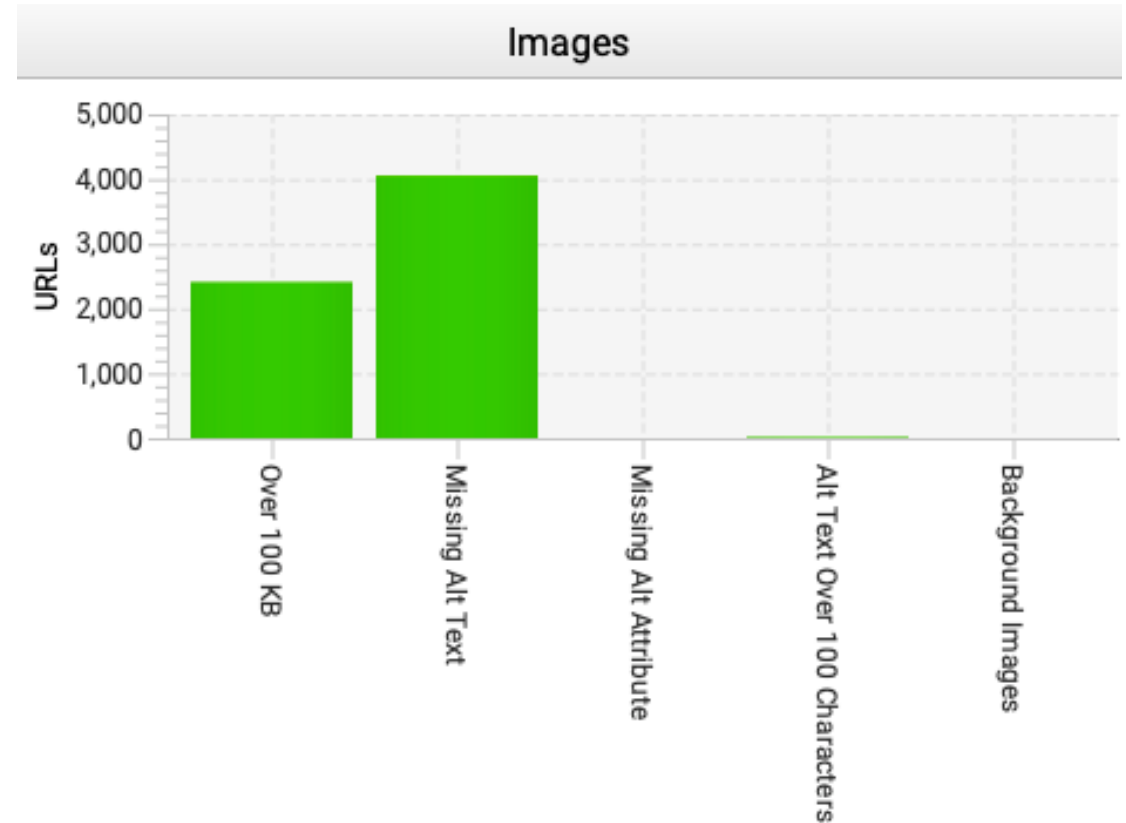


The screenshot displays the top navigation bar of the Southern African Development Community (SADC) website. The header is dark blue with the text "SOUTHERN AFRICAN DEVELOPMENT COMMUNITY" and "TOWARDS A COMMON FUTURE" in white. Navigation links for "Home" and "Who We Are" are visible. Below the header, a news event titled "Featured News event" is partially visible, with the subtitle "U.S. Government and SADC Renew Partnership". A prominent white cookie consent banner is overlaid on the page. The banner contains the following text: "Our website uses cookies. We are always working to improve this website for our users. To do this, we use anonymised data provided by cookies. This information might be about you, your preferences or your device and is mostly used to make the site work as you expect it to. The information does not usually directly identify you, but it can give you a more personalised web experience. You can learn more about how we use cookies by reading our [Cookie Notice](#). You have the option to activate or block any performance cookies, functional cookies and targeting cookies. However, blocking some types of cookies may impact your experience of the site and the services we are able to offer. Please choose one of the below options". Below the text are three checkboxes: "Performance cookies", "Functional cookies", and "Targeting cookies". At the bottom of the banner are three buttons: "Save preferences", "Accept all cookies", and "Decline All".

# CONTENT ANALYSIS AND AUDIT FINDINGS CONT...

## User experience

- Alternative text/captions and key words are missing
- Significantly impact on accessibility, search engine visibility and overall user experience.



# CONTENT ANALYSIS AND AUDIT FINDINGS CONT...

## Social Media Accounts

CCARDESA has very low engagement and following on all their social media platforms according to these statistics from SEO tools (Buffer and Sprout Social):

- LinkedIn - 405 followers
- YouTube -71 subscribers and 33 videos
- Facebook - 3.053 followers
- Twitter - 73 followers and only joined in March 2022
- TikTok - 0



# TFCA PORTAL

The SADC Trans-frontier Conservation Areas (TFCAs), a mechanism that delivers on the implementation of SADC Protocols, Strategies and Programmes related to the conservation and sustainable utilisation of natural resources, has a portal that mainly focuses on the following thematic areas:

- Agriculture (livestock, crop production, aquaculture, bee-keeping, etc);
- Change (adaptation, mitigation, finances, etc);
- Natural Resource Management (protected area management, habitat management, species management and law enforcement, forestry resources, marine resources, freshwater resources, etc), and;
- Tourism (hospitality, guiding, marketing and management)

# RECOMMENDATIONS

## Information accessibility

CCARDESA can increase the chances of its platform being discovered by the target audience, including farmers and other stakeholders by:

- Implementing effective search engine optimization (SEO) strategies.
- Steps such as:
  - keyword research,
  - on-Page Optimization
  - technical SEO
  - content optimization
  - link building etc.

Implementing these steps can optimize the website and its content to improve accessibility.

# RECOMMENDATIONS CONT...

## Information Readability

- It is crucial that CCARDESA regularly monitor website traffic, user behaviour, and keyword performance using tools like Google Analytics.
- This will provide valuable insights to refine the SEO strategy, identify areas for improvement, and measure the effectiveness of optimization efforts.
- Optimizing the website and its content for search engines is crucial to improve its visibility and ensure that it appears in the top search results.

# RECOMMENDATIONS CONT...

## **CCARDESA's Social media accounts**

It is essential to focus on the quality of engagement and the potential reach of the accounts. Some considerations are to:

### **1) Use of Hashtags and Trending Topics**

- To keep accounts updated on relevant hashtags and trending topics in the agricultural and rural development sectors.
- To incorporate the hashtags strategically into tweets to increase the visibility of CCARDESA's content and connect with broader conversations happening in the online community.
- To collaborate and participate in conversations and discussions by mentioning and tagging relevant accounts.

# RECOMMENDATIONS CONT...

## **2) Use of Multi Media elements**

CCARDESA can deliver information in a more engaging and visually appealing manner by:

- Posting more interactive multimedia content on social media platforms can greatly enhance engagement and capture the interest of the target audience.
- Incorporating a variety of multimedia elements such as videos, images, infographics, and interactive tools

# RECOMMENDATIONS CONT...

## **TFCA content to reflect on the CCARDESA knowledge hub**

CCARDESA needs to create content on natural resources management and tourism. Specific knowledge products can be on the following thematic areas:

- Wildlife conservation
- Conflicts between wildlife and human life
- Forestry – timber and non-timber products
- Protected area management - habitat management, species management and law enforcement
- Marine resources or freshwater resources, etc
- Tourism - hospitality, guiding, marketing and management

# RECOMMENDATIONS CONT...

## **Types of knowledge products on the website and focus on target audiences**

- The new pieces of content should be more specifically addressed to farmers, women, youth and vulnerable groups to promote increased adoption of research results.
- The products must focus on long-term mind-set strategies to assist the farmers and other value chain actors to change their approach and adopt business approach in agriculture.
- To capacitate the Information, Communications and Knowledge Management (ICKM) focal points in SADC Member States.
- To reclassify and rename categories of the knowledge products on the hub. Not all products are knowledge products. Possible classification suggestions to best define what each piece of content is include; best practices, news articles, best bet, etc.

# RECOMMENDATIONS CONT...

## **Broadening CCARDESA's themed content base**

There is need for CCARDESA to prioritize the other thematic areas through demand driven research. The following are recommended:

- Sustainable utilisation of agricultural production resources,
- Application of digital and artificial intelligence for agricultural production,
- Sustainable management of natural resources,
- Wildlife conservation,
- Conflicts between wildlife and human life



# RECOMMENDATIONS CONT...

- Forestry: timber and non-timber forest products,
- Fisheries,
- Wide range crop production,
- Resilience to emerging agricultural risks,
- Increased commercialization and access to markets for the agricultural sector (especially for smallholder farmers) and;
- Increased participation of youth, women, girls and vulnerable groups in agricultural value chains

# RECOMMENDATIONS CONT...

## **Types of ICT-based (audio-visual) knowledge products that CCARDESA can develop to increase audience engagement:**

CCARDESA needs to maximize the use of ICT tools and artificial intelligence as the cornerstone of production and marketing efficiency in agriculture. CCARDESA can be an active participant in using these tools to improve the performance throughout the value chain.

- 16 ICT-based knowledge products have been proposed to be developed under this assignment:



Document

# RECOMMENDATIONS CONT...

## **Dissemination of the new ICT-based (audio-visual) knowledge products**

A number of dissemination activities must be used to engage in with the different value chain actors so as to stimulate a shift away from subsistence approaches and assist the players to see room for growth. The activities should include:

- Various ICT technologies (such as computers, laptops, smart phones, tablets, mobile apps, messenger apps, the internet, social media etc.)
- Traditional media (TV, Radio and Print)
- Electronic media and various outdoor activities for researchers, extension agents, farmers and other various stakeholders.

# RECOMMENDATIONS CONT...

- CCARDESA must alert key stakeholders, especially the ICKM focal persons, on the projects in their various countries.
- CCARDESA also needs to develop a communication plan to guide ICKM focal persons in undertaking their mandates of enhancing knowledge management for advocacy and decision support and communication at national level.
- Knowledge sharing and communication needs to be improved by translating technical scientific knowledge into simple language understandable by farmers.
- Value chain actors must be encouraged to hold seminars to educate others with the value of information and knowledge in their various institutions.

# RECOMMENDATIONS CONT...

- To improve the appointments of ICKM focal point persons in the member countries in order to enhance the sharing of information and knowledge in the region.
- CCARDESA needs to share more information with countries and increase its visibility.
- To increase the efforts of getting in touch with various countries and agencies to teach the public how science can help them in agriculture.
- Knowledge translation and localizing of content is also key to allow for the public to understand the issues
- To continue enabling stakeholders to communicate more with the public to enhance the implementation of the ICKM strategy

# DISCUSSION

- Issues identified from the Content Analysis and Audit Report Presentation

**END**