

CCARDESA

Centre for Coordination of Agricultural Research and Development for Southern Africa



2021

ANNUAL REPORT



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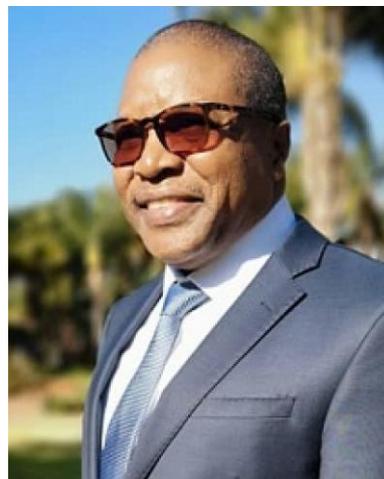
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REMARKS: CCARDESA BOARD CHAIRPERSON

I have the pleasure and honour of welcoming you to the CCARDESA Annual Report for 2021. As always, we greatly treasure our work and acknowledge the huge responsibility that the SADC Member States have put on us. Through this report, we provide our stakeholders with an update on what transpired and what was achieved in the 2021 Financial Year.

Implementation of the 2021 Annual Work Plan resulted in several progressive strides and the achievement of key milestones for the organisation. After transition into a new Strategic Plan and a Medium Term Operational Plan, the institution has a clear focus and maintaining a strong present in the six thematic areas that include inclusiveness, supporting productivity, strengthening resilience of food systems to climate change, technology generation and dissemination, capacity building and knowledge management.



Since 2020, the global situation has operated under unusual conditions due to the Covid-19 pandemic, CCARDESA continued to use innovative approaches to the implementation of activities in its work plan. Physical interactions within the organisation and with external partners was minimal. Instead, the use of virtual platforms to effectively interact with partners and implement the work plan took centre stage and was mastered to a level where the psychological belief in physical meetings and interactions faded. The Secretariat made good use of the ICT and virtual platform hardware and software which were procured when the pandemic broke out.

Amid the Covid-19 restrictions, the achievement of the outputs was good. The 2021 annual work plan had 139 planned outputs from the activities and CCARDESA recorded an impressive 75% success in delivering these planned outputs. This includes the development and approval of a new Information, Communication and Knowledge Management (ICKM) Strategy, successful establishment of irrigation facilities in five countries to assist farmers fight the impacts of covid-19 and the initiation of infrastructure development in Angola and Lesotho, capacity building activities and development of new technical partnerships. In the year under review, the total annual revenue of the organisation rose to USD3,086,226 while the assets stood at USD1,512,619.

The Board continued to provide guidance and overview to the Secretariat and gave direction to ensure that programmes run smoothly. Two meetings of the Board were held during the year, during which important decisions were taken, reviews of the different sections of the Secretariat were carried out and principles of good corporate governance were followed. In line with the CCARDESA Charter, the Board identified qualified individuals to serve on the CCARDESA Board with effect from July 2022 when most of the members of the serving Board will be required to retire.

Many individuals and organisations contributed significantly to the success of CCARDESA in 2021. I am grateful to all our partners whose inputs, advice, encouragement and positive criticisms contributed to the achievements of CCARDESA. I would like to thank the SADC Secretariat, SADC Member States, the National Agricultural Research Systems of SADC Member States, Farmer Organisations, regional and international organisations for their valuable contributions to the success of CCARDESA in 2021. I also wish to give special recognition to all the development partners, especially the European Union, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the World Bank, and the International Fund for Agricultural Development (IFAD).

I wish recognise the hard work tireless effort and commitment of the Board members who provided the required guidance to the Secretariat, as well as the CCARDESA Secretariat staff for their commitment and hard work in the implementation of activities and achievement of outputs documented in this annual report.

Castro Camarada (PhD)

Board Chairperson

CCARDESA BOARD MEMBERS



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member of Finance Committee



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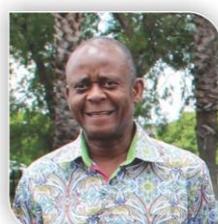
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FOREWORD: CCARDESA EXECUTIVE DIRECTOR

CCARDESA was established to practically add value to the aspirations of SADC Member States by contributing to improved food security. The Secretariat has the duty to implement the approved work plans in support of the key regional strategic documents such as the SADC Regional Agricultural Policy (RAP), the Regional Indicative Strategic Development Plan (RISDP), the Comprehensive African Agriculture Development Programme (CAADP), and the Sustainable Development Goals (SDGs).



The annual work plans of CCARDESA are organised under six themes that deal with the priorities of the region. These are outlined in the long term strategy of the organisation. In 2021, the Secretariat implemented a number of activities and generated various outputs which are described in this report. To support implementation and generation of impactful outputs, new partnerships were established with different organisations of common interest with CCARDESA, while the existing development partnerships and technical partnerships were strengthened.

The Covid-19 pandemic in 2021 continued to suppress the performance of CCARDESA but this was not significant as the Secretariat adapted to the conditions and managed to make good progress in implementing the programmes and generated good outputs. Significant effort was made in ensuring the good governance at the Secretariat and mobilisation of resources through implementation of the new resource mobilisation strategy.

I wish to thank all the technical and strategic cooperating partners who have been supporting the work of CCARDESA. Their support has been the driving force behind the outputs documented in this Annual Report. I also wish to thank the CCARDESA Board of Directors for their guidance throughout the year, and the work of the Secretariat staff whose work directly led to the progress recorded in this Annual Report.

Cliff Dlamini (PhD)
Executive Director

ACKNOWLEDGEMENTS

The following sponsors and partners are acknowledged for their contribution to the work of CCARDESA.



Contents

REMARKS: CCARDESA BOARD CHAIRPERSON	ii
CCARDESA BOARD MEMBERS.....	iv
FOREWORD: CCARDESA EXECUTIVE DIRECTOR.....	v
ACKNOWLEDGEMENTS.....	vi
LIST OF ACRONYMS.....	x
EXECUTIVE SUMMARY	xii
1. Introduction and Background.....	1
1.1 Introduction.....	1
1.3 Background	1
1.2 Institutional Arrangement and Governance of CCARDESA	2
1.3 The Long-Term Strategic Plan	2
1.4 Alignment of the Annual Operational Plan to the Strategic Plan.....	3
2. ANALYSIS OF PHYSICAL AND FINANCIAL PERFORMANCE FOR THE YEAR	4
2.1 Analysis of Physical Performance.....	4
2.2 Analysis of Financial Performance for the Year for Programmes.....	5
2.3 Alignment of Physical and Financial Performance	6
2.4 Overall Financial Performance for CCARDESA	7
3. KEY ACHIEVEMENTS BY THEMATIC AREA.....	9
3.1 Thematic Area 1: Agricultural productivity and food and nutrition security.....	9
3.2 Thematic Area 2: Resilience to emerging agricultural risks.....	10
3.3 Thematic Area 3: Commercialisation of the agricultural sector and market access	11
3.4 Thematic Area 4: Women, youth and social inclusion.....	11
3.5 Thematic Area 5: Knowledge and information management, communication and policy support.....	12
3.6 Thematic Area 6: Capacity strengthening of CCARDESA and AR4D institutions.....	16
4. GOVERNANCE AND ACCOUNTABILITY.....	16
5. RESOURCE MOBILISATION AND PARTNERSHIPS	16
6. CHALLENGES.....	18
6. CONCLUSION	18
7. PLANS FOR 2022	19

List of Tables

Table 1: Planned Outputs and Budget by Thematic Area	19
Table 2: Planned Outputs and Budget by Programme/Project	19
Table 3: Implementation Status of Annual Outputs by Thematic Area	20
Table 4: Implementation Status of Annual Outputs by Programme/Project	20
Table 5: Financial Performance by Thematic Area	20
Table 6: Financial Performance by Programme/Project	21
Table 7: Alignment of Physical and Financial Performance by Thematic Area	21
Table 8: Alignment of Physical and Financial Performance by Programme/Project	21
Table 9: Statement of Financial Position at 31 December 2021	22
Table 10: Statement of Financial Performance of CCARDESA for the year ended 31 December 2019	22
Table 11: Statement of changes in net assets	23
Table 12: Statement of Cash Flows	23
Table 13: Proposals and concept notes developed in 2021	32

List of Figures

Figure 1: Trends in the use the CCARDESA Dgroups	27
Figure 2 Global distribution of CCARDESA Dgroup users	28
Figure 3 Trends in the performance of the CCARDESA Facebook (2018-2021)	28
Figure 4 Trends in annual website users	29
Figure 5 CCARDESA news items 2018 to 2021	29
Figure 6 User satisfaction with content of CCARDESA knowledge products.....	30

LIST OF ACRONYMS

ACCRA	Adaptation to Climate Change in Rural Areas of Southern Africa
AFAAS	African Forum for Agricultural Advisory Services
AGRA	Alliance for a Green Revolution in Africa
AnGR	Animal Genetic Resources
APPSA	Agricultural Productivity Programme for Southern Africa
ASARECA	Association for Strengthening Agricultural Research in East and Central Africa
AU-IBAR	African Union Inter-African Bureau for Animal Resources
BMZ	German Federal Ministry for Economic Cooperation and Development
CA	Conservation Agriculture
CAADP	Comprehensive Africa Agriculture Development Programme
CAADP-XP4	Comprehensive Africa Agriculture Development Programme Ex-pillar 4 Project
CCARDESA	Centre for Coordination of Agricultural Research and Development for Southern Africa
CCAFS	CGIAR Research Program on Climate Change, Agriculture and Food Security
CCAA	Climate Change Adaptation in Agriculture
CSA	Climate Smart Agriculture
CIMMYT	Centro Internacional de Mejoramiento de Maíz y Trigo (International Maize and Wheat Improvement Centre)
COMESA	Common Market for Eastern and Southern Africa
CORAF	West and Central Africa Council for Agricultural Research and Development
CSA	Climate Smart Agriculture
DeSIRA	Development Smart Innovation and Research in Agriculture
CTA	Technical Centre for Agricultural and Rural Cooperation
EU	European Union
FANRPAN	Food, Agriculture and Natural Resources Policy Analysis Network
FAO	Food and Agriculture Organisation of the United Nations
FARA	Forum for Agricultural Research in Africa
GA	General Assembly
GCCA+	Global Climate Change Alliance Plus
GCF	Green Climate Fund
GDP	Gross Domestic Product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
ICT	Information and Communication Technologies
ICKM	Information, Communication, Knowledge Management
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute

M&E	Monitoring and Evaluation
MOU	Memorandum of Understanding
MTOP	Medium Term Operational Plan
MS	Member State
NARES	National Agricultural Research and Extension Systems
NARS	National Agricultural Research System
NDA	National Designated Authority
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organisation
R & D	Research and Development
RAP	Regional Agricultural Policy
RCoL	Regional Centre of Leadership
RFS&NS	Regional Food Security & Nutritional Strategy
RISDP	Regional Indicative Strategic Development Plan
RLAT	Rapid Loss Appraisal Tool
RMSAP	Resource Mobilisation Strategy and Action Plan
RUFORUM	Regional Universities Forum for Capacity Building in Agriculture
S3A	Science Agenda for Agriculture in Africa
S4AC	Science for Agriculture Consortium
SACAU	Southern Africa Confederation of Agricultural Unions
SADC	Southern African Development Community
SAAIKS	Southern Africa Agricultural Information and Knowledge System
SRO	Sub-regional Research Organisation
USD	United States Dollar
VA	Vulnerability Assessment
WB	World Bank

EXECUTIVE SUMMARY

Overview

This Report presents a review of progress made by CCARDESA Secretariat, in collaboration with the Member States in the implementation of the Annual Plan and Budget for the Year 2021. It outlines planned outputs and resource allocation by thematic area and project for 2021; highlights of implementation status, achievements, expenditure analysis by project; implementation challenges; and recommendations.

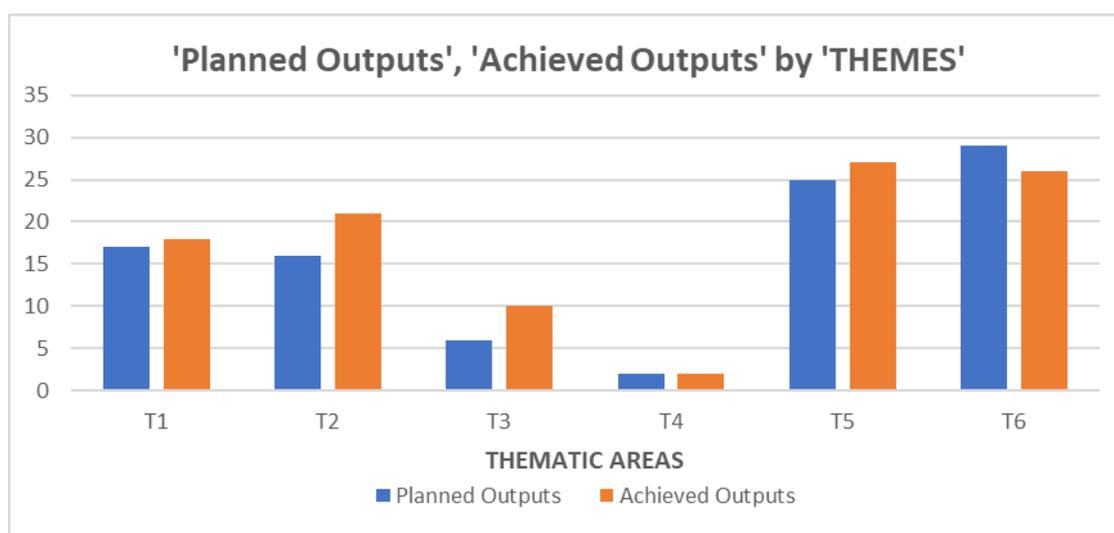
Alignment of the Annual Operational Plan to the Strategic Plan

The Annual Work Plan and Budget for 2021 are aligned to the thematic areas of the Long-Term Strategic Plan (2020-2029) which are further articulated in the Medium-Term Operational Plan (MTO) 2020-2025. The thematic areas are:

- i) Agricultural productivity and food and nutrition security;
- ii) Resilience to emerging agricultural risks: environmental, climate change and transboundary pests and diseases;
- iii) Commercialisation of the agricultural sector and market access
- iv) Women, youth and social inclusion;
- v) Knowledge and information management, communication and policy support; and
- vi) Capacity strengthening of CCARDESA and AR4D institutions.

Analysis of Physical Performance

Achievement of the planned outputs was high. In Thematic Areas 1,2,3 and 5, the Secretariat achieved more outputs than planned.



Analysis of Financial Performance

The revenue for the period increased by 50% from US\$ 2.1 million to US\$ 3.1 million. The expenditure increased by the same percentage on account of accelerated implementation of programme activities when Covid – 19 restrictions eased during the year.

Cash and cash equivalents decreased by 51% from US\$ 3.1 million in the previous year to US\$ 1.5 million. International and regional cooperating partners (ICP) disbursed US\$ 1.3 million for various projects and US\$ 2.7 million was expended on project activities implementation, the bulk of the activities being financed from the opening cash and cash equivalents balances. The Member states contributed US\$ 0.2 million to support the Secretariat activities.

The property and equipment decreased by 19% on due to depreciation for the period. Trade payables decreased by 62% reflecting timeous payment of liabilities as they fall due. The Reserves and Net assets decreased by 51% due to accelerated implementation of programme activities mainly financed by the financial resources from the opening cash resources.

Highlights of Key Achievements by Thematic Area

#	Thematic Area	Key Achievements
1	Agricultural productivity and food and nutrition security	<ul style="list-style-type: none"> ○ Implementation of 8 research projects continued in Angola and Lesotho ○ Proposals were developed for additional 10 Research and Development (R&D) sub-projects, to be implemented in 2022. ○ The two countries issued the first call for concept notes (CNs). From a total of 46 CNs that were received, 27 (14 from Angola and 13 from Lesotho) were recommended to proceed to full proposal development. Successful R&D proposals will be commissioned in 2022. ○ Six technologies in Lesotho and seven in Angola were identified from the shelf for dissemination i.e. three improved maize varieties and three common bean varieties in Lesotho, while in Angola, it was three improved varieties of maize and four of cassava. ○ Two Implementation Support Missions conducted for APPSA in May/June and November 2021. ○ The November Mission indicated that considerable progress had been achieved in 2021. ○ Study to; evaluate the level of investment in agricultural research and development; identify gaps and interventions needed to drive technological development and innovation in selected national and regional institutions of SADC countries was undertaken ○ Study to review CCARDESA's operational space and identify the most effective partnerships that CCARDESA needs was also carried out.
2	Resilience to emerging agricultural risks: environmental, climate change and transboundary	<ul style="list-style-type: none"> ○ The mapping of CSA initiatives in the region was undertaken ○

	pests and diseases	<p>Private Sector Engagement Strategy and Action Plan was developed to guide CCARDESA in engaging with the private sector especially on issues related to climate-relevant interventions.</p> <ul style="list-style-type: none"> ○ uidelines for mainstreaming climate science technology and innovation (STI) indicators into national agricultural investment plans (NAIPS) were produced to facilitate the tracking efforts by countries to mainstream climate relevant research and development in their programmes, policies and actions. ○ number of important webinars/scientific symposia which focused on specific topics of relevance to the research and development priorities of the region covering mitigation, foresight and cross border trade.
3	Commercialisation of the agricultural sector and market access	<ul style="list-style-type: none"> ○ study to identify the key constraints to cross border trade was completed
4	Women, youth and social inclusion	<ul style="list-style-type: none"> ○ ctivities aimed at minimizing the impact of COVID-19 on farming communities were implemented in Eswatini, Mozambique, Zambia and Zimbabwe. The efforts were to assist, women, youths and vulnerable groups on production and marketing of agricultural commodities that can improve production during the COVID-19 situation and assist with their recovery in the post-pandemic era. ○ rrigation facilities were installed in the project areas in Mozambique, Zambia and Zimbabwe. Boreholes were sunk and installation of facilities for irrigation was done. In Eswatini, greenhouses have been constructed to support production of mushrooms. ○ All the countries are focused on production of short season crops using improved technologies. Significant quantities of various vegetables have been produced and marketed in Mozambique, Zambia and Zimbabwe. There has been significant income generation as a result of this project.
5	Knowledge and information management, communication and policy support	<ul style="list-style-type: none"> ○ ncreasing numbers of users accessing information and knowledge products from CCARDESA information platforms which include social media, D-groups and the website. ○ ore knowledge products were developed and promoted via the CCARDESA platforms. ○ new information Communication and Knowledge Management Strategy was developed. The strategy is aligned to the CCARDESA Long-term Strategy.
6	Capacity strengthening of CCARDESA and AR4D institutions	<ul style="list-style-type: none"> ○ raining of scientists from Angola and Lesotho on proposal writing and on results-based monitoring and evaluation was facilitated. ○ even Scientists from Lesotho commenced their long-term training, two at Ph.D. level, four at MSc level and one at Bachelor's level. ○ onsiderable progress realised on upgrading of research infrastructure, purchase of equipment, and establishment of Regional Centres of

		<p>Leadership.</p> <ul style="list-style-type: none">○ rehabilitation of office blocks, access roads, irrigation systems, purchase and installation of IT infrastructure and equipment to facilitate research continued in both countries.
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Challenges Encountered During the Year

The following challenges affected the implementation of programmes during the year under review:

- The COVID-19 restrictions
- The inadequate number of staff at CCARDESA to implement the activities.

1. Introduction and Background

1.1 Introduction

This Report presents a detailed review of progress made by CCARDESA in collaboration with the Member States and other stakeholders in implementing the Annual Work Plan 2021 as approved by the Board of Directors. The report outlines the following:

- i) Status of implementation of Outputs by thematic area and by programme/project
- ii) Budget utilization by thematic area and by programme/project
- iii) Overall Financial Performance for CCARDESA
- iv) Key achievements for the year
- v) Challenges encountered
- vi) Plans for 2022
- vii) Detailed implementation analysis by project

1.3 Background

CCARDESA is a subsidiary organisation of the Southern African Development Community (SADC) Secretariat. It was established through a decision of the SADC Council of Ministers in February 2010 and a Charter which came into force on 5 April 2011. CCARDESA has the mandate of coordinating agricultural research and development (R&D) in Southern Africa, in furtherance of the objectives and targets set forth by the SADC Member States. The Centre became operational in 2012 and signed a hosting agreement with the Government of Botswana in 2014. The objectives of CCARDESA have been stipulated in the Charter establishing the organisation and reflect the desires of the SADC Member States. These are:

- i) Coordinate and promote collaboration among regional and national agricultural research and development systems (NARS) through regional and international cooperation;
- ii) Facilitate the exchange of information and technology among Member States;
- iii) Promote partnerships in the SADC region between public, private, civil society and international organizations in R&D;
- iv) Improve agricultural technology generation, dissemination and adoption in the region through collective efforts, training and capacity building; and
- v) Strengthen research and development in States Parties by mobilising human, financial and technological resources to implement and sustain demand-driven activities

The Vision of CCARDESA under its new strategy covering the period 2020-2029 is sustainable agricultural growth and socio-economic development in the SADC. This will be achieved by delivering on its Mission, which to set the regional research and development agenda, mobilise resources, support capacity development, foster collaboration and provide agricultural information and knowledge in the SADC region. In the implementation of this medium-term operational plan (MTO).

1.2 Institutional Arrangement and Governance of CCARDESA

The CCARDESA Charter establishes the institutional framework of CCARDESA with the following responsibilities:

- i) States Parties Ministers which consist of SADC Ministers responsible for Agriculture and Food Security for all SADC Member States. This is the supreme governance structure of CCARDESA is the SADC State Parties Ministers responsible for Agriculture and Food Security, which has the duty of receiving reports of CCARDESA as well as appointing the members of the Board of Directors.
- ii) The General Assembly of regional research and development stakeholders from SADC Member States, which meets every two years. The General Assembly has a set of functions that include the approval of the External Auditors of CCARDESA.
- iii) The Board of Directors of CCARDESA provides oversight and guides the CCARDESA Secretariat on its general direction and programmes. The Board of Directors, is composed of 13 voting members and 2 ex-officio members
- iv) The CCARDESA Secretariat performs the day-to-day functions of CCARDESA by implementing the programmes of CCARDESA and performing all tasks of coordination of agricultural research and development in the SADC region. The Secretariat reports to the Board of Directors

1.3 The Long-Term Strategic Plan

The objectives of CCARDESA are achieved through the implementation of research programmes which are defined in the Long-Term Strategic Plan (2020-2029) which was formally approved by the CCARDESA Board in December 2019. The Strategic Plan is a 10-year regional framework setting the priorities and articulating the necessary interventions for enhancing regional research and development agenda.

The Strategic Plan is well aligned to various relevant SADC policy and strategy frameworks including the Regional Indicative Strategic Development Plan (RISDP), the SADC Regional Agriculture Policy and other related documents. At continental level the Strategic Plan is aligned to the Comprehensive Africa Agriculture Development Programme (CAADP); the Malabo Declaration; and the Science Agenda for Agriculture in Africa. At global level the Strategic plan is informed by the Sustainable Development Goals (SDGs), specifically those on poverty, hunger, gender equality, productive employment, climate change and sustainable use of terrestrial ecosystems. The plan is developed within the Agriculture Research for Development (AR4D) paradigm, which puts the needs of farmers and other agricultural value chain actors first. The process was highly participatory evolving most relevant stakeholders at national and regional levels.

The Long-Term Strategic Plan is implemented through a series of Medium-Term Operational Plans (MOTOP) of which the current one covers the period 2020-2024. The Strategic Plan and the MOTOP intends to facilitate the delivery of five results which are:

- i) Increased agricultural productivity and food and nutrition security;
- ii) Sustainable management of natural resources and increased resilience to climate change and other emerging agricultural risks;

- iii) Increased commercialisation of smallholder agriculture and access to markets;
- iv) Gender equality, women empowerment and increased employment and participation of youth and vulnerable groups in agricultural value chains; and
- v) Strengthened capacity of regional and national AR4D institutions, farmers and other agricultural value chain actors

The above results will be achieved through implementation of activities in six thematic areas, this represents reduced number of thematic areas, concentrating energies to a few high priority investment areas to achieve maximum impact and these are:

- i) Agricultural productivity and food and nutrition security;
- ii) Resilience to emerging agricultural risks: environmental, climate change and transboundary pests and diseases;
- iii) Commercialisation of the agricultural sector and market access
- iv) Women, youth and social inclusion;
- v) Knowledge and information management, communication and policy support; and
- vi) Capacity strengthening of CCARDESA and AR4D institutions

1.4 Alignment of the Annual Operational Plan to the Strategic Plan

The Annual Work Plan and Budget for 2021 are aligned to the thematic areas of the Long-Term Strategic Plan (2020-2029) which are further articulated in the Medium-Term Operational Plan (MTO) 2020-2025 as given in Section 1.3 above. In pursuing the implementation of the above results and related thematic areas, a number of ongoing programmes and projects were implemented during the year under review namely:

- i) Agricultural Productivity Programme for Southern Africa (APPSA).
- ii) Comprehensive Africa Agriculture Development Programme CAADP ex-pillar IV Africa Regional and Sub-regional Organisations for Agricultural Research and Innovation (CAADP-XP4).
- iii) Mitigating the impact of COVID-19 on food and nutrition security using Climate Smart Technologies in SADC countries (SADC COVID-19 Response).
- iv) Minimizing adverse economic impacts of COVID 19 on the agriculture sector and food systems in SADC and building future resilience to crisis events (GIZ COVID-19 Response).
- v) Harnessing Climate-Smart Agriculture (CSA) Practices to Reduce the Impacts of Climate Change in Southern Africa (GCCA+).

A total of 95 activities with an expected total of 139 outputs were planned for 2021 to contribute towards the results of the thematic areas presented in the MOTP and operationalized by different programmes and projects. A total budget of US\$5,143,378 was allocated to implement the planned outputs and the allocation by thematic area is given in the Table 1. Completion rate of the planned activities ranged from 71 to 100%. During the year under review, a total of 104 outputs were generated, against the planned number of 139. The breakdown of outputs and budget by programme/project is given in Table 2.

Table 1: Planned Outputs and Budget by Thematic Area, 2021

#	Thematic Area	Number of Activities	Number of outputs planned	Budget (US\$)
1	Agricultural productivity and food and nutrition security	17	22	985,600
2	Resilience to emerging agricultural risks: environmental, climate change and transboundary pests and diseases	16	28	1,058,220
3	Commercialisation of the agricultural sector and market access	6	10	34,085
4	Women, youth and social inclusion	2	3	
5	Knowledge and information management, communication and policy support	25	34	349,411
6	Capacity strengthening of CCARDESA and AR4D institutions	29	42	2,716,062
7	TOTAL	95	139	5,143,378

Table 2: Planned Outputs and Budget by Programme/Project, 2021

#	Programme/Project	Number of planned Activities	Number of outputs planned	Budget (US\$)
1	CAADP-XP4	46	84	1,879,518
2	APPSA	35	35	1,300,981
3	SADC COVID-19 Response	3	3	578,074
4	GIZ COVID-19 Response	5	9	879,699
5	ACCRA	6	8	8,052
	Admin	-	-	497,055
6	TOTAL	95	139	5,143,378

2. ANALYSIS OF PHYSICAL AND FINANCIAL PERFORMANCE FOR THE YEAR

2.1 Analysis of Physical Performance

From a total of 95 activities that were planned in 2021, as at end of December, 67 (70.5%) activities were completed, 5 (5.3%) were actively being implemented and nearing completion, 13 (13.7%) were slightly delayed, and 9 (9.5%) were significantly delayed or not implemented and one (1%) was deferred. The activities that were neither implemented nor completed will be carried forward to the 2022 financial year. A total of 104 (74.8%) outputs were achieved from a total of 139 outputs that were expected from the planned activities (Table 1). A total of 43 (30.9%) outputs were still incomplete or not achieved by end of the year.

Table 1: Implementation Status of Annual Outputs by Thematic Area, 2021

#	Thematic Area	# of outputs planned	# of outputs completed	# of outputs not completed	Completion rate (%)
1	Agricultural productivity and food and nutrition security	22	18	9	81.8
2	Resilience to emerging agricultural risks: environmental, climate change and transboundary pests and diseases	28	21	10	75.0
3	Commercialisation of the agricultural sector and market access	10	10	0	100
4	Women, youth and social inclusion	3	2	1	66.7
5	Knowledge and information management, communication and policy support	34	27	7	79.4
6	Capacity strengthening of CCARDESA and AR4D institutions	42	26	16	61.9
7	TOTAL	139	104	43	74.8

Table 2: Implementation Status of Annual Outputs by Programme/Project, 2021

#	Programme/Project	# of outputs planned	# of outputs completed	# of outputs not completed	Completion rate (%)
1	CAADP-XP4	84	60	24	71
2	APPSA	35	27	8	77
3	SADC COVID-19 Response	3	3	0	100
4	GIZ COVID-19 Response	9	7	2	78
5	ACCRA	8	7	1	88
	TOTAL	139	104	35	74.8

2.2 Analysis of Financial Performance for the Year for Programmes

Table 5: Financial Performance by Thematic Area, 2021

#	Thematic Area	Budget (US\$)	Expenditure (US\$)	Variance	Utilization rate (%)
1	Agricultural productivity and food and nutrition security	985,600	135,185	850,415	14%
2	Resilience to emerging agricultural risks: environmental, climate change and transboundary pests and diseases	1,058,220	774,842	283,378	73%
3	Commercialisation of the agricultural sector and market access	34,085	208,537	(174,452)	612%
4	Women, youth and social inclusion	-	-	-	0%
5	Knowledge and information management, communication and policy support	349,411	218,015	131,397	62%
6	Capacity strengthening of CCARDESA and AR4D institutions	2,716,062	1,709,757	1,006,305	63%
7	TOTAL	5,143,378	3,046,335	2,097,043	

Table 6: Financial Performance by Programme/Project, 2021

#	Programme/Project	Budget (US\$)	Expenditure (US\$)	Variance	Utilization rate (%)
1	APPSA	1,879,518	1,110,925	768,593	59%
2	CAADP-XP4	1,300,981	688,674	612,306	53%
3	SADC COVID-19 Response	578,074	119,387	458,687	21%
4	GIZ COVID-19 Response	879,699	764,215	115,484	87%
5	ACCRA	8,052	7,599	453	94%
6	TOTAL	4,646,323	2,690,800	1,955,523	

2.3 Alignment of Physical and Financial Performance

Table 7: Alignment of Physical and Financial Performance by Thematic Area, 2021

Thematic Area	# of outputs planned	# of outputs completed	Completion Rate (%)	Budget (US\$)	Expenditure (US)	Utilization rate (%)
Agricultural productivity and food and nutrition security	23	18	78%	271,875	110,376	41%
Resilience to emerging agricultural risks: environmental, climate change and transboundary pests and diseases	26	21	81%	422,925	284,918	67%
Commercialisation of the agricultural sector and market access	10	10	100%	89,876	16,608	18%
Women, youth and social inclusion	3	2	67%	4,186	-	0%
Knowledge and information management, communication and policy support	36	27	75%	821,529	383,809	47%
Capacity strengthening of CCARDESA and AR4D institutions	41	26	63%	1,080,712	457,058	42%
TOTAL	139	104	75%	2,691,103	1,252,769	47%

Table 8: Alignment of Physical and Financial Performance by Programme/Project, 2021

Thematic Area	# of outputs planned	# of outputs completed	Completion Rate (%)	Budget (US\$)	Expenditure (US)	Utilization rate (%)
APPSA	35	27	77	985,600	349,157	35%
CAADP-XP4	84	60	71	1,385,158	642,494	46%
SADC COVID-19 Response	3	3	100	97,140	93,613	96%
GIZ COVID-19 Response	9	7	78	223,205	167,505	75%
ACCRA	8	7	88	-	-	
TOTAL	139	104	74.8	2,691,103	1,252,769	47%

2.4 Overall Financial Performance for CCARDESA

Table 9: Statement of Financial Position at 31 December 2021

	2021 USD	2020 USD
ASSETS		
Current assets		
Cash and cash equivalents	1 504 654	3 068 953
Trade and other receivables	265	-
	<u>1 504 919</u>	<u>3 068 953</u>
Non - Current assets		
Plant and equipment	7 700	9 550
	<u>7 700</u>	<u>9 550</u>
Total assets	<u>1 512 619</u>	<u>3 078 503</u>
LIABILITIES		
Current liabilities		
Trade and other payables	22 595	59 775
	<u>22 595</u>	<u>59 775</u>
Total liabilities	<u>22 595</u>	<u>59 775</u>
Total net assets	<u>1 490 024</u>	<u>3 018 728</u>
NET ASSETS		
Reserve Fund	531 387	531 822
Member States Contribution Fund	163 405	205 525
Administration Fund	49 090	(32 915)
Capital Grants	7 700	9 550
Programme Funds	738 442	2 304 746
Total net assets	<u>1 490 024</u>	<u>3 018 728</u>

Table 10: Statement of the Financial Performance of CCARDESA for the year ended 31 December 2019

	2021 USD	2020 USD
Revenue	3 086 226	2 061 593
Amortisation of capital grant	3 038	2 646
Other operating losses	-	(174)
Operating expenditure	<u>(3 089 264)</u>	<u>(2 064 065)</u>
Surplus for the period	-	-

Table 11: Statement of changes in net assets

	Reserve fund USD	Member states contribution fund USD	Administration Fund USD	Capital grants USD	Programme Funds USD	TOTAL ASSETS USD
Balance at 31 Dec 2019	522 140	209 980	(243 284)	222	698 158	1 187 216
Contributions received	-	200 310	166 768	-	3 456 200	3 823 278
Plant and equipment additions	-	-	-	11 974	-	11 974
Amortisation of Capital grants	-	-	-	(2 646)	-	(2 646)
Bad debts recovered	55 246	-	-	-	-	55 246
Funds utilised	(45 564)	(216 317)	(55 913)	-	(1 756 580)	(2 074 374)
Transfers	-	11 552	99 092	-	(110 644)	-
Currency valuations	-	-	422	-	79 170	79 592
Donor refunds	-	-	-	-	(61 558)	(61 558)
Balance at 31 Dec 2020	531 822	205 525	(32 915)	9 550	2 304 746	3 018 728
Contributions received	-	207 117	205 820	-	1 342 546	1 755 483
Plant and equipment additions	-	-	-	1 188	-	1 188
Amortisation of Capital grants	-	-	-	(3 038)	-	(3 038)
Funds utilised	(435)	(249 237)	(123 076)	-	(2 735 644)	(3 108 392)
Currency valuations	-	-	(739)	-	(48 239)	(48 978)
Donor refunds	-	-	-	-	(124 967)	(124 967)
Balance at 31 Dec 2021	531 387	163 405	49 090	7 700	738 442	1 490 024

Table 12 Statement of Cash Flows

	2021 USD	2020 USD
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net cash used in operations	(37 445)	(66 895)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of plant and equipment	(1 188)	(11 974)
CASH FLOWS FROM FINANCING ACTIVITIES:		
(Decrease)/increase in Reserve Fund	(435)	9 682
Decrease in Member States Contribution Fund	(42 120)	(4 455)
Increase in Administration Fund	82 005	210 369
(Decrease)/increase in Capital Grants	(1 850)	9 328
(Decrease)/increase in Programme Funds	(1 566 304)	1 606 588
Amortisation of Capital Grants	3 038	2 646
Net cash flows from financing activities	(1 525 666)	1 834 158
NET (DECREASE)/INCREASE IN CASH AND CASH EQUIVALENTS		
Cash and cash equivalents at the beginning of the period	3 068 953	1 313 838
Effect of exchange rate movements	-	(174)
CASH AND CASH EQUIVALENTS AT THE END OF PERIOD	1 504 654	3 068 953

3. KEY ACHIEVEMENTS BY THEMATIC AREA

This Section presents main achievements by Thematic Area in line with the approved 2021 Annual Work.

3.1 Thematic Area 1: Agricultural productivity and food and nutrition security

3.1.1 Technology generation and dissemination

CCARDESA is supporting technology generation and dissemination through the Agricultural Productivity for Southern Africa (APPSA) project. The project has two active technical components: 1) technology generation and dissemination; and 2) infrastructure and capacity development.

During the year, Scientists from Angola and Lesotho continued with the implementation of 8 research projects and completed the development of proposals for an additional 10 Research and Development (R&D) sub-projects, which will be commissioned in the first quarter of 2022. The two countries also managed to issue the first call for concept notes (CNs). From a total of 46 CNs that were received and went through an independent national and regional review process, 27 (14 from Angola and 13 from Lesotho) were recommended to proceed to full proposal development. Successful R&D proposals will be commissioned in 2022.

The project identified six technologies from the shelf for dissemination in Lesotho and seven in Angola. These technologies included three improved maize varieties and three common bean varieties in Lesotho, while in Angola, it was three improved varieties of maize and four of cassava.

The World Bank conducted two Implementation Support Missions for APPSA in May/June and November 2021. Both missions reviewed the overall progress of the project, compliance of fiduciary and safeguard policies. The Missions also provided technical and project management advice to improve on implementation.

The overall impression at the end of the November Mission was that considerable progress was achieved in 2021. However, as the project will be moving into year three of implementation in 2022, there is an urgent need to improve under component one - technology generation and dissemination. To this end, it was agreed that while Angola and Lesotho are still going through the full research cycle for technology generation, they should make an effort to disseminate the technologies that were generated during phase one of APPSA. The 2022 Annual Work Plan and Budget was developed in December 2021 through a results-based approach to factor in the above the ISM recommendations.

3.1.2 Investment in Agricultural Research

The Secretariat successfully completed a study on investment in agricultural research in the region. Its aim was to evaluate the level of investment in agricultural research and development, identify gaps and interventions needed to drive technological development and innovation in selected national and regional institutions of SADC countries.

The study noted that investments in AR4D are mainly from governments and have since declined due to change in national priorities which has been exacerbated by the COVID-19 pandemic. There is also limited investment from the private sector which is an untapped opportunity. The report will be used to establish trends on investments and capacities in agricultural research since 2016 to better inform strategic planning, policy formulation, priority setting benchmarking and measuring progress. Some of the recommendations include extensive resource mobilisation to support the implementation of AR4D programmes and private sector involvement across the value chain.

3.1.3 CCARDESA Partnerships in AR4D

CCARDESA is expected to bring together national, regional and European organisations to jointly plan, execute, evaluate and report on progress made in the implementation of its AR4D interventions in the region. A study to review CCARDESA's operational space and identify the most effective partnerships that CCARDESA needs was carried out during the year. As a follow up to this study, CCARDESA also developed the strategy and an action plan for partnerships. A policy brief was also developed on the partnerships.

3.2 Thematic Area 2: Resilience to emerging agricultural risks

Under this theme CCARDESA produced a number of outputs from the implementation of the planned activities.

- Climate smart initiatives (CSA) in the CAADP-XP4-participating countries have been mapped. The mapping exercise was meant to take stock of existing initiatives, projects/ networks in the region, the policies available, and the range of CSA relevant strategies that have been implemented in the past 5 years
- A Private Sector Engagement Strategy and Action Plan was developed during the year. This document will provide CCARDESA will relevant information to better engage with the private sector especially on issues related to climate-relevant interventions.
- Guidelines for mainstreaming climate science technology and innovation (STI) indicators into national agricultural investment plans (NAIPS) were produced to

facilitate the tracking efforts by countries to mainstream climate relevant research and development in their programmes, policies and actions.

- CCARDESA hosted a number of important webinars/scientific symposia which focused on specific topics of relevance to the research and development priorities of the region. Some were in relation to the emerging issues of climate change and resilience of farming systems, while others were related to trade. The key webinars/symposia held during the year are:
 1. Climate change and agricultural productivity – what have we achieved? Where do we go from here?
 2. Achieving sustainable forest management through research and development in SADC
 3. Scoping a future research agenda for agricultural greenhouse gases in Southern Africa
 4. Management of farm animal genetic resources under a changing climate. The role of animal genetic resources for food and agriculture under a changing climate.
 5. Futures of food in southern Africa - Webinar with University of Stellenbosch School of Business
 6. Regional Policy Dialogue on Cross-Border Trade in Agricultural Inputs and Commodities in the SADC Region
 7. Achievements of the APPSA Programme Since Inception

The outcomes from these webinars/symposia will form reference points for further work to be implemented in 2022.

3.3 Thematic Area 3: Commercialisation of the agricultural sector and market access

Commercialisation of agriculture is supported by various aspects within and outside the agricultural sector, including change of objectives by individual farmers. The Secretariat carried out training on foresighting, with emphasis on how to conduct the foresighting and how to interpret the results. A total of 237 people from 11 SADC countries were trained in the use of foresight tools. This will improve their planning, management, policy formulation and response to future changes/risks through a more proactive approach and anticipation of these changes.

The Secretariat completed a study which identified the key constraints to cross border trade. The findings were subjected to regional validation and consultation among experts on finding solutions. The proposed solutions to the constraints will form part of the activities for 2022.

3.4 Thematic Area 4: Women, youth and social inclusion

The Secretariat is implementing a project that aims at minimizing the impact of COVID-19 on the farmers. This is part of the efforts to assist, women, youths and vulnerable groups. The project was being implemented in Eswatini, Mozambique, Zambia and Zimbabwe. In 2022, there are plans to extend it to other 4 countries if resources permit. These projects are being implemented in communities by local partners, focusing mainly on production and marketing of agricultural commodities that can improve production during COVID-19 situation and assist with their recovery in the post-pandemic era.

Irrigation facilities were installed in the project areas in Mozambique, Zambia and Zimbabwe. This involved the sinking of boreholes as well as installation of field infrastructure facilities for irrigation. In Eswatini, greenhouses have been constructed with the support from the project funds and production of mushrooms has been increased. The local partner, Philani Maswati

Charity Organization, is currently producing mushrooms and establishing strategic partnerships with other organisations to access foreign markets.

All the countries are focusing on production of short season crops using improved technologies. Significant quantities of various vegetables have been produced and marketed in Mozambique, Zambia and Zimbabwe. In Eswatini, production has focused on mushrooms. There has been significant income generation as a result of this project.

3.5 Thematic Area 5: Knowledge and information management, communication and policy support

3.5.1 ICKM Update and trends 2018-2021

Knowledge and information management are considered to be essential components of an institution. Their development has to take place at the same pace as the technical elements of the organisation. In the reporting period under review, CCARDESA has successfully positioned itself as a “go-to” knowledge and information broker in the SADC region and beyond. CCARDESA’s impact in the region has been enhanced through the ICKM technical area which is done through a robust and up-to-date system for managing information and knowledge. The key highlights and trends are as follows:

CCARDESA Website, Facebook and Dgroups

Discussion groups: Figure 1 shows the performance of the Dgroups between 2018 and the third quarter of 2021. There were 3,473 participants in 2018, 3,688 in 2019, 4,054 in 2020 and 4,316 up to the third quarter of 2021. The graph shows steady increase of the numbers of D-Group users. Most of the users are from within Southern Africa (Figure 2).

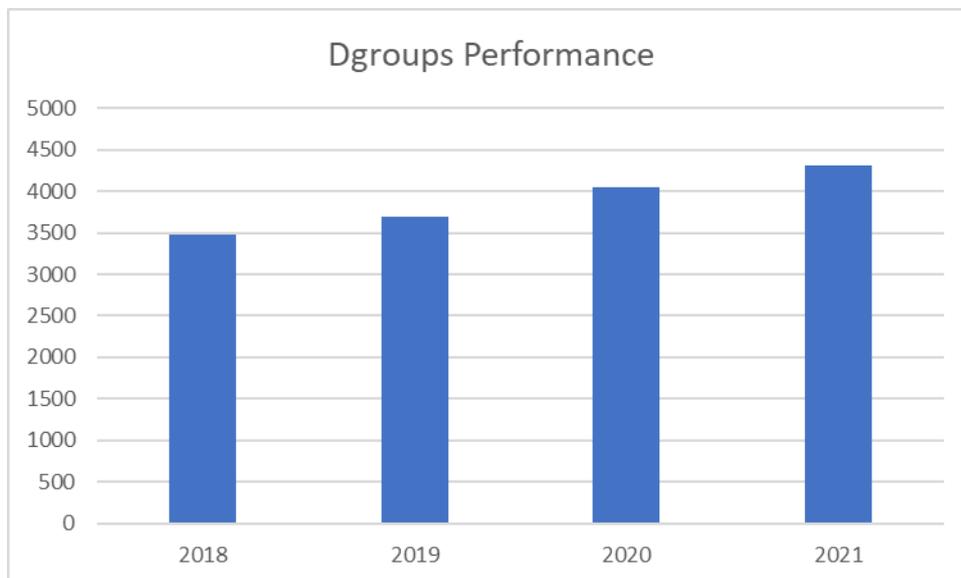


Figure 1: Trends in the use the CCARDESA Dgroups

The world map shows the countries where most members of the discussion group



originate.

Figure 2 Global distribution of CCARDESA Dgroup users

CCARDESA'S Facebook Performance

CCARDESA has significantly improved its visibility. 2,830 people currently follow CCARDESA on Facebook as compared to 2,790 in 2020. There is more increase anticipated as the 2021 data has only factored in 3 quarters. From Figure 3, one notes a steady progression from 2018, where there were 1,201 followers. The usage increased to 1716 and 2790 in 2019 and 2020, respectively.

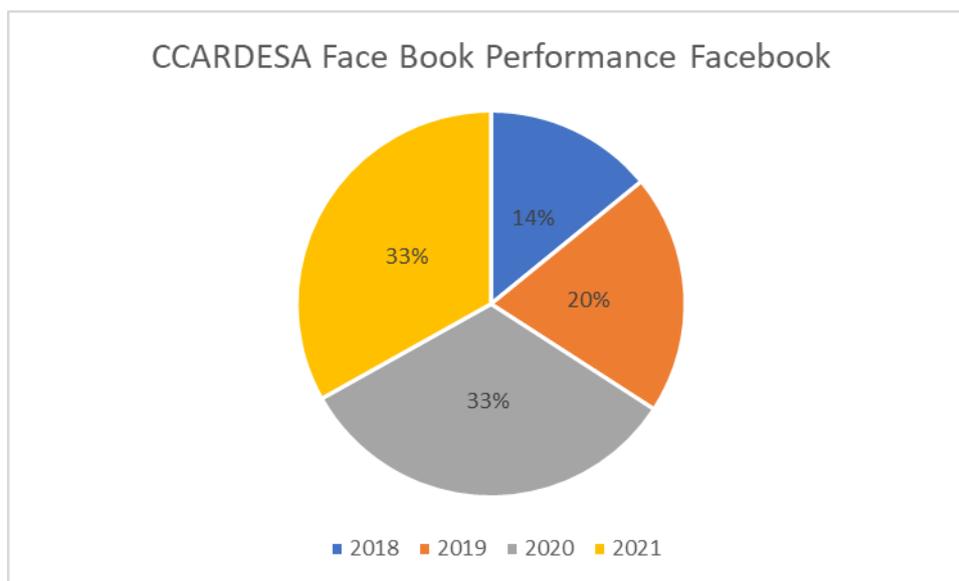


Figure 3 Trends in the performance of the CCARDESA Facebook (2018-2021)

CCARDESA Annual Website Users

CCARDESA has witnessed a steep increase in website users from 2018, where there were only 2,383 users, to 16,840 in 2019, and then almost doubled in 2020 to 34,200 (Figure 4). Website usage up to the third quarter of 2021 was 27,103. The final value for 2021 will be calculated after closure of the year.

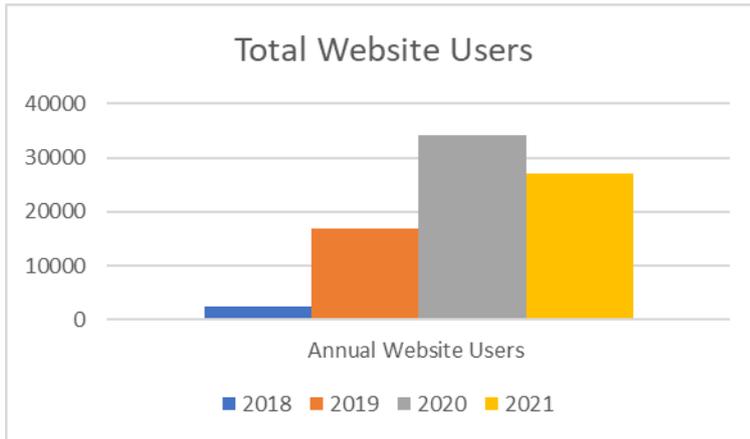


Figure 4 Trends in annual website users

News Items posted on the CCARDESA Website

CCARDESA uses latest news to further engage and inform its users. Figure 5 shows the total number of news items that were posted on the CCARDESA website for the past 4 years. In 2018, CCARDESA posted 13 news items, whereas in 2019, the number increased to 63, then in 2020 the number grew steadily to 67 and in 2021, the number stands at 55.

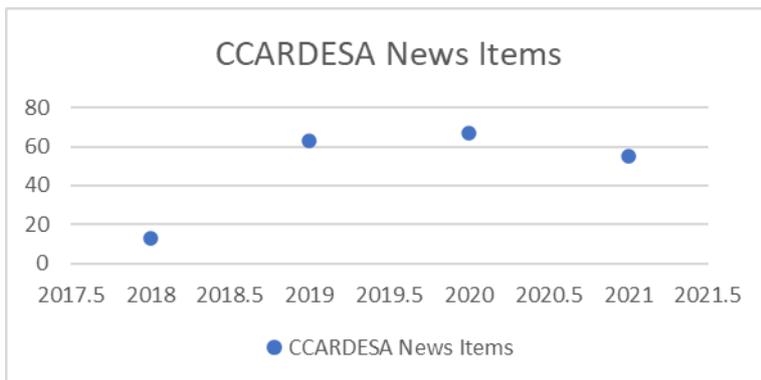


Figure 5 CCARDESA news items 2018 to 2021

Knowledge Products Download, Usage and users from the SAAIKS

CCARDESA has 868 knowledge products on the website. These can be downloaded and used for different purposes by the users. The most common users of the website include government agricultural researchers, government agricultural extension personnel, government policy advisers, and academia. During the period from 1st January to 31st September 2021, CCARDESA observed higher usage of 307 by other interest groups, 255 academia, 205 NGO staff, 152 government agricultural researchers followed by 61 government agricultural extension personnel, and lastly 56 government policy advisers. It is clear from the data that CCARDESA is meeting its target and mandate of research coordination on the website because the researchers are topping the list of users.

As the users download the documents from the system they also specify the purpose of the knowledge that they download. A total of 453 users indicated that they use the Knowledge products for research, 183 for other purposes, 135 for field extension, 112 for

policy development, 93 for academic purposes and 43 for national extension. From the above, one sees a correlation of the occupation of the user and the purpose of the document.

User satisfaction with the CCARDESA Content

CCARDESA also tracks its user satisfaction and during the period under review, 12 member states were satisfied with the content that they get on the website. There is also undisputable satisfaction from countries outside the SADC region (Figure 6).

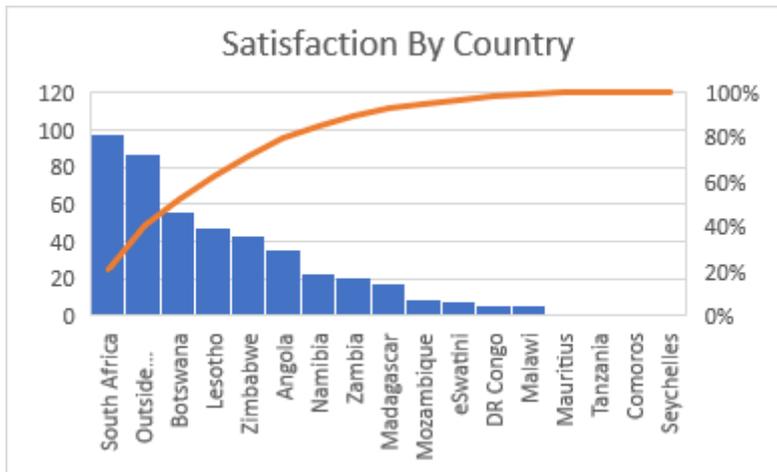


Figure 6 User satisfaction with content of CCARDESA knowledge products

CCARDESA UTube Users

CCARDESA UTube page is functional and has increased its visual knowledge products from 5 project videos in 2020 to 19 in 2021. This is a steep increase which is likely to continue going up as CCARDESA has put in place mechanisms of developing and collecting audio visual knowledge products from its member states and internal projects.

CCARDESA Mobile Application

The CCARDESA mobile App has increased its users from 140 last year to 212 in 2021. The country that is topping the list in terms of performance is Mozambique. The performance of Mozambique is attributed to the field trip of sensitizing extension staff about the mobile app. The three countries that follow Mozambique all received Mobile App trainings.

3.5.2 Development of information, communication & knowledge management strategy

ICKM is a key area of emphasis for CCARDESA, as it takes the role of an information broker in the region. The role of CCARDESA in the area of ICKM has grown significantly over the years. In the initial stages, the institution had a strategy that concentrated on establishing the ICKM within the CCARDESA Secretariat and making its components functional. This has been achieved. The new ICKM strategy now shifts towards building on the achievements of the initial phase to improve the delivery of service to stakeholders. The new strategy also aligns itself to the Long-term Strategy of CCARDESA and it is designed to be a catalyst to the milestones that have been outlined in the CCARDESA Strategy. Its main strategic intervention areas are:

- i. Strengthen and Maintain SAAIKS, ICKM System and Associated Infrastructure
- ii. Facilitate the Interoperability of Systems
- iii. Knowledge Translation into Interactive Radio Programmes
- iv. Strengthen e-Learning Solutions and Knowledge Exchange
- v. Optimise Media Engagements & Knowledge Brokerage Foras
- vi. Capacitate Stakeholders in Knowledge Management

The ICKM strategy has a monitoring framework for tracking progress and facilitate review of the actions where necessary.

3.6 Thematic Area 6: Capacity strengthening of CCARDESA and AR4D institutions

On capacity development, CCARDESA facilitated the training of scientists from Angola and Lesotho on proposal writing. Project staff from the two countries together with scientists were also trained on results-based monitoring and evaluation. Seven Scientists from Lesotho commenced their long-term training, two at Ph.D. level, four at MSc level and one at Bachelor's level. In Angola, nine Scientists are due to commence their long-term training in 2022, three at Ph.D. level and six at MSc level.

Considerable progress has also been registered in activities related to upgrading of research infrastructure, purchase of equipment, and establishment of Regional Centres of Leadership. Rehabilitation of office blocks, access roads, irrigation systems, purchase and installation of IT infrastructure and equipment to facilitate research continued in both countries during the second half of the year.

4. GOVERNANCE AND ACCOUNTABILITY

The key governance structures of CCARDESA met and carried out their mandates. The Ministers, who are convened through the SADC Secretariat, met in May 2021 and considered the issues of CCARDESA. The Board of Directors met in July and will meet again in December for their second meeting of the year. Decisions were taken at each of these meetings as part of their oversight duties.

CCARDESA convened the second General Assembly (GA) in June 2021, which was the second meeting of this governance structure since its establishment. Among other things, the GA endorsed the report of the Board Chairperson as well as the CCARDESA Strategic Plan.

At project level, various administrative and technical structures that provide guidance to the projects met. These include the Implementation Support Missions of the APPSA Project, and the Technical Committee and Technical Advisory Committee, both for the CAADP XP4 Project.

5. RESOURCE MOBILISATION AND PARTNERSHIPS

The efforts on resource mobilisation are guided by the resource mobilisation strategy and action plan. The Secretariat has reached out to a wide range of potential partners and held consultative meetings which focused on introducing and marketing the work of CCARDESA. The key output of these meetings was identification of partners that could serve as implementing partners and those that could be funding partners.

The Secretariat has significantly widened the horizon of funding and technical partners in the 2021 financial year. For example, contacts were made with the Swiss Development Cooperation, Bill & Melinda Gates Foundation and the World Vegetable Centre. The Secretariat developed a joint concept note with the World Vegetable Centre to conduct collection, conservation, and improvement of indigenous vegetables. The concept note emphasises on both conservation and use of these highly nutritious crops as a way of contributing to nutritional security in the SADC region.

Similarly, the Secretariat developed a proposal on the management of the African Red Locust. The proposal aims at assisting the region to manage the outbreak and control of the Locusts using modern technologies. Another proposal on the hosting of the monitoring of the Agricultural Science and Technology Indicators (ASTI) that was jointly prepared with the International Food Policy Research Institute (IFPRI) was submitted to USAID. CCARDESA is cooperating with several partners and the University of Turku in Finland to prepare a proposal on Morula and Baobab for submission to the Horizon EU Call. Table 1 shows the main proposals and concept notes developed during the year.

Table 1: Proposals and concept notes developed in 2021

	TITLE	PARTNERS	TYPE	TARGETED FUNDER
1	Scaling of innovations, evidence-based policy development and scaling of innovations.	RENAPRI	Concept Note	B & M Gates Foundation
2	Mitigating the impact of COVID-19 on food and nutrition security using Climate Smart Technologies in SADC Countries – Phase 2	SACREEE, GWP and SARUA	Proposal	EU through SADC
3	Vegetables for Nutrition and Food Security, and Livelihood Improvement in the Southern Africa Region (V4NFLI)	World Vegetable Centre	Concept Note	Open
4	African Migratory Locust (AML) in the SADC region: harnessing technological innovations for preparedness (early warning, response and mitigation) under climate change	FAO	Concept Note	IFAD
5	Agricultural Science and Technology Indicators (ASTI) in Southern Africa: better informing agricultural research policy and investment decisions through data, outreach, and capacity strengthening	IFPRI	Proposal	Unsolicited submission
6	BAORULA: Developing sustainable value chains to ensure and enhance the use of key underutilized Agroforestry species (Baobab and Marula) for food production and environmental resilience	Various stakeholders in Botswana, Namibia, Ghana and Burkina Faso.	Proposal	Horizon Europe (on-going)
7.	Climate-Natural Resources Management (C-NRM) Project	GIZ	Proposal complete and funding secured	German Government (Agreement about to be signed)

CCARDESA also established partnerships with the University of Stellenbosch, Centre for Agricultural Food Policy (CAFP) in Zimbabwe, Southern Africa Research and Documentation Centre (SARDC), Development of Smart Innovation Through Research in Agriculture (DeSIRA)-LIFT, FAO- Tropical Agricultural Platform (TAP), FAO Sub-Regional Office, Grow Africa and the CGIAR Research Programme on Climate Change, Agriculture and Food Security (CCFAS).

With some of these stakeholders, CCARDESA formalised the partnerships through signing Memoranda of Understanding (MoU) and hosted joint webinars on important regional issues. For example, MoUs were signed with CAFP, SARDC and University of Stellenbosch Faculty of AgriSciences. Joint webinars were also implemented with the Global Research Alliance for Greenhouse Gases in Agriculture (GRA), the African Union Inter-Africa Bureau for Animal Resources (AU-IBAR) and the Regional Network for Agricultural Policy Research Institutes (ReNAPRI). These deliberated on topical issues, which respectively covered climate change mitigation, animal genetic resources conservation and identification of barriers against cross border trade in the region. CCARDESA experts featured in several webinars hosted by various actors on various issues related to the Global Food Summit and the UN Climate Change Conference 2021.

The partnership with AFAAS, ASARECA, CORAF and FARA continued and grew stronger in the year especially under the CAADP XP4 Project. There are a number of joint activities that were successfully implemented. Besides the joint CAADP-XP4 Programme M&E review meetings, CCARDESA jointly implemented activities on CSA, Africa Foresight Academy, policy analysis training, ICKM, and development of strategy on private sector engagement. For the 2022 financial year, the project's five institutions will convene a joint planning meeting in December.

6 CHALLENGES

The impact of COVID-19 continued to affect the implementation of activities despite the measures that were taken. Most of the activities were implemented through online platforms such as Zoom and Teams. However, the participation was low in some cases due to poor network quality in Member States. Online implementation was also affected by delays in response by national stakeholders to requests from the Secretariat.

For the APPSA project, there were significant delays in Angola in establishing the Project Implementation Unit and fiduciary structures. Consequently, the progress of the entire project slowed down.

The human resource capacity at the Secretariat is limited. The workload is high but the staff have been making effort to deliver on the approved work plan.

6. CONCLUSION

Significant technical, managerial and corporate progress was made in 2021. Implementation of the activities in the work plan reached 75% by the end of the year despite the challenges posed by COVID-19 restrictions. Those not implemented will be carried forward to 2022. The challenge of manpower at the Secretariat still continue but the staff that are there have put in extra effort to achieve the outputs in this report.

7. PLANS FOR 2022

In 2022, the Secretariat will be implementing a combination of activities consisting of those carried forward from 2021 as well as a set of new activities. The 2022 Annual Work Plan has more than 70 activities, arranged in Thematic Areas as guided by the Strategic Plan. Most of the Activities fall under Thematic Areas 5 and 6. Illustrative activities planned for implementation under the six thematic area are as follows:

Thematic Area 1: Agricultural productivity and food and nutrition

- ✓ Develop joint response mechanisms to emerging technical and innovation issues
- ✓ Produce flagship publications on: Africa Status Report on research and innovation
- ✓ Develop technical documents to guide the implementation of best practices in R&D projects
- ✓ Facilitate scientific and exchange visits when required

Thematic Area 2: Resilience to emerging agricultural risks: environmental, climate change and transboundary pests and diseases

- ✓ Review, update and finalize existing inventory of Climate Smart Agriculture technologies
- ✓ Develop a SADC handbook on Climate Smart Agriculture technologies
- ✓ Establish irrigation systems and provide Climate Smart Agriculture inputs in model sites

Thematic Area 3: Commercialisation of the agricultural sector and market access

- ✓ Convene a Regional Private Sector Engagement Workshop
- ✓ Support participation of NARES in meetings on emerging issues at regional, continental and international level
- ✓ Provide technical support to national and regional organisations to strengthen capacity for quality control of agricultural inputs and products, to increase cross border trade
- ✓ Identify strategic partnerships/Strengthen linkages with value chain players

Thematic Area 4: Women, youth and social inclusion

- ✓ Produce best practice guidance notes based on experiences of the SROs

Thematic Area 5: Knowledge and information management, communication and policy support

- ✓ Undertake high level policy dialogues and strategic meetings
- ✓ Convene policy dialogues at regional and continental levels linking the outcomes from the various levels
- ✓ Develop and operationalise knowledge management strategies including guidelines for data capture at national, regional and continental level
- ✓ Develop ISO compliance standard for sharing information
- ✓ Increase awareness of available improved technologies in the region
- ✓ Develop and establish a progress and results monitoring database (MIS)
- ✓ Digitalisation Survey
- ✓ Develop CSA knowledge products

- ✓ Disseminate CSA knowledge products

Thematic Area 6: Capacity strengthening of CCARDESA and AR4D institutions

- ✓ Train country Stakeholders on resource mobilisation and management in conjunction with international experts
- ✓ Establish portals for funding opportunities and coordinate/facilitate the process of responding to calls together with AR4D actors
- ✓ Establish a fund for equitable support in proposal development including international expertise
- ✓ Customise existing MEL systems to ROM in collaboration with IFAD and EU partners (including development of KPIs & targets)
- ✓ External Audit
- ✓ Internal Audit
- ✓ Develop training materials for climate smart agriculture (CSA)
- ✓ Provide CSA trainings based on the needs assessment