

 <p>Food, Agriculture and Natural Resources (FANR) Directorate SADC Secretariat</p>	<p>Implementation and Coordination of Agricultural Research and Training in the SADC Region (ICART)</p>	 <p>European Union 9th EDF</p>
--	--	--

Back to Office Report

**Workshop on the Development of an Agricultural Information,
Communication and Knowledge Management (AICKM) strategy
in Agricultural Research & Development (AR&D) at national
level**

Victoria, Seychelles
22-24 March 2010

K.J. Bheenick

BACKGROUND INFORMATION:

A series of national workshops have been envisaged in the SADC Member States as part of the process to initiate reflection at national level on the need for developing strategies for Agricultural Information, Communication and Knowledge Management (AICKM). This follows a couple of regional workshops organised by the ICART project, where the SADC Network of Agricultural Information Managers had developed a method for carrying out these national workshops and provided some guidelines on the development of such strategies. The intention is to create awareness of the need to develop AICKM Strategies at National Level and eventually at Regional level.

Seychelles workshop:

The workshop held in Seychelles was the first in the series and was possible following data gathering that had been carried out by the local organizing team. The workshop was planned over 3 days, as per the attached programme. Attendance was consistently above 30 people throughout the 3 days.

The workshop was opened by Mr Antoine Moustache, CEO of the Seychelles Agricultural Agency. Following the presentations on the approach to agricultural information management at the SADC level, including the use of the AIMS portal, participants started the process of carrying out the stakeholders information needs assessment using the matrix designed for that purpose. The following day, the process of identifying components of the AICKM Strategy was started and on the final day, participants were able to have a first outline of the AICKM Strategy Document, which would be refined through follow-up meetings both using electronic means as well as face-to-face meetings.

The Seychelles Learning Team was structured and allocated responsibilities to its members to draft different parts of the document and post these on the discussion forum provided.

The documents attached to this report describe the programme and the outputs of the workshop.

Conclusions:

The meeting provided an opportunity to the ICART project to backstop the National Focal Point and members of the SADC ARD Information Managers Network in leading efforts to develop the national AICKM. Participants were able to better appreciate the roles of their institutions and themselves in the process of facilitating agricultural information exchange.

The discussion forum created for the Seychelles learning team is hosted on the AIMS portal. It can also be accessed at:

<http://dgroups.org/groups/SADC-AIMS/ARD/SEY-AIMS-LT>

Programme

Workshop on the Development of an Agricultural Information, Communication and Knowledge Management (AICKM) strategy in Agricultural Research & Development (AR&D) at national level

**22nd – 24th March 2010, CARE House, Training Room,
Victoria, Seychelles**

DAY 1	Monday 22nd March 2010
Opening Session	ITEM
08:30 – 09:00	Registration of participants
09: 00 – 09: 15	Welcoming remarks and Opening of the workshop by CEO Seychelles Agricultural Agency, Mr. Antoine Moustache
09: 15 – 09: 45	The SADC approach to Information, Communication and Knowledge Management in Agricultural Research & Development (Mr. Krishan Bheenick)
09:45 – 10:00	Tea Break
Session 1	<i>Presentation of the SADC AIMS portal and the AICKM Methodology</i>
10:00 – 10.15	Review of Workshop Objectives, Approach & Expected Outcomes – Mr Keven Nancy
10.15 – 11:00	The SADC Agricultural Information Management Information System (AIMS) and web based tools to facilitate networking and collaboration
11:00 – 11: 30	Establishment and functions of the Learning Team – Mr Keven Nancy
11: 30 – 12: 00	Methodology for the development of the AICKM Strategy – K Bheenick
12.00 – 12.30	Introduction of the use of the Information Needs Analysis matrix – Sandra Sinon
12:30 – 13:30	Lunch Break
Session 2	Assessment of Stakeholders Information Needs
13:30 – 14:45	Group work to review the context and content of the matrix. Stakeholders both as producers and users of information
14:45 – 15:00	Tea Break
15:00- 16:00	Group work continued
	End of day 1

DAY 2 <i>Tuesday 23rd March 2010</i>	
Session 3	Validation of Information Needs by Stakeholders
08:30 – 10:30	Plenary sessions to validate the completed matrix, to serve as the basis for communication and information exchange
10:30 – 10:45	Tea Break
Session 4	AICKM Strategy development
10:45 – 12:30	Review of the linkage between the matrix and the method for developing the AICKM Strategy; Creation of work groups to address parts of the AICKM Strategy
12:30 – 13.30	Lunch Break
13.30- 14.30	Group work on the AICKM strategy development
14.30 -14.45	Tea Break
14.45 -16.00	Continuation of group work; Drafting of AICKM sections by groups
	End of day 2

DAY 3 <i>Wednesday 24th March 2010</i>	
Session 5	Establishing the first draft of the AICKM Strategy
08.30- 10.30	Plenary on the 1 st draft of the AICKM Strategy; Identification of gaps
10.30 – 10.45	Tea Break
10.45 – 12.30	Further groupwork or Plenary on the 1 st draft of the AICKM Strategy
12.30 – 13.30	Lunch Break
Session 6	Planning and costing the implementation of the AICKM Strategy
13.30 – 14.30	Establishment of the write-up team: mode of operation of the to complete the process within an agreed schedule, Discussions on the means of implementation of the Strategy (short-term, medium term)
14.30 – 14.45	Tea Break
Session 7	Way forward to complete the AICKM Strategy Document
14:45 – 16:00	Presentation by each stakeholder of actions he/she will be undertaking to contribute to the conclusion of the draft national strategy. Facilitation by the electronic networking tools. Establishment of mechanism to endorse the draft strategy. Sharing of the draft document among stakeholders
16:00 – 16:15	Closing remarks by facilitator /SADC Secretariat and Mr. Moustache



SEYCHELLES AGRICULTURAL R&D STAKEHOLDERS INFORMATION NEEDS ASSESSMENT MATRIX

Stakeholder Group	Information Needs	Assessment	Priority	Recommendations
Smallholder Farmers	Market Information	High	High	Develop market extension services
Agribusinesses	Technical Support	Medium	Medium	Provide training and advisory services
Government	Policy Advice	Low	Low	Engage in policy dialogues
Academia	Research Collaboration	Medium	Medium	Establish research partnerships
Development Partners	Capacity Building	High	High	Implement capacity building programs

SEYCHELLES AICKM STRATEGY (Draft version 1)

INTRODUCTION

The idea of implementing an AICKM based system for the SADC region comes to an opportune time now that climate change issues and food security is the global talk.

There are many key government and NGO institutions, local and international that can join their effort together in the implementation of such important project.

For our local context, I suggest that the Seychelles Agricultural Agency (SAA), in great collaboration with the Department of Natural Resources, in the Ministry of Environment, Natural Resources and Transport (MENRT) which is also the parent Ministry of the SAA takes the lead.

WHAT IS AICKM?

- Planning, collecting, processing, validating, monitoring, evaluating AR&D information
- Managing agricultural information
- Agriculture based information network
- Sharing of agricultural information using effective communication
- Appropriate packaging of information for the end users
- Quality control of agricultural information
- Using ICT tools to achieve the agricultural information/knowledge sharing
- Feedback mechanism
- Easy access to agricultural information
- Dissemination of scientific information
- Gathering, Processing and sharing of information

WHY SHARE INFORMATION AND KNOWLEDGE

- To broaden existing knowledge
- To move forward
- To get new ideas
- To interact and get help when needed
- Make information flow easier
- Transparency: promote trust/collaboration between stakeholders
- Keep stakeholders informed on new developments in AR&D
- Producing quality products
- To better inform stakeholders
- To progress and develop the agricultural sector
- Innovation
- Promote new technologies in agriculture
- Promote new techniques in agriculture
- Collaboration between stakeholders for rapid response in emergency situations
- Promote stakeholders and public awareness

QUALITIES OF A KNOWLEDGE SHARING PLATFORM

The knowledge platform has to be:

- At a low cost or free
- Clear at all time
- Simple
- Accessible to all users
- Relevant to the people concerned
- Popular and user friendly
- Appropriate for issues of concern to beneficiaries
- Physical or virtual forum

BACKGROUND TO THE AICKM STRATEGY

POLICIES SUPPORTING AICKM AT REGIONAL AND NATIONAL LEVEL

- Policies related to fisheries and forestry should be consulted
- National policies
 - Agricultural development strategy 2009 – 2011
 - Food security strategy 2008 – 2011
 - National strategy
 - Seychelles strategy 2017
 - EMPS 2000 – 2010
- Supportive policies
 - Food act 1992 Ministry of Health (MoH)
 - Land registration act
- Other policies of national/regional and international partners
- Regional: COMESA, SADC, IOC
- International: FAO, IAEA, CTA, IFAP, IFAD
- Policies of local partners: SAA, NRD, Finance, NGO, Social Affairs, MoH, SFA, Environment

AICKM IN NATIONAL INSTITUTIONS IN RELATION TO AR&D (HOW IS AICKM REFLECTED IN POLICY OF THE INSTITUTIONS)

- Individual institutions must provide the policies/vision of the institution for assessment
- Stakeholders must provide information about AICKM inclusion to a focal point

WHO ARE THE STAKEHOLDERS OF AR&D

- Agricultural Extension Services, Research Unit, Farmers Association, SAA, NGO, media, METEO, schools (educational institutions), Public health department, input suppliers, NATCOF, DBS, SFA, DoE, District Administrator, SBS, SLA,NSB

CURRENT STATUS OF AICKM IN AR&D

- Lack of information sharing
- Research findings are not always shared to farmers and other stakeholders
- Some farmers are reluctant to use new technologies
- What is available, how is it being managed, are there success stories?
- What are the challenges faced?
- Media, e-mails, meetings
- Unpublished results of research, unprocessed raw data, indigenous knowledge of farmers
- Raw information
- Inventory to identify gaps

CURRENT CHALLENGES TO AICKM

- Lack of communication between stakeholders to share information
- To convince stakeholders to use the physical and/or visual forms
- Establish proper platform for AICKM
- Mainstreaming of AICKM concepts in the sector
- Lack of human resources, trained/skilled qualified in AICKM in AR&D

GOALS OF AICKM

- To set up an information platform that is accessible to all
- To set up a website for agricultural data analysis
- To make information more available through communication
- To encourage discovery and innovation through knowledge/information sharing in AR&D
- To have AICKM incorporated into all policy documents at all levels and for all sub-sectors of agriculture
- Enhance and promote the availability and accessibility of information for national food security
- Up-to-date info every month
- Improve food security through Knowledge and information sharing on AR&D

THE NEED FOR AN AICKM (OBJECTIVES)

- Provide platform for sharing knowledge
- Development strategy information and research
- Bringing the awareness on the use of AICKM

(Insert section typed up by Nada)

COMPONENTS OF THE AICKM STRATEGY

COMMUNICATION STRATEGY

- Communication should be quick, easy, simple, effective and on a regular basis
- Make AICKM available to the people who need the information
- Relevant stakeholders should be involved to strengthen AICKM
- Identify the target group
- Training on different use of communication media e.g web, internet applications
- Committed users and technical persons
- New and reliable peripheral components
- Having proper resources
- Access information via internet
- Website/monthly update
- More regular meetings
- Publish more leaflets
- Good physical hardware connectivity (network base)
- Good data storage and software application
- Organise meeting between management
- Use media to pass on information to public and stakeholders
- Generating and updating information
- Sharing information and giving feedback via e-mails
- Have talks/documentations on the media TV/radio
- Printing posters and newsletters for those who don't have networking systems

INFORMATION MANAGEMENT STRATEGY

- Access information by phones or SMS to and from Extension Officers and other organizations
- Update information every month
- Several computer terminals where you capture all information from different stakeholders
- Organise capacity building workshops on sharing information between different stakeholders
- Capacity building to develop website, networking etc
- Have a database on all information shared between different sectors or a library
- Have a directory on all stakeholders information on their address, phone number and e-mail address, and make it accessible to everyone who need it
- Define what kind of Information/knowledge we require relating to AR&D
- Define the format of how we present Information/knowledge
- It is important to know where we get the Information/knowledge
- Identify the target group for Information/knowledge
- Quality of Information/knowledge – how reliable and from reliable sources
- Accuracy of the information/knowledge
- Criteria for validating the knowledge
- Developing tools that help you sort/screening information/knowledge for different purpose
- Processing the information/knowledge so can be made readily available
- Means and ways of updating and upgrading information/knowledge itself and the system

KNOWLEDGE MANAGEMENT STRATEGY

- Define the format of how we present knowledge
- It is important to know where we get the knowledge
- Identify the target group for knowledge
- Quality of knowledge – how reliable and from reliable sources
- Accuracy of the information/knowledge
- Criteria for validating the knowledge
- Developing tools that help you sort/screening information/knowledge for different purpose
- Processing the information/knowledge so can be made readily available
- Means and ways of updating and upgrading information/knowledge itself and the system
- Add to/improve on the pool of knowledge
- Help stakeholders to improve on their services/products
- Improve on/adopt new skills, techniques and practices
- For professional development/capacity building
- Ensure uniformity standards are maintained
- Ensure continuity
- Knowledge should be shared – not keeping to oneself
- Knowledge acquired must be shared to stakeholders
- Use available technology to store and share knowledge
- Bring stakeholders together as a team
- How can stakeholder update it
- It can help users to know how much information they have in stock
- Closer interaction between users

INFORMATION NEEDS ASSESSMENT OF THE AR&D STAKEHOLDERS

Current status of knowledge:

- Traditional techniques
- New technologies
 - Shadehouse technology
 - Crop varieties and adaptability
 - Crop protection
 - Planting techniques
 - Effect of climate change on crops/livestock
 - Irrigation
 - Nutrition value of local crops and livestock
 - Drainage
 - Local fruit/vegetable biodiversity
 - Performance of animal breeds
 - Fertilisers/nutrient response to crops
 - Crop water requirements
 - Aspect of good quality
 - Marketing
 - Value addition
 - Packaging
 - Crop/livestock adaptability
 - GIS/Agricultural land
 - Leases/legal

- Financing and credit
- Statistics on export
- Biosecurity
- Quarantine
- Managing agricultural information
- Sanitary (SPS)
- Research results
 - Improved varieties
 - Resistance to pest and diseases
 - Better irrigation system
 - Marketing and trade
 - Outlets
 - Organisation management
 - Details on pest/disease
 - Introduction and spread and dispersal
 - Method of control
 - Monitoring/Evaluation
 - Control of pest/disease
 - Planting techniques
 - Fertilizer application
 - Research results
 - Trials results
 - Irrigation
 - Fertilizer recommendation
 - Soil fertility/Management
 - Awareness/progress/development/worrying/emergency response
- Stakeholders
 - Farmers, farmers association, public, SAA, media/METEO/nutrition, climatic data, local conditions, information on crop performance in different season, local crop grown, database on local crop consumed in Seychelles

Attitude towards AR&D

- Most stakeholders have a positive attitude towards AR&D
- Most feel there are barriers preventing them from getting information from AR&D
- The barriers are:
 - Lack of trust of some techniques
 - Lack of information sharing
 - Lack of communication both ways
 - Insufficient collaboration between stakeholders
 - The new techniques should be more practically demonstrated to farmers
 - Stakeholders willing to share information to improve on AR&D
- Current channels/mode of communication
 - Field visit, TV production, videos/online, phone/SMS
- Challenges faced to access of information
 - Lack of communication
 - Lack of trained personnel
 - Lack of internet facilities
 - Lack of availability of information
 - Lack of motivation from stakeholders
- Proposed actions/activities
 - Improve communication

Training more staff
Provide resources – human, financial, logistic, interactions, stakeholder
More information to the stakeholders
Incentives to provide information
Proper packaging of information
Mainstreaming AICKM into national strategy
Information should be available in different forms eg data, reports, illustrated

IMPLEMENTATION OF THE AICKM STRATEGY

ASSESSMENT OF EXISTING KNOWLEDGE SHARING PLATFORMS

- We must have the assessment standard or indicator
- The platform must have functions in order to collect, store, organize and dissemination of data/information
- Open access limited – free publishing
- Meet with the needs coming from different stakeholder and person with different levels of ICT tools and technology
- SADC – AIMS
 - Easy access
 - Open to public
 - Integrated function (ICT tools, spatial, non-spatial)
- SADC – AIMS
 - A successful platform
 - Knowledge sharing
 - Information communication
 - Access other physical platforms

EDUCATION AND AWARENESS PROGRAMMES

- Publish report
- Create user friendly portals and website and train stakeholders to use
- Leaflets, SMS, database, field visits, TV programs, radio presentation, dialogue, newspaper, newsletter, seminars workshops, TV spots
- Organise training for personnel
- Use media/organize forums
- Organise workshop/meeting
- Education using booklet
- Organise training based on the target group characteristics (what means to use)
- Field visit
- School programmes – quiz, public speaking
- Identify themes and timing of programmes

INFORMATION AND KNOWLEDGE EXCHANGE ACTIVITIES

- There should be regular meetings with stakeholders
- Advertisements – media, banners, buses, packagings
- Campaigns & promotions

- Personal research if enough interest is stimulated
- Field days, theme days, special events, exhibits
- Change in behaviour

MONITORING AND EVALUATION

- Based on feedback
- By survey
- Performance indicators – Define, scale, cost, benefits, time, indirect observation,
- Formative and summative evaluation
- Devise an evaluation tool – ways to give feedback

IMPACT ASSESSMENT

- Positive/negative impact on stakeholders
- Positive/negative impact in the local setting/context
- Positive/negative impact on regional scale

TIME FRAME

- 2 months for write-up

BUDGET

- Taking into account the advertisement cost, training, set up an office for information to farmers
- Budget on purchasing good, reliable equipments