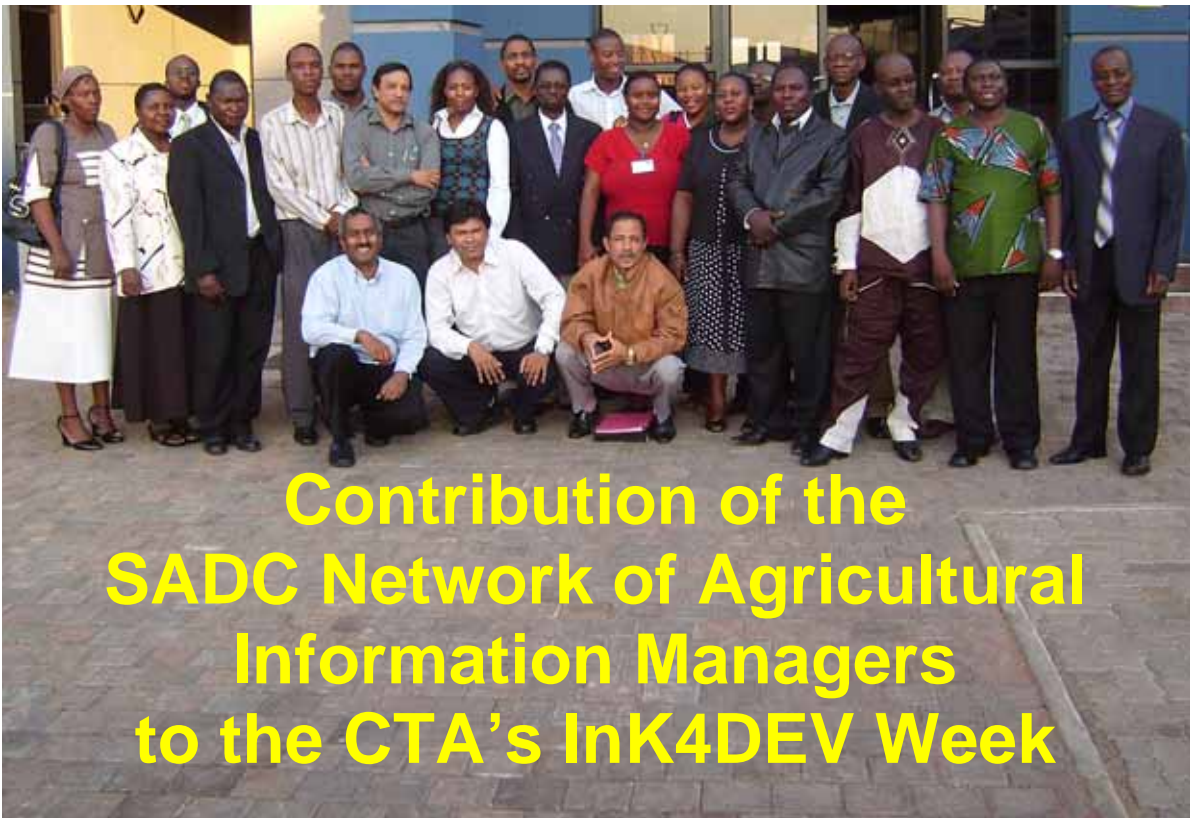




IMPLEMENTATION AND COORDINATION OF AGRICULTURAL RESEARCH AND TRAINING (ICART) IN THE SADC REGION



***Southern African Regional Meeting
9-13 Nov, 2009,
Windhoek, NAMIBIA***

*Extracts of the Proceedings of the ICART Regional Workshop on
Agricultural Information, Communication & Knowledge Management in
Agricultural Research and Development – 26-29 May 2009*

**9.0 SESSION 8 – Planning implementation of AICKM Strategy
Development by the Regional Network of Agric Information
Managers**

9.1 Finalising the outline of the handbook on developing an AICKM Strategy

Having reviewed the contents of the brainstorming sessions of the previous day and identified the gaps in the process, the participants spent some time adding subheadings and issues that needed to be addressed in the process of developing the AICKM Strategy. A specific session was then allocated to describing the contents of the AICKM Strategy document such that the guidelines provided in the proposed handbook would allow the group developing the strategy in a Member State or institution would have both an indication of the activities to be carried out as well as an idea of how the outcomes of the activities feed into the elaboration of the AICKM Strategy document.

By the end of the session, the participants were confident that they had a much clearer idea of the entire process and the kind of interaction that was required among the stakeholders during the process of developing the AICKM Strategy. The contribution of the national workshop to the overall approach was also discussed. The national workshop was a unique opportunity for the stakeholders of ARD at national level to finalise the Information Needs Assessment matrix such that all agreed on their roles in the process of information exchange and sharing. However, the national workshop should also try to go beyond establishing the information needs but also to start defining the framework of the AICKM Strategy. Thus, there would be a requirement for the AICKM Strategy development team to work on a plan during the national workshop or immediately following the workshop. It was generally agreed that all the teams from the Member States should collaborate on-line as far as possible through the tools they were exposed to. The intention would then be to combine the national AICKM strategies into a regional Strategic Plan for implementation, which will require the mobilization of funds at regional level.

However, the participants considered that starting work on the national AICKM Strategies and arriving at an advanced stage would already provide potential donors with an idea of the potential benefits of implementing such a strategy. The preparation of a regional draft strategy document by mid 2010, as was being proposed by the ICART project, would be ideal, but depended primarily on the ability of the Network to mobilise its resources to implement the activities in the development process during that time. The outcome of the brainstorming and plenary discussions on the process of developing the AICKM Strategy is provided in Box 6 (a)-(e)

Box 6 (a) – Outline of a SADC Handbook on developing an AICKM Strategy; (a) Preliminary contents and presentation of background information to the development of the AICKM Strategy

Title: SADC HANDBOOK ON DEVELOPING AN AICKM STRATEGY

Acknowledgement
Contributors

1. Background to the development of the AICKM Strategy

- Describe context: Policies in country
- National / Regional / International AR & D Vision
- Institutional objectives (broader than AICKM)
- Describe/Uncover current objectives of AICKM in the organisation (not of the strategy)
- Where are we in AICKM
 - Current status
 - Current practices in communication and knowledge management
 - Existing - Status / Etat des lieux
 - Available information not being used to a maximum to glue maximum output
 - Identification of gaps in Information and Knowledge
 - Challenges
 - What are the challenges you face
 - E.g. Information are scattered in offices, libraries, with no structure; are we working individually and not as a team?
 - Where do we want to go
 - Proper management of information so that it is available to respective target group (stakeholders)
 - To reach to all agricultural stakeholders
 - To obtain feedback from the stakeholders on the information we are providing
 - Identify milestones on what we want to achieve & when
 - Why an AICKM strategy
 - To improve service delivery
 - Enhance information flow
 - Improve skills among different stakeholders
 - To strengthen the farmers / research / extension linkage
 - Enhance technology transfer
 - Feeling the lack of a proper AICKM strategy
 - To formulate AICKM strategy vision

Box 6 (b) – Outline of a SADC Handbook on developing an AICKM Strategy; (b) Getting started with the development of the AICKM Strategy

2. Getting started

- To hold meeting with senior management after meetings like this(report back)
- Get management involved + buy in
- Have a meeting (or advocate) to create awareness among top management; senior management & key stakeholders
- Establish the importance of AICKM strategy to the institution
- Formulate objectives of AICKM (later to be validated with stakeholders)
- Make a preliminary inventory of available information management resources- ASSETS
- Establishing the core team
 - Seek support of senior management to get the team established (if needed)
 - Lookup to the departments or institutions that can be involved
 - To bring together human resources from within the different agricultural institutions/departments
 - Provide for representation of stakeholders on the team
- Identify stakeholders
 - Method developed in Sept 2008 workshop to identify and list stakeholders
 - Hold smaller meetings with stakeholders we know – get their buy in
 - Include representative of stakeholders on core team
 - Do a preliminary assessment of the modes of information transfer and the respective usefulness
- Preliminary assessment of available information
 - Identify existing technologies and sources of information
 - Assess format of available information
- Make a detailed assessment of the assets
 - Make an inventory of existing assets
 - Internet Access
 - Agric Databases
 - Publications
 - Availability of a multi disciplinary team
 - Trained personnel for AICKM
 - Face to face capacity building
 - Capacity building materials and resources
 - Established channels of communications
 - Availability of equipment (ICT tools and training infrastructure)
 - Connectivity infrastructure to enable electronic collaboration
- Planning the process for developing the strategy
 - Capacity building requirement
 - Building capacity of team members
 - Team-building
 - Capacity building in content management
 - Planning ICT resources requirement for the process
- Assess the requirement for additional resources
 - What could be done with what we have
 - Are there minimum requirements or benchmarks?
 - What more will need and how it will be financed
 - Potential sources of funds for activities & workshops

Box 6 (c) – Outline of a SADC Handbook on developing an AICKM Strategy; (c) Stakeholder Information Needs Analysis and its validation by stakeholders

3. Stakeholder information needs analysis

- Review CTA reports in SADC Member States on agricultural information needs assessment (2005, 2007-2009)
- List of basic information required to start strategy development
- Hold small meetings with stakeholders (stakeholders we know) for preliminary conceptualisation
- Draw a questionnaire to different stakeholders to assess their information needs, and/or
- Do a survey (RRA) to assess the modes of information transfer and the respective usefulness
- Data analysis from agriculture facilities and research institutions
- Data structuring and gap analysis
- Use workshop approach to bring all stakeholders together to review their information (*September 2008 method*)*
 - Select workshop participants
 - Stakeholders network
 - To organise workshop venues
 - Complete data gathering and gap analysis
 - Carry out SWOT analysis
 - Training needs assessment
 - Define list of information & communication management activities related to each information requirement

** Extracts of the proceedings of the ICART Workshop held in September 2008 describing the approach to the identification of Stakeholders and the approach to the Information Needs Assessment are provided in **Appendix 4***

Box 6 (d) – Outline of a SADC Handbook on developing an AICKM Strategy; (d) Further analysis of information gathered on the context of AICKM Strategy development and Needs Assessment

4. Strategy development – Analysis

- Core team to identify institutions that can assist with strategy development
- Expand Core team to Strategy Development Team
- Continue awareness campaign with senior management
- Continue awareness of local stakeholders
- Develop and maintain inventory of ICT tools / channels
 - What is the current status of connectivity in the country (telephony, internet)
 - What is the current status of internet connectivity to Agricultural R&D institutions in the country
 - What is the status of ICT infrastructure within each Agricultural R&D institution in the country
- Document results of the Stakeholders Needs Assessments as the starting point to Strategy development
- Compile lists of activities related to each information requirement
- We have a proper analysis to feed the AICKM strategy when we have documented answers to the following questions:
 - What knowledge we have in hand (available and accessible)
 - What information & knowledge can we supply
 - What additional information & knowledge do we need
 - What information & knowledge is not available
- Ensure we have addressed and included all elements of IMS; CMS & KMS:
 - Develop a checklist for each and document how these have been addressed
 - IM Strategy (examples)
 - Information needs assessment of stakeholders
 - Document information available from different sources
 - Document which information needs to be generated from available data
 - Responsibility for generating and updating information
 - To develop an action plan for data gathering and information generation
 - Ensuring quality of information content
 - What information is not available and measures to solve the problem
 - Communication Management Strategy (examples of issues)
 - Analyse communication channels and pathways (SWOT)
 - Inventory of and development of ICT tools
 - Selection of appropriate communications tools
 - Feedback mechanism and mechanism for response to feedback
 - Knowledge management strategy (Examples of issues)
 - Define knowledge
 - Objectives of sharing the knowledge
 - Develop an inventory of Information Management & Analysis tools
 - Describe the current and proposed knowledge base
 - Type and quality of knowledge
 - Adapting know how to the local context
 - Upscaling and reaching many stakeholders
 - Identify a suitable (or design & develop a) knowledge sharing platform
 - Method for knowledge exchange between Member States

5. Strategy development – Drafting the AICKM Strategy and Action Plan

- Formulate a plan for action / implementation
- Identify institutions that can take on responsibility of implementation of AICKM activities
 - Define / clarify responsibilities and roles of different actors
 - Planning the implementation scenarios
 - Assess the feasibility of implementation options
- Time frame for implementation
 - Phases of information delivery
 - Timing of information delivery
 - Phases of implementation
 - Schedule the activities
- Define milestones for implementation
- Incorporate Monitoring and Evaluation
 - Define list of activities related to each information requirement
 - Simple indicators such as number of events, information items posted on websites
 - Monitor who establishes an AICKM Strategy and its implementation
 - Develop method for monitoring and evaluation
 - Formulate monitoring and evaluation tools
 - External evaluation of the process
 - Impact assessment methods for future assessments
- Document the AICKM Strategy
 - Communication management strategy components
 - Information management strategy components
 - Knowledge management strategy components
 - Compilation into a master document (online collaboration possible)
- Contents of the AICKM Strategy Document
 - Define AICKM but especially knowledge as the ultimate product
 - Objectives of sharing the knowledge
 - Qualities of the knowledge sharing platform
 - Contextualising the AICKM Strategy: Background to development of strategy (Part 1)
 - The process of developing the AICKM Strategy – getting started (Part 2)
 - Information Needs Assessment of the ARD stakeholders (Part 3)
 - Analysis of the AICKM and development of the strategy (Part 4(a))
 - ICT Inventory
 - Information & knowledge product development
 - Components of the AICKM Strategy (Part 4(b))
 - AICKM made up of IMS, CMS & KMS components
 - Proposed phased implementation based on the current context
 - Implementation prospects for knowledge exchange
 - Type and quality of knowledge requirements
 - Assessment of existing knowledge sharing platform (e.g. AIMS)
 - Broad activities related to information & knowledge exchange
 - Adapting knowhow to the local context
 - Method for knowledge exchange between Member States
 - Monitoring and Evaluation of the process
 - Risk analysis
 - Education and awareness programmes
 - Impact assessment
 - Conclusion and recommendations for adoption of AICKM Strategy

Box 6 (f) – Outline of a SADC Handbook on developing an AICKM Strategy; (f) Starting off the implementation of the AICKM Strategy

6. Starting the implementation process

(some aspects may be concurrent with Strategy development)

- Dissemination of AICKM documents to stakeholders
- National workshops to sensitise stakeholders and senior managers
- Creation of awareness to local stakeholders
- Continuous feedback mechanism to assess if we are doing the right thing
- Mobilise financial, material and human resources for various activities
- Mobilise resources for meeting
- Conduct capacity building workshops on knowledge sharing
- Adopt platform for information exchange
- Procure computers and accessories for information storage
- Communicate outcomes of evaluation process
- Carry out studies on Impact and adoption of knowledge management systems

APPENDIX 4 – Extracts of the ICART Workshop on the development of an information exchange platform on AR&D – September 2008

Identification of stakeholders:

The discussions brought out the fact that some types of organisations, such as governmental, financial, regional and international cooperating organisations and some private sector organisations, often play a role as process facilitators with respect to each category of stakeholders. Thus, such organisations have to be identified at every level and included as a stakeholder & facilitator in the communication and knowledge management process.

Table 1: Stakeholders of agricultural information exchange

Stakeholder Category	Stakeholders	
Farmers and their Associations	<ul style="list-style-type: none"> -Traditional leaders -Community leaders -Farmer Unions/Assoc. -Associations/Cooperatives. -Faith-based orgs -Labour unions -Commodity-based orgs 	<ul style="list-style-type: none"> -Government institutions -Private sector institutions -Financial institutions -Regional & International institutions -Donors and Cooperating Partners
Extension/ Technical Advisory Services	<ul style="list-style-type: none"> -Traditional leaders -NGOs -Faith based orgs -Media organizations -Training providers -Tertiary education institutions -Commodity-based orgs 	<ul style="list-style-type: none"> -Government institutions -Private sector institutions -Financial institutions -Regional & International institutions -Donors and Cooperating Partners
Market intermediaries	<ul style="list-style-type: none"> -Input Suppliers -Marketing orgs -Traders & Assoc. -Transport providers -Commodity-based orgs 	<ul style="list-style-type: none"> -Government institutions -Private sector institutions -Financial institutions -Regional & International institutions -Donors and Cooperating Partners
Processors	<ul style="list-style-type: none"> -Small & Medium Enterprises - Associations/Coops -Commodity-based orgs 	<ul style="list-style-type: none"> -Government institutions -Private sector institutions -Financial institutions -Regional & International institutions -Donors and Cooperating Partners
Consumers and their Associations	<ul style="list-style-type: none"> Consumers Consumer groups/assoc. Media organisations 	<ul style="list-style-type: none"> -Government institutions -Private sector institutions -Financial institutions -Regional & International institutions -Donors and Cooperating Partners
Researchers	<ul style="list-style-type: none"> -Scientific/Disciplinary networks/institutions -Tertiary education institutions 	<ul style="list-style-type: none"> -Government institutions -Private sector institutions -Financial institutions -Regional & International institutions -Donors and Cooperating Partners
Policy makers	<ul style="list-style-type: none"> -Traditional leaders -Politicians - Administrators -Consumer associations -Commodity-based orgs 	<ul style="list-style-type: none"> -Government institutions -Private sector institutions -Financial institutions -Regional & International institutions -Donors and Cooperating Partners

Proposed method for the development of an agricultural information, communication and knowledge management strategy

Introduction:

The method being developed is proposed as a generic approach that can be applied to the analysis of information exchange on any theme. While the example used in this workshop is Agricultural Research and Development, it is expected that the method could apply to specific scientific or disciplinary themes, or even locality-based theme (district, province, national, regional).

8.1.1 Phase 1: Planning phase

The first step in the process is to identify the theme on which information exchange is being considered: in this case “Agricultural Research and Development”. The analysis can be seen either from a regional perspective or a national perspective. Therefore, all the questions to be addressed in the stakeholders’ information needs analysis matrix need to be expressed containing the above theme in order to maintain the thematic focus at all times.

The background to the analysis of agricultural information exchange should be informed by and grounded in policy documents. Thus policy documents of the countries or region should be scanned for references to aspects of Agricultural Research and Development. Once the policy document scan has been carried out, the intended purpose of information exchange on A R&D should be clearly formulated and linked to the contemporary stated policies. Sources of policy documents will include Ministries of Food, Agriculture, Natural Resources, Environment, Information Technology, Trade, Rural Development and Regional Cooperation, as well as public and private institutions associated with these Ministries. Note that ‘Agriculture’ is interpreted in the broad sense and includes sectors such as fisheries, forestry, livestock, food security etc. The definition of the FAO of ‘Agriculture can be used a reference.

The goal and purpose of the AICKM should be stated as grounded in the contents of the policy documents. Objectives of the AICKM may also be formulated, based on the expectations described in the policy documents. These objectives may have different timeframes.

Stakeholder identification should follow, based on the stated theme and geographical scope of information exchange being considered. The participants proposed that the list of stakeholders as presented in Table 1 be used to identify the stakeholders pertaining to the theme.

8.1.2 Phase 2: Stakeholder information needs assessments

The participants assessed the ‘Knowledge Management Matrix’ discussed at the ICART Stakeholders’ Assembly. The matrix was subsequently modified to take on board their suggestions. The discussions on the items to be represented in the columns continued beyond the workshop and the facilitator has incorporated the final layout in the new proposed matrix (Table 2).

Table 2. Proposed Information, Communication and Knowledge Management Matrix for Stakeholder’s Information Needs Assessment

INFORMATION THEME ANALYSIS [A R&D]	Stakeholder Identified by Type and Name	Current status (Stocktaking)				Information definition and packaging				Challenges and formulation of corrective actions				
		Current status of knowledge on AR&D (what do they know) Contribution	what knowledge can the stakeholder contribute on (AR&D)	Current attitude towards AR&D	Current practices channels/mode/of comm. & KM on AR&D	WHAT what are their information needs on AR&D	WHY why do they need that information on AR&D	BY WHOM Who could provide this information on AR&D	HOW what channels of communication to use to provide info on AR&D	Challenges faced to access the information	Challenges faced to make the information available	Proposed actions/activities to overcome constraints	Timeframe for activities	Activities Budget
Farmers and their Associations														
Extension/ Technical Advisory Services														
Market intermediaries														
Processors														
Consumers and their Associations														
Researchers														
Policy makers														

For each of the identified stakeholder, the following questions have to be addressed:

Current Status of Communication and Knowledge Management:

1. Current status of knowledge on AR&D (what do they know)
2. Contribution
what knowledge can the stakeholder contribute on (AR&D)
3. Current attitude towards AR&D
4. Current practices
Channels/mode/of comm. & KM on AR&D

Definition of information needs and appropriate packaging:

5. WHAT
What are their information needs on AR&D
6. WHY
Why do they need that information on AR&D
7. BY WHOM
Who could provide this information on AR&D
8. HOW
What channels of communication to use to provide info on AR&D

Challenges and proposed action plan

9. Challenges faced to access the information
10. Challenges faced to make the information available
11. Proposed actions/activities to overcome constraints
12. Timeframe for activities
13. Activities Budget

Although the matrix is now enlarged to represent a number of issues that have to be considered for the information needs of each stakeholder, it does not necessarily have to be completed in a single attempt, but allows for the assessment and analysis to be presented to a forum, whereby all the information is presented to the audience. Thus one could split the process based on the time available for consultation.

One of the initial steps could involve taking stock of the situation, whereby stakeholders participate in the process of defining their current status of knowledge and practices, while also determining how they can also contribute to the generation of information and knowledge on the particular theme.

A second step in this process would be to identify the information requirements, in as much detail as time allows, such that the stakeholder can define as clearly as possible the information required, the format in which it is expected and who they consider should provide such information.

The above steps could also be carried out by the stakeholders prior to their arrival at a workshop, whereby a compiled version is made available to the stakeholders as material for discussion. Having completed the first two steps as described above, another exercise that can be carried out is to counter check the information expected from one stakeholders (or category of stakeholders) against those they state as their contribution. Such comparisons may help the parties involved in information exchange to improve their understanding of the demand and

supply of the information. Furthermore, it may also be useful to establish the lists of information contributed by each stakeholder and their corresponding users of information (mapping the information networks of stakeholders). It may be expected that each stakeholder listed on the matrix should find itself both a producer of information and a user of information. Such exercises would strengthen the appreciation of the interdependency of the stakeholders with respect to the theme.

The third step which would ideally be carried out after some cross-analysis of the information needs and sources of information is to address the challenges faced both in generating and making information available and in gaining access to the information. Such a exercise is most suitable to a workshop format, whereby the stakeholders may share their views on the challenges and solutions can be formulated jointly. In this section, the expected timeframe and associated budgets for the proposed activities would be discussed and realistic objectives established for implementation.

The matrix itself may be stored in electronic format and made available as a working document for the community – the matrix may continuously be updated with more details of the information needs as they arise, and enable the stakeholders to continue the discussion through electronic means. Regular face to face meetings or workshops may be organised to refine the matrix and action plan.

8.1.3 Phase 3: Formulation of the AICKM strategy document

The third phase of the process is to develop the AICKM strategy, based on the issues captured in the matrix. Following the definition of the purpose of information exchange, linked to policy documents, the objectives of the communication strategy with the identified stakeholders can then be formulated. The contents of the matrix would then provide the elements that make up the strategy and implementation plan. Some of the issues that may be documented as part of the AICKM strategy may include the following:

- Current practices in communication and knowledge management
- Information needs identified
- Information exchange gap analysis and SWOT analysis
- Communication objectives
- Packaging of information and messages and channels of communication
- Advocacy strategies
- Implementation responsibilities
- Monitoring and evaluation and feedback mechanisms
- Action plan
- Budget and timeframe

8.1.4 Phase 4: Implementation of strategy and periodic review

Following the formulation of the AICKM strategy, the implementation process may start almost immediately as some aspects of the strategy may not require additional resources than already available. Other aspects of the action plan, which require financial and logistical resources will obviously need to wait for these to become available. Thus the participants felt that the work can already be initiated on the planning aspects of implementation, as well as making use of the existing tools for information exchange, such as the AIMS portal. This is especially applicable to those having connectivity to the web from their institutions.

Thus participants listed examples of various planning activities that could be carried out, while waiting for resources to become available for implementation of activities:

Planning activities that can be carried out with little additional resources:

- Development of advocacy materials and tools
- Awareness creation and advocacy for information generation and sharing among local stakeholders
- Generation of information and knowledge at local level
- Identification or development of training materials
- Data gathering at local level
- Capacity building among peers or online through networking
- Development and improvement of AICKM tools
- Elaboration of the M&E strategy and feedback mechanisms
- Participation in and facilitation of online discussions
- Provide already available communication tools to stakeholders
- Updating of existing information & knowledge
- Review of emerging ICT tools for practical applications in the AICKM strategy implementation
- Participatory process of developing the implementation plan for the AICKM and contribution to the implementation of complementary initiatives

Activities that require additional resources:

- Development of ICT tools
- Face to face capacity building
- Meetings for awareness creation and workshops on methodology, skills development, sharing of experiences
- Data gathering highlighted in gap analysis
- Content development and packaging
- Communication and dissemination of information and knowledge products (print, radio, TV etc.)

Throughout the implementation phase, means of ensuring sustainability of the system will have to be sought. Similarly, the progress in implementation will have to be assessed and the implementation plan reviewed.