User's Manual

Information and Communication Management Strategy Development

A Toolkit for Agricultural and Rural Development Organisations

CTA

About CTA
The Technical Centre for Agricultural and Rural Cooperation (CTA) is a joint international institution of the African, Caribbean and Pacific (ACP) Group of States and the European Union (EU). Its mission is to advance food and nutritional security, increase prosperity and encourage sound natural resource management in ACP countries. It provides access to information and knowledge, facilitates policy dialogue and strengthens the capacity of agricultural and rural development institutions and communities. CTA operates under the framework of the Cotonou Agreement and is funded by the EU. For more information on CTA visit www.cta.int or contact:

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Foreword

Providing access to information and knowledge that allow organisations and individuals to fully engage in agricultural and rural development activities in African, Caribbean and Pacific (ACP) countries has been the hallmark of CTA's work.

This publication responds to the increasing need for organisations to think and plan strategically about managing and using their information and knowledge resources in an efficient and effective manner. Lack of strategy for information and knowledge management was identified as a major gap when CTA conducted a series of needs assessment studies across the ACP regions to gain an insight into the needs and capacities of various actors in the agricultural and rural development sector. Further gaps were observed due to lack of information sharing and dissemination approaches within institutions, making it difficult for organisations to learn lessons from past practices and effectively plan, monitor, and evaluate their activities. The studies covered hundreds of agricultural and rural development (ARD) institutions and consultations were held with senior policy-makers and planners from a wide cross-section of institutions. The need to help organisations develop and implement an information and communication management (ICM) strategy emerged as the top priority, which bodes well with CTA's current emphasis on integrating knowledge management (KM) with ICM, as reflected in its new strategic plan.

Based on a thorough review of what had been done in this area, CTA embarked on the development of two publications – a Facilitator's guide and a *User's manual* – in collaboration with ICM and KM practitioners. The exercise involved writing, organising regional methodology validation and training of trainers workshops in the Caribbean, Pacific, Southern, West and Eastern Africa. The manuals are the output of a highly collaborative and consultative process aimed at filling a clearly identified need.

The manuals stress the importance of teamwork, consultation and getting the buy-in of all stakeholders who will be affected by and involved in the actual crafting of the ICKM strategy. They examine implementation, monitoring and evaluation issues with useful tips and tricks. Users of the manuals are also encouraged to refer to the CTA/KIT/IICD publication *Smart Toolkit for Evaluating Information Projects, Products and Services* for more tools and useful insights in this area. ARD organisations are encouraged to work together to develop their information and communication management (ICM) strategy and in doing so, share their information resources and experiences.

CTA welcomes any feedback on these manuals as well as experiences in using them for strategy development in ARD organisations. Please send your comments to: cta@cta.int.

Michael Hailu
Director, CTA

Acknowledgements

When this journey began on a cold winter's day in December 2003, no one could have imagined the numerous twists and turns that would be taken to arrive at the end products we have today. The Information and Communication Management Strategy Development "Facilitator´s Guide" and "User´s Manual", are the result of a huge collaborative undertaking spanning Africa, the Caribbean and Pacific regions, involving hundreds of senior policy makers, planners and information practitioners in agriculture and rural development.

On behalf of CTA, I would like to take this opportunity to thank: all the participants in the needs assessment studies, priority-setting exercises and regional workshops for giving of their time and providing useful insights and feedback; the peer reviewers for providing the academic tempered with practical experience-based suggestions and recommendations to improve the documents; RUFORUM for providing the requisite pedagogical expertise; and, last but by no means least, the authors who toiled relentlessly and diligently to ensure a high quality and extremely relevant output. I would also like to express my thanks to the management of CTA for their continuous and steadfast support throughout this process.

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Barbara Gumbs is a professional information management specialist. She acquired her experience at the Caribbean Industrial Research Institute, Trinidad and Tobago where she worked for twenty-one years as an information specialist and as Head of the Technology Information Service. During this period she led several projects that focused on industrial, agricultural and environmental information management. These projects were funded by the Organization of American States (OAS), IDRC (International Development Research Centre, Canada), UNESCO and Caribbean regional and private sector organisations. After her retirement she continued to work as an information management consultant. Barbara is the Regional Coordinator for the Caribbean needs assessment and follow-up studies administered by CTA. She has presented several papers at regional and international conferences.

Preface

Since 2003, the Technical Centre for Rural and Agricultural Cooperation (CTA) has conducted a series of needs assessment studies, workshops and priority-setting activities in over 34 countries covering the African, Caribbean and Pacific regions. Several hundred senior policy makers, planners, information professionals and decision makers from a cross-section of agricultural and rural development organisations participated in these activities. These interactions highlighted deficiencies in the area of information sharing, information dissemination, and information management.

One of the ways in which CTA has responded to these needs is in the preparation of two practical tools – a facilitator's guide and a user's manual. The intended target audience for the user's manual are those individuals who are responsible for leading the development of an information and communication management strategy in organisations in the agricultural sector. These users are predominantly senior managers, senior staff members or subject specialists, all of whom are expected to have a thorough knowledge and appreciation of the importance of information in the execution of organisational goals. In instances where a consultant is contracted to develop an organisation's ICM strategy, the staff member who is assigned to oversee the process may use this user manual as a resource.

Module

1

Introduction

Importance of ICM

This user's manual assumes that there is an overarching national agricultural policy. Such a policy informs the mission, direction or mandate of organisations, both large government organisations, such as government ministries and small non-governmental organisations (NGOs) that comprise a national agricultural sector. A national agricultural policy can be explicit – as in a stated government manifesto, white paper or other document, or the policy can be implicit – inferred from speeches delivered by representatives from ministries of agriculture, planning, finance or from other ministries over the course of time. National agricultural policies shape the vision of an organisation and influence its future strategic direction. Agricultural policies and ICM strategy are intertwined in a continuous iterative feedback loop of – definition, implementation, monitoring, assessment, adjustment and redefinition. At each point in the loop, assessment, adjustment and redefinition can be done. Consequently an ICM strategy is not "cast in stone" and should be revisited, as new or revised agricultural policies are formulated, as new information needs are recognised and as technology and global developments influence the local economy.

This user's manual aims *to guide a team leader through the development of an ICM strategy document for an agricultural organisation*. An appreciation of the concept of information and communication management and the importance of formulating, implementing and monitoring an information and communication management strategy to achieve organisational goals is a prerequisite for leading the development of an ICM strategy document. A brief discussion of these concepts is presented below.

1.1 Information and communication management (ICM)

Data and information can be found in both electronic and hard copy formats in any organisation. Examples of the formats in which information is available range from computer databases and files, paper reports, instructional videos that accompany operational manuals and procedures to audio recordings of lectures and meetings. The use of information and communication technologies (ICTs) facilitates access to these types of formats through shared computer networks within an organisation and externally through networks in the public domain. Examples of ICTs in the dissemination of information include: computers, tablets, mobile phones, radios, televisions and satellite systems. Information is generated in all departments as part of designated work programmes, for example, personnel, finance, research, marketing, computer, and public relations departments. Therefore information in an organisation is not limited to the holdings of the library, information resource centre, record management centre or computer centre. It is imperative to have a holistic view of information as both an organisational resource and as a valuable asset.

As a resource, information (i.e. raw data, content in reports, oral advice or ICTs) is required for decision making at all levels. It must be perceived to be as valuable to an organisation as its finances, its personnel, its plant and machinery and its clients. This perception is reflected in how an organisation manages its information and information infrastructure e.g. appointment of custodians of information who are responsible *inter alia* for its generation, transformation into usable formats, dissemination and security. "Top management's" perceived value of an organisation's information assets are indicated by its response to information needs, accountability demanded of custodians, provision of adequate funding, the availability and accessibility of a documented information strategy, as well as the level at which the information department is located in the organisation chart (compared to other assets in the organisation).

Resources and assets require the use of management principles if organisation goals and mandates are to be achieved. This statement also applies to information and communication resources and assets. Information and communication management must therefore include the management of information as well as the management of information and communication technology. Information and communication management (ICM) is therefore a "multidisciplinary concept or practice spanning four main disciplines – information technology, information management, communication and management – to improve the use of information in [an] organisation and the society at large".[1] The concept of ICM is taken a step further by Horton[2] when he highlights the following five guiding principles identified by many organisations as the foundation for strategic information management:

1 Information holdings and information technologies are major assets of the [organisation] and must be managed accordingly;

2 Information investments should be made only in support of the [organisation's] mandates, goals and objectives;

3 The line and staff managers, and employees in the different departments of the [organisation] are custodians of the information they use, and, as such, they have a major responsibility within corporate constraints to use the information effectively and efficiently, and to share it both internally and with various client groups [or stakeholders];

4 End-users are accountable for the planning, management and control of the information they collect, produce, process and store, deliver and use;

5 There must be a formal management approach to the management of the life-cycle phases of information, beginning with its creation and following through all the way to its retirement and disposition.

Horton goes on to say that strategic information management *becomes an attempt to relate information issues to program and corporate strategic objectives and to develop related strategies*. This manual focuses on linking the development of an ICM strategy to the mandate of an organisation. In other words, the ICM strategy detailed in a corporate ICM strategy document must support the organisation in achieving its

mission, vision, mandate and goals.

1 *Annual Report* 2009 http://annualreport2009.cta.int/en/glossary.html

2 Horton, F.W. The strategic role of information management Library Science with a Slant to Documentation and Information Studies 1993, vol. 30, No 1 pp. 1-5 ISSN 0970-6089

1.2 Benefits of an ICM strategy

An ICM strategy is a framework that provides direction and establishes priorities for the management of an organisation's information and communication resources and assets to support the execution of its programmes and projects. All organisations, whether small or large, or in the public or private sector, can benefit from the formulation and implementation of a written organisation-wide ICM strategy that is available to all members of staff. This is true for small organisations (Appendix XIII) and for ministries of agriculture in which there are several divisions and departments. In traditional societies, adaptation of the principles of ICM and the development of an ICM strategy using traditional methods of communication and information management will need to be further explored.

Below are important benefits that an organisation can derive from formulating and implementing an ICM strategy:

- Information resources are objectively allocated to programmes and projects according to designated priorities for achieving organisation goals
- ICT capacity is accorded priority as an underlying support for programmes and projects
- Acquisition and updating of ICT hardware and software are carried out in consultation with users and in accordance with established priorities
- Information acquisition and use are a standard budget item for organisation or departmental programmes or projects
- Operational procedures encourage integration of information and communication thereby facilitating internal and external networking
- Optimum flow of information is achieved between generators, custodians and users of information
- All members of staff are kept informed about organisation priority programmes and plans, thereby engendering cooperation and focus in the achievement of goals.
- Capacity building for ICM is incorporated into organisation development and plans
- Mechanisms for monitoring and evaluating information acquisition, generation, use and dissemination are incorporated into organisation programmes and projects
- Monitoring of developments in the external environment is recognised as an important activity that facilitates proactive responses to possible opportunities and/ or threats as these relate to the attainment of organisation goals.

1.3 Scope and structure

Six steps are presented for the formulation of an ICM strategy document. While the focus of this user's manual is on agricultural organisations, the following steps can be used by any organisation:

1 Creation of "buy-in" by management and line staff

2 Appointment of a strategy development team

3 Analysis of the current situation

4 Preparation of a SWOT analysis

5 Development and formulation of strategic objectives, core strategy and preparation of the ICM strategy document

6 Implementation, presentation, monitoring and evaluation and updating of the strategy.

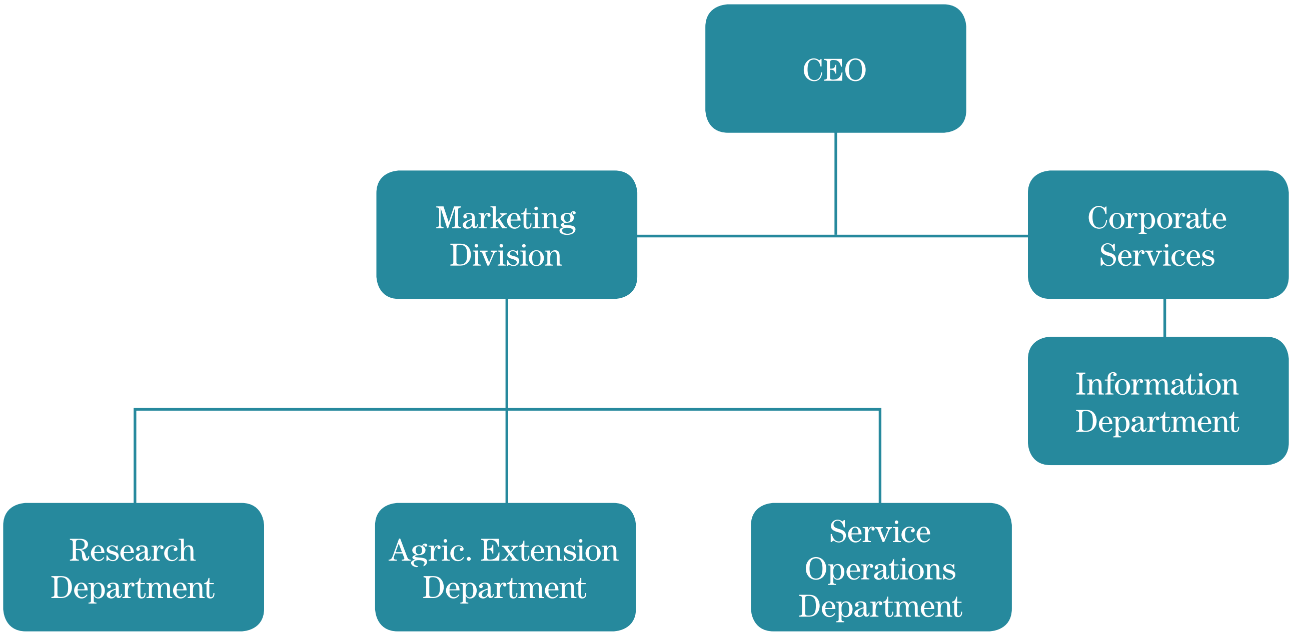
A discussion of each step will be followed by an account of the approach taken by a hypothetical organisation Agrimark[1] – an agricultural marketing organisation. Background information on Agrimark is presented in **Box 1** and its organisation chart is shown in **Figure 1**.

Box 1. Agrimark: Background

Agrimark is a statutory body that was established by an Act of Parliament to provide an efficient extension service for rural communities, to develop and provide a market intelligence service for the agro sector and to provide assistance for the development of food products using fruits and vegetables. The Heads of the Research Department, the Agricultural Extension Department and the Service Operations Department report to the Director of the Marketing Division while Head of the Information Department reports to the Director of Corporate Services (finance and personnel). The organisation chart in Figure 1 represents formal lines of communication in Agrimark.

1 Any resemblance to an existing organisation is purely coincidental. The details provided for this hypothetical organisation are used to illustrate the development of an ICM strategy.

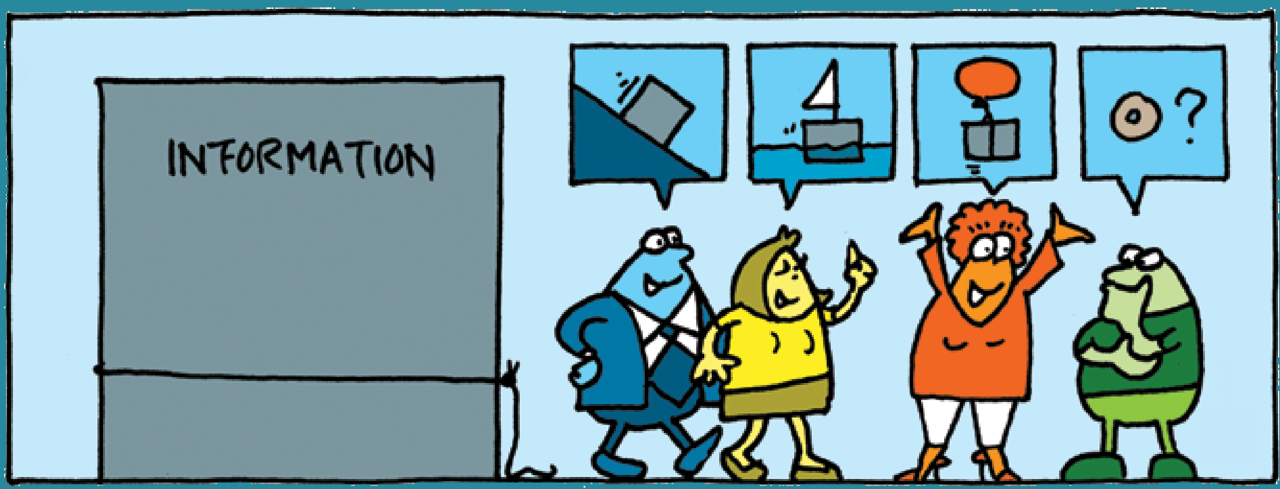
Figure 1. Agrimark: Organisation chart



Module

2

Preparation and Planning Process



An organisation may take the initiative to adopt and include an ICM strategy as part of its management approach because of exposure to the concept at workshops or conferences, or from observing the role that a strategic approach to ICM management has contributed to the achievement of another organisation's prescribed mandate. However the underlying trigger that leads to change is usually recognition of ineffective and inadequate information management that can manifest itself in several ways. Examples are unsatisfactory information and communication flow in departments and throughout the organisation, sporadic and limited budgetary support for information management, inefficiencies in data collection and analysis, failure to recognise opportunities that could achieve organisation objectives, inability to take proactive action to possible threats, and inconsistent or unclear policies and procedures.

Once the decision is made to develop an ICM strategy document, an effective preparation and planning process is critical for its successful implementation. The directive may come from your Chief Executive Officer. On the other hand, a senior manager or another member of your staff who has been sensitised to the concept at a workshop or conference may take the initiative to introduce the possible benefits of an ICM strategy to your organisation. Regardless of who introduces the idea to your organisation, it is highly desirable to have a champion to continually push the development process forward.

At the end of this chapter you will be able to:

- develop ideas for the creation of "buy-in" by staff members in your organisation
- advise on, and participate in, the selection of members of a strategy development team
- review the scope of the terms of reference for the strategy development team
- devise a plan for the collection of information for a needs assessment and its subsequent analysis
- lead your team members in developing the ICM strategy through a desk research study, an information audit and focus group discussions with stakeholders.

2.1 Preparation for the development of an ICM strategy

Good preparation means gaining the approval of your Chief Executive Officer (CEO) and senior management and the commitment of all staff members to the process of developing an ICM strategy. In other words, the initial focus is on the creation of "buy-in" by all staff. Once this is achieved, you will be ready to begin mobilising resources, setting up a strategy development team and planning for the collection of relevant data and information.

2.1.1 Creation of "buy-in": critical success factors

There are three critical success factors to consider when working on the creation of "buy-in" for the development and implementation of an ICM strategy. These critical success factors are:

- appointment of a champion or change agent to propel the process
- commitment from your CEO and Corporate Services
- commitment from all staff – line staff and support staff – across your organisation.

What is the function of a champion?

A champion or change agent is personally motivated to see the process developed and the ICM strategy used in organisation management. Consequently, this individual will be relentless in introducing the concept. This is particularly important at the initial stage. A champion or change agent must be knowledgeable, persistent, flexible, non-threatening in demeanour and be capable of networking at the intra-departmental level as well as in the inter-institutional arena.

If the champion or change agent is the Director or CEO, this individual is in a position to issue a directive and delegate a senior manager to lead the process.

Cases in which the champion or change agent is not a member of the management team can become a challenge – though not an insurmountable one. If this is your situation, you will need to overcome two challenges: how to convince your CEO and senior managers (if they are not already supportive) of the importance of an ICM strategy, and how to gain commitment from line and support staff.

You can adopt two possible approaches to assist you in convincing your management; you can prepare and present a briefing paper at a scheduled meeting and you can engage in lobbying division managers, department heads and senior staff members at meetings or even informally at coffee breaks on a one-to-one basis in order to mobilise support. The management briefing paper should not be longer than two pages. It should provide a short paragraph about the advantages of implementing an ICM strategy, it should also identify at least one information problem in your organisation that can be solved through the implementation of an ICM strategy and demonstrate how this action will assist in meeting one of your organisation's corporate objectives. The most effective approach from a management perspective would be a pro forma project outline that provides an *overview* of the process as part of an audio-visual presentation. **Appendix I**. Flow chart for the development of an ICM strategy will be a useful input for preparation of the overview. A detailed account of each step will not be required for this presentation. Therefore the overview should cover the main headings at the beginning of each step in the flow chart.

The preparation of an ICM strategy document requires a considerable investment of time, – in collecting information, attending meetings for the deliberation of information and communication needs, conducting analyses, and maintaining communication with staff and stakeholders – all of which generate costs. Therefore, your management's approval is essential for the deployment of resources, for the allocation of funds and for obtaining access to files that may contain confidential information. Furthermore, a notice authorising heads of departments to facilitate scheduled interviews and meetings signifies management's approval and commitment to the development of an ICM strategy.

In some circumstances, particularly where your organisation is large or where resources are very scarce, it may be impractical to obtain your management's approval to develop an ICM strategy for your entire organisation at the same time. In this case it would be better to select a sub-system for development of an ICM strategy. To be effective, the sub-system should aim to achieve one or more of your organisation's objectives or one that affects the management of information across several units or departments, for example your marketing sub-system, your agricultural extension sub-system or your farmer registration sub-system. One advantage in the selection of a sub-system is that the benefits of implementing an ICM strategy could be realised in a shorter time than if the entire organisation is involved in the process at the same time. This approach could also serve as a way of encouraging the full adoption of an ICM strategy across the organisation. **Appendix II**. Selection of a sub-system presents a case that demonstrates how you can approach the selection of a sub-system within your organisation for the development of an information strategy. While the case is that of an industrial research institute, the approach that was used can equally be applied to an agricultural organisation.

Commitment from staff is essential. They must understand the process and how the implementation of an ICM strategy can assist them to carry out their job functions more efficiently. Communication is essential in relieving anxieties and for dispelling rumours that are sure to spread with the introduction of any new system in an organisation. An oral presentation will provide the opportunity for staff to ask questions and to raise any concerns that they may have.

Separate briefing sessions should be held for those stakeholders from whom active participation will be crucial to the success of the development and implementation of your ICM strategy. Stakeholders should be invited to focus group discussions, and those who normally contribute to the funding of your organisation should participate in a separate session. These sessions should be held after obtaining your management's approval for the development of your organisation's ICM strategy.

Organisations in traditional societies must follow their cultural norms for communicating information. These norms may include using the first line of communication through the chief of the village, or in other cases following the norms in patrilineal or matrilineal societies.

Box 2 provides the approach adopted by the Agrimark champion or change agent, a subject specialist within the Information Department.

Box 2. Agrimark: Approach used by champion/change agent

Below are the mechanisms used by Agrimark's change agent to introduce the concept to management and staff. This change agent was sensitised to the ICM concept at a workshop.

A. To management: Preparation and presentation of (i) a brief report on the workshop that included the benefits of implementing an ICM strategy and (ii) a briefing paper to portray the link between ICM strategy development and the realisation of Agrimark's mandate. The paper detailed three information management problems in Agrimark that could be addressed by the adoption of an ICM strategy and examples of advantages to be gained by doing so. The three information management problems that were addressed in the briefing paper were: the inaccessibility of production data which was held independently by staff, obsolete equipment and outdated hardware which negated the attempt to network and dissatisfaction with the services provided to farmer associations – Agrimark's major stakeholder. A pro forma estimate of the costs and time that could be incurred in the development of an ICM strategy was included in an Appendix to the briefing paper.

B. To staff: Oral presentation of a brief background on the workshop that included a definition of an ICM strategy, advantages for Agrimark and an outline of the process for developing an ICM strategy document.

2.1.2 Setting up a strategy development team

You can appoint a leader for development of the strategy document, subject to approval by your corporate management team. The leader can be selected from a member of staff and need not be the same person as the champion. In cases where the organisation is unable to identify a suitable team leader from staff, it could consider contracting the services of a consultant

A consultant is expected to have skills and abilities that may not be readily available in your organisation. At certain stages of the strategy development process, in particular the moderation of focus group sessions for stakeholders, the definition of critical issues and the development and formulation of strategic options for inclusion in the ICM strategy document, the experience and expertise of a consultant would be a distinct advantage. However it is necessary to recognise that the consultant in most cases will not have any detailed knowledge of in-house policies and procedures. If hiring a consultant is seen as the best approach for your organisation, a staff member must be appointed to partner the consultant in executing the exercise. There are two advantages: for the consultant, he/she will be helped to get relevant information and negotiate your organisation's cultural dynamics; for the organisation, the staff member will be get hands-on exposure to each step in the process.

The staff member selected as team leader or partner to the consultant should have a number of key attributes.

- *Leadership capability.* Team members need to be guided in accomplishing activities within specified time periods. Solutions to challenges will need to be found
- *A thorough knowledge of operational procedures in the organisation; this includes knowledge about inter-departmental functions.* This level of knowledge will override any narrow views held by some team members
- *Familiarity with the culture of the organisation.* Specific ways of circumventing problems, seizing opportunities and respecting certain administrative positions will not be written in operational manuals
- *Excellent communication skills.* Communicating milestones achieved during the development process is essential for maintaining "buy-in" throughout the development of the ICM strategy document
- *An in-depth knowledge about the vision of the organisation.* Particularly useful in guiding the team during discussions on the way forward and in the analysis of information collected
- *Be sufficiently senior in the organisation to have direct access to the CEO or members of the management team.* Consultation and inputs may be required from the CEO or senior managers during the development process. It will be useful for the team leader to have ready access – either through informal communication mechanisms via the telephone, or email exchanges or formally in writing.
- If you have received a directive from your management to lead the development process, your first task is to familiarise yourself with the procedure for developing an ICM strategy document. A flow chart of the steps is presented in **Appendix I**.

It is impractical, if not impossible, for one individual to prepare an ICM strategy document, so a team approach is the preferred method to follow. After you are familiar with the steps, you will need to set up your team. You will need to focus on the composition of the team and desirable attributes of team members.

Departments that collect, organise, store, use, repackage and disseminate data and information, regardless of format, should all be represented on your team. The organisation chart and your own knowledge of the organisation will be useful. For example, you could include leaders of major work programmes that span several departments (e.g. development of farming livelihoods for women and youth) on the team.

Team members do not need to be managers of departments. In fact it is better to consult these managers to jointly determine who will be the most suitable representative from their department in terms of personal attributes and availability. Desirable attributes for team members are:

- *strong interpersonal skills.* Team members will be interacting with many staff members and stakeholders to elicit information.
- *prior experience in working as a team member.* This is an advantage especially for carrying out assigned responsibilities and for participating in team discussions and brainstorming sessions.
- *tact, patience and the ability to think "on one's feet".* In the course of information collection, some respondents may be reluctant to provide the information required for analysis. It will be necessary to think of alternative methods for eliciting a response during interactions with respondents.

The team should not be excessively large in size. Try to include representatives from the core information gathering and disseminating areas and from user groups in the organisation. Each team member will have responsibilities and must be required to complete these efficiently. If additional inputs are needed, you could consider co-opting of members for a specific reason. **Box 3** details Agrimark's approach to the selection of its strategy development team.

Box 3. Agrimark: Selection of strategy development team

The composition of the ICM strategy development team was decided at a meeting of the CEO and the Directors of the Marketing Division and Corporate Services.

The managers sought candidates with technical competence and desirable personal attributes as well as a strong commitment to the goals of Agrimark and a tendency to think "outside of the box" in pursuit of creative solutions to challenges. The Director of Corporate Services contributed further information from personnel records for those who were being recommended to sit on the strategy development team. At the end of the meeting, six members were appointed to the Agrimark strategy development team.

2.1.3 Terms of reference

Terms of reference (TOR) are necessary for a consultant or an in-house team charged with the development of a project or programme. Terms of reference should include short paragraphs that detail:

- Background or context of the proposed study/assignment and an indication of the problems that need to be addressed
- Objectives that must be met
- Scope of the work
- Methodology for conducting the study
- Expected output
- Resources that will be made available to the team
- A schedule for completion of major activities
- The completion date for submission of the final report and the number of copies that should be provided.

One of the first tasks of the strategy development team is to prepare a draft of the terms of reference (TOR) for submission to management. The team leader's prior knowledge of the development of the strategy document will guide these deliberations. At this stage it is important to determine if the proposed ICM strategy document is for your entire organisation or for a sub-system that is strategic to the attainment of your organisation's corporate objectives, for example, agricultural extension or research or marketing. This approach may be considered in cases where there are limited resources available for the preparation of the ICM strategy document for the entire organisation. The sub-system selected *must* be strategic to the organisation to have the greatest impact when the ICM strategy is implemented. After the draft is approved, the document should be finalised as a formal "contract" between the strategy development team and the management committee of your organisation.

An example of terms of reference for the development of an ICM strategy is presented in **Appendix III** for Agrimark. You can also see another example in the Facilitator's Guide.

2.2 Collection and analysis of information

You have obtained your management's endorsement, created initial "buy-in" by staff members, (as part of an ongoing process) established your team and received terms of reference for development of your organisation's ICM strategy document. Before you can finalise the document you need to present your draft plan of action to your team members, solicit their comments and input and allow for discussions to clarify suggested procedures.

The first step in the action plan is to conduct an information and communication needs assessment. Your role as team leader is to ensure that each member is prepared for the work ahead. Your plan should include the following mechanisms for the collection of information and its analysis:

- Desk research
- An internal information audit
- Focus group discussions with stakeholders
- A SWOT analysis.

2.2.1 Conducting your desk research

Your desk research will provide input for the preparation of two important documents that will be used for analysis of the current situation in your organisation and as reference material for drafting the ICM strategy. These documents are:

- An organisation profile
- An intelligence brief.

Organisation profile

A profile is a brief description of your organisation. It should include:

1. Mandate and goals
2. Brief summary of development plans
3. Organisation chart
4. Functions of departments
5. Categories of stakeholders
6. Standing committees and their purpose
7. National and regional committees on which the organisation is represented
8. Observations about your corporate culture as it relates to information use and resources.

The major sources from which you will be able to identify items 1-7 are existing or draft organisational policies, strategic documents (general and ICT- or ICM-related), annual reports, departmental reports, legal documents that established your organisation, newspaper clippings, interviews with your personnel manager and selected minutes of standing committee meetings. However the corporate culture of your organisation (item 8) requires a different approach. This is an “intangible” and can only be defined by observation. Questions that can help you to determine the sense of your corporate culture are suggested below.

Your corporate culture on the use of information and the priority accorded to the provision of ICT infrastructure and information resources is an important component of your institutional profile. Awareness of this aspect of your organisation can assist you in negotiating challenges that may arise in the development of the ICM strategy document. This may also provide a useful input to team deliberations on the weaknesses or strengths of your organisation. Hard facts about your corporate culture may not be found in any documents. However you will be able to get a sense of how much importance and emphasis your organisation currently gives to the information dimension by seeking answers to the following questions:

- Is there an information department or information resources centre in your organisation?
- To whom does this department report? Is it to the corporate office, to the manager of another department?
- Does this department have representation on any committee in your organisation?
- If it does, is it for contribution of input to issues on information management, content, organisation, dissemination and control?
- Is it a standard requirement for information sourcing and dissemination to be recorded as a separate budget item in the management of projects?
- What is the relationship between the IT function and the work programmes of other departments?
- At the organisational level, are there up-to-date, well-documented policy and procedure manuals (hard copy or online) that are accessible and available to all staff members? Can staff find procedures to guide them in the execution of, for example, projects or programmes, or in developing external networks? Such manuals cover all operations in the organisation and are not restricted to information related activity.
- At the department level, are there guidelines for staff on various operations, procedures etc. with accompanying sample forms for use? How recent are these guidelines?
- What mechanisms are used for communicating with staff?
- A paragraph summarising the answers to the above questions should be included in the profile. Agrimark’s profile is presented in **Appendix IV**.

Intelligence brief

An intelligence brief identifies socio-economic, political, industrial and technological changes and developments that have the potential to impact negatively or positively on the mandate, direction and programmes of an organisation. This brief not only alerts readers to events but also suggests how an organisation may be affected. In the industrial and business environment, developments and changes in the external environment are continually monitored in what is termed “intelligence gathering”. This approach is no less important for an agricultural organisation. It is necessary to know in advance, about possible changes in the environment in which your organisation operates in order to take advantage of opportunities or to safeguard against threats that may derail implementation of your ICM strategy and hence your corporate objectives. Therefore in order to prepare an intelligence brief as an input for strategic planning or for the preparation of your ICM strategy document, continuous monitoring of events over time is recommended.

Sources that will provide information for preparation of your intelligence brief include *inter alia*:

- business sections of newspapers (local, regional and international)
- agricultural newsletters
- speeches of Ministers of Agriculture and technocrats from related ministries
- annual reports of stakeholder organisations
- relevant websites
- trade-related websites
- agricultural production and demographic statistics
- research reports from universities
- feedback gleaned from those staff members who interact with stakeholders and who sit on local, regional and international committees.

Box 4 provides an indication of the changes and developments that should be continuously monitored. An intelligence brief for Agrimark is presented in **Appendix V**.

Box 4. Events and trends to be continuously monitored

- New communication technologies that could be used for collecting, recording, processing and disseminating information
- Marketing trends and new agricultural trading blocks
- Changing needs of stakeholders served by agricultural institutions
- Trends in the delivery of information by publishers and information providers
- New "competitors" who plan to provide similar or related services
- New funding sources
- Shifts in a government's policy for the agricultural sector and new bilateral agreements that include agriculture as a co-operative undertaking
- Prospective alliances and networks
- New agricultural training programmes and training mechanisms

2.2.2 Conducting your internal information audit

After compiling your organisation profile and intelligence brief, your team needs to be prepared to conduct an audit of: information and communication needs, resources, information generated and disseminated by staff members and information infrastructure available to staff. Therefore the audit:

- assesses the information and communication needs of staff members
- identifies critical information and communication gaps and shortfalls as well as duplication of effort in the organisation's response to identified needs
- determines who generates information in your organisation and who are the users of this information; this is useful input for determining the actual flow of information in your organisation and beyond the confines of your organisation
- determines if needs and resources are aligned with the vision and goals of your organisation.

The following information must be presented to the team:

- the objective of the audit: as defined in the foregoing paragraph
- what information will be sought from staff members: the types of information and the significance of responses
- how the audit will be conducted: the mechanisms that will be used for collecting information
- what must be included in the report of the audit

Box 5 captures topics discussed at Agrimark's initial team meeting.

Box 5. Agrimark: Topics for initial team meeting

At the initial team meeting, the leader briefed members on the objectives of the audit and how it was to be conducted. Resource material and plans for preparing team members for the audit were also presented.

Objectives: To determine the information and communication needs of staff, identify resources available and used by staff, to determine existing gaps between needs and resources and to collect inputs that would assist in assessing the direction of the flow of information between technical departments in the organisation.

Methodology: Interviews in which a questionnaire will be used as a guide to obtain information for a situational analysis on the information and communication needs of staff members and the flow and direction of information between technical departments

Resource material: A questionnaire will be provided for use as a guide during interviews. To assist in preparing for the interviews an accompanying sheet of annotations will clarify for the interviewer the reasons for inclusion of specific groups of questions and hence their importance to the audit.

Plans for preparing the team: Role-playing exercises will be used to build confidence in administering the questionnaire. Resource personnel from a management organisation will be recruited for a one-day session to facilitate training in role-playing.

A draft questionnaire is presented in **Appendix VI** to illustrate the types of questions that should be included. The information that you should aim to collect from interviewees include: their job functions and responsibilities, information and communication needs, information sources used, information and communication technology and equipment available to collect, process and disseminate information, information exchanges and interaction with individuals and departments in the organisation and with stakeholders in other organisations, budgets for information functions and evaluation of products and services provided. Annotations in **Appendix VII** should accompany the questionnaire. These annotations inform the interviewer of the importance of obtaining answers to groups of questions and indicate how they will assist in analysing the responses in order to determine future direction and policy. You should prepare a similar list of annotations as an appendix to your questionnaire.

After the initial meeting, the team leader must prepare the members for conducting interviews. Preparation entails deciding on who ought to be interviewed; who will be assigned to conduct each interview and the techniques which should be used to elicit the required responses from interviewees. In other words team members must be prepared to approach each interview with confidence.

In small organisations, all staff members should be interviewed during the audit. However in large organisations, a representative sample can be interviewed if the entire organisation is being audited. Categories of staff that should be included are:

- heads of departments
- heads of major programmes e.g. crop diversification, extension, database creation
- line staff, especially those involved in information related activities (of any kind).

Do not assign team members to the departments in which they normally work. They will be familiar with how the department functions and will tend to "lead" the respondent to answer questions in a particular way which will skew the questionnaire analysis results. A team member from another department is more likely to be objective in administering the questionnaire. As team leader (or working with a consultant) you will need to make the decision (or make suggestions) concerning the allocation of team members to administer the questionnaire.

Two team members should be assigned to each interview. One member should concentrate on asking questions and on soliciting illustrations to confirm statements or opinions expressed, while the other team member should focus on completing the questionnaire and on writing explanatory notes that will be useful in subsequent analyses of the information provided. The questionnaire should be circulated to interviewees a few days in advance of the interview.

After the questionnaire has been pretested on a pilot group of respondents, it should be edited and finalised. Team members should use the questionnaire in role-playing exercises that portray possible challenges that they are likely to encounter during interviews. This exercise can be fun and still achieve its objective.

Rules are basically simple:

- Role-play must be focused
- The objectives must be clear and understood
- Instructions must be clear and understood
- Feedback needs to be:
  - specific
  - relevant
  - achievable
  - given immediately.[1]

1 http://www.businessballs.com/roleplayinggames.htm

Box 6 indicates the role-playing instructions provided by Agrimark's resource person.

Box 6. Agrimark: Scope of role-playing briefing session

Specific objectives: Provision of supervised practice in using the questionnaire as a guide for discussions during the interview; to instil confidence in posing follow-up questions or in presenting relevant scenarios that would assist in obtaining a true picture of a situation when a direct answer was not readily provided by the interviewee; to develop proficiency in writing accurate and succinct notes during and after the interview

Requirements for the role of interviewers: Delivery of a suitable opening statement for introducing the questionnaire to the interviewee; familiarity with the sequence of groups of questions in the questionnaire; familiarity with the reasons the questions were included in the interview and be prepared to use one or several follow-up questions (as a result of "thinking out of the box') or develop an improvised scenario "on the spot" that would help the interviewee to provide a relevant response; recording explanatory notes.

Requirements for the role of interviewee: Portrayal of a respondent who is reluctant to provide a relevant response, who always queries the reason for asking a particular question, or a respondent who provides one-syllable responses.

Feedback: All team members were required to critique each other's role-playing performances and to suggest alternatives for improving ways to solicit responses.

Information collected during audit interviews must be collated and summarised in a report that is analysed by the team during its deliberations on ICM strategy formulation. Information should be reported under the following headings:

- *job functions:* training/expertise required for each function, information and communication needs, useful formats
- *information resources:* availability, accessibility, frequently used, under-utilised, not shared with the wider organisation, level of usefulness
- *ICTs in use:* up-to-date or obsolete, usefulness in managing information collection, recording, organisation, controlling and accessibility, in facilitating intra-departmental communication, in servicing external stakeholders
- *information flows:* formal and informal interactions between different departments and individuals (when these have been specifically named), interactions with external stakeholders
- *capacity building:* current provisions for training staff
- *budgetary allocations:* current funding, procedures for allocation of funds for all information management functions
- *evaluation mechanisms:* information products and services, execution of job functions
- *gaps or shortfalls:* in information and communication needs, information resources available and accessible; expertise, capacity building, ICTs, budget allocations
- *operational manual and guidelines:* availability and accessibility at the organisation and department levels.

A map that shows the direction of the flow of information between job functions, departments, and individuals within your organisation should be attached to the report on the audit interviews. A similar map should be prepared to show the flow of information between departments and stakeholders (e.g. agro-processors, farmers, researchers in other organisations). Information for this visual portrayal of the direction of information flow is captured from responses that indicate who produces or generates data or information and to whom it is sent. A map showing the direction of the flow of information is a catalyst for discussions that can lead to recommendations for changes in policies and procedures. Examples of what an information flow map can reveal are as follows:

- informal information collaboration between departments; *informal* in the sense that it is not part of the formal structure as depicted in an organisation chart
- indicates which departments have established one-way or two-way communication links
- functions as a check that what was understood during the interviews and now reflected in the map is an accurate description of what actually occurs in the organisation
- graphically identifies the departments that have no communication links
- assists in identifying weaknesses and strengths in intra-departmental or organisation-wide communication
- suggests solutions for current deficiencies in communication, for example the need for new procedures and policy guidelines, updating of additional information infrastructure
- new information "gate-keepers" in the organisation – persons who function as an information resource (e.g. because of their expertise) but is not known or is not a part of the formal communication structure in the organisation.

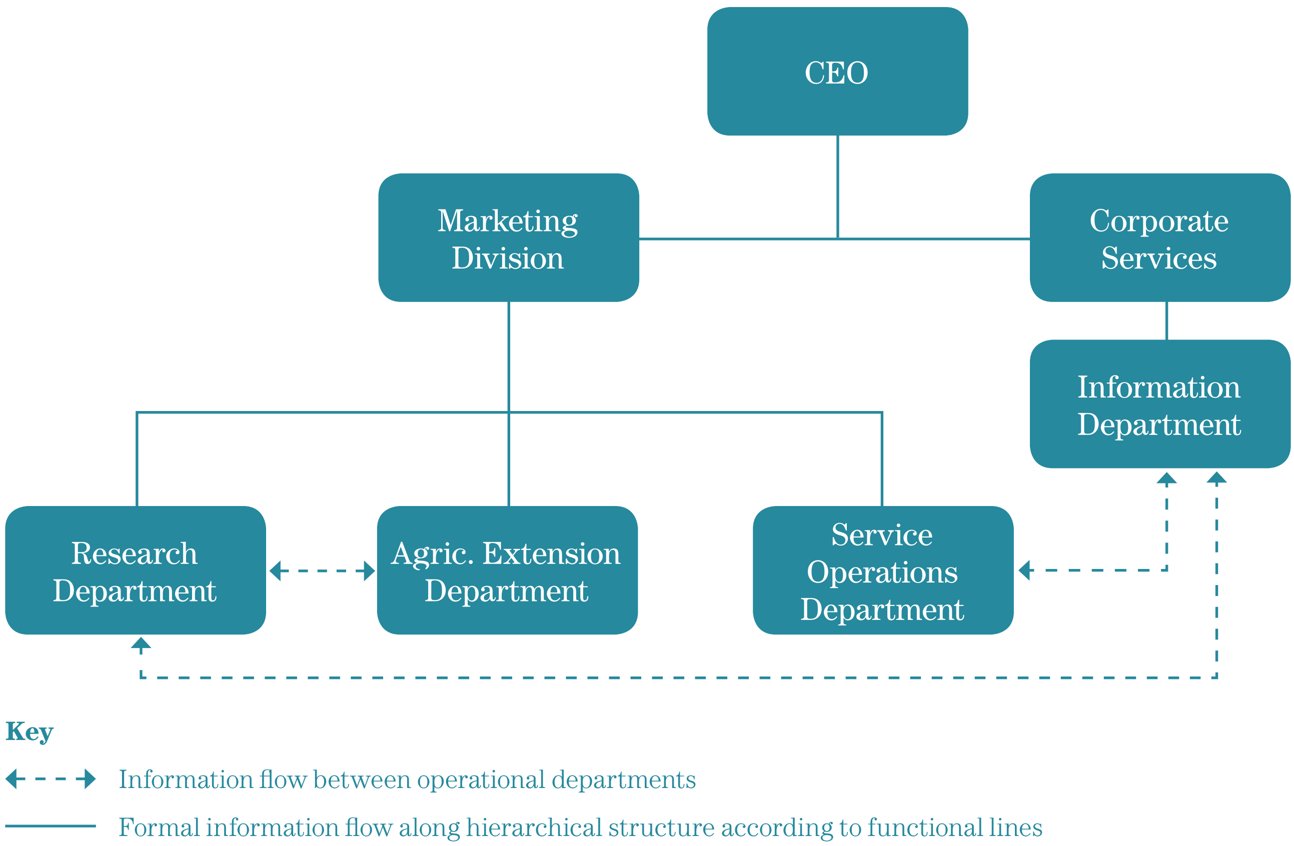
Figure 2 reveals the *informal* information flow between operational departments (as distinct from administrative functions) after analysis of the results of the information audit. The informal information flow captures the interactions outside prescribed reporting procedures. The *formal* communication in Agrimark is depicted in its organisation chart and follows functional lines.

Examination of **Figure 2** leads to the following observations:

- Not all departments exchange information. The Research Department and the Agricultural Extension have a two-way flow of information between them. Similarly there is two-way communication between the Research Department and the Information Department. One or all three departments could be generators and/or users of information. The specific responses in the questionnaire will provide the relevant information.
- There is no exchange of information between the Agricultural Extension Department and the Information Department. Similarly, there is no exchange of information between the Agricultural Extension Department and the Services Operations Department.

- This suggests that further investigations should be made to determine the reasons for lack of communication between specific departments. Closer examination of the organisation's procedures manual (its content, policy for distribution, accessibility to all staff and its last revision date) is necessary. This informal communication may take place because of the personal relationship that exists between individuals across the departmental divide. Looking to the future, the informal flow of information may need to be formalised to facilitate and endorse sharing of information and networking within your organisation. If there is an existing policy that is not followed by staff, then reasons for this situation must be investigated and suitable recommendations explored.

Figure 2. Agrimark: Informal information flow between operational departments

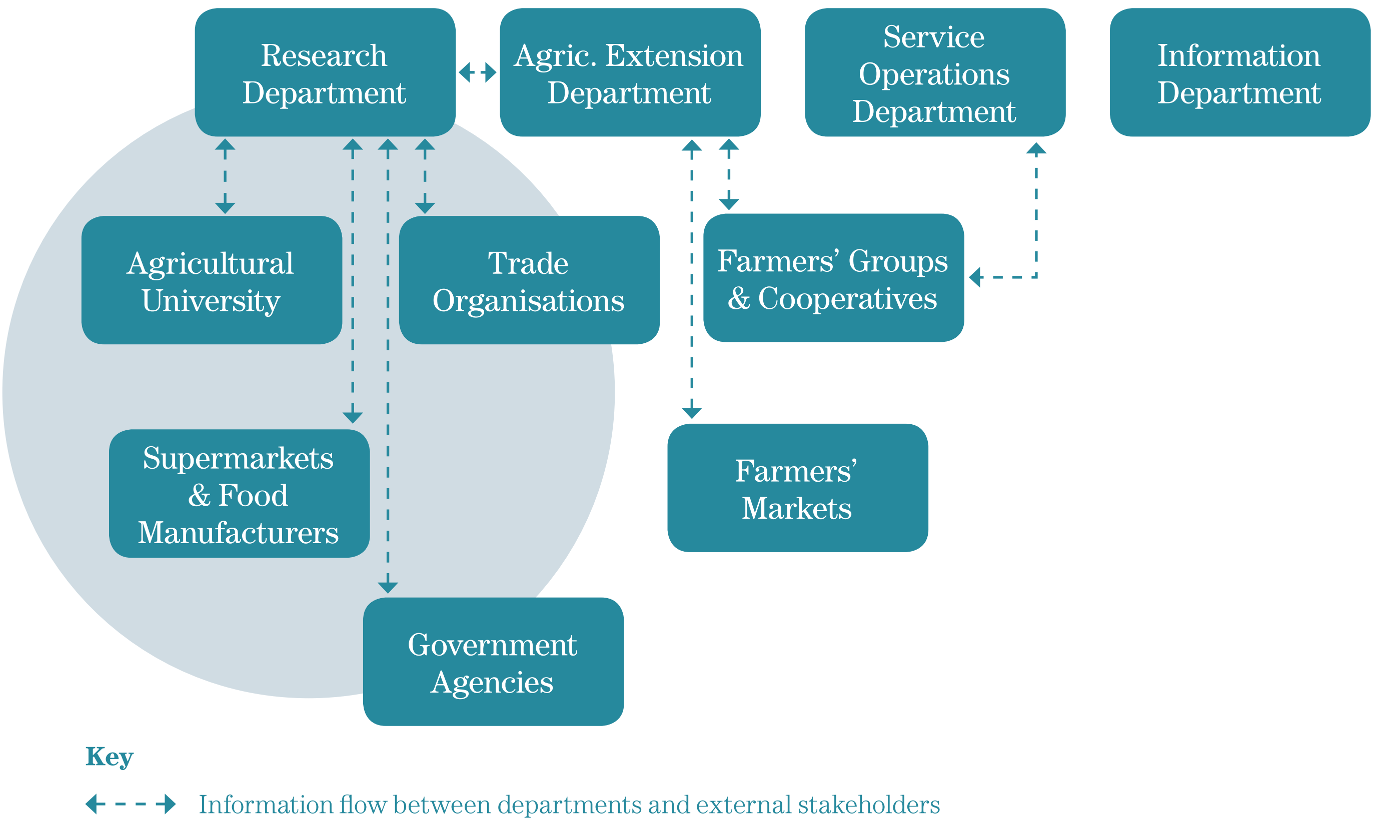


Mapping the flow of information between your organisation and its stakeholders can reveal which departments or individuals function informally as a "gate-keeper" or hub for interpersonal interaction with the external environment. This individual or department is another source of information for the identification of possible opportunities or threats before they become public knowledge. Your organisation will have a head start in planning accordingly. The challenge for your organisation will be devising systems and procedures to make the information collected by the "gate-keeper" or hub accessible to those who need it.

Figure 3 captures a "picture" of the external two-way information flow. In Agrimark the scope and functions of the Research Department, the Agricultural Extension Department and the Service Operations Department have resulted in the cultivation of two-way linkages with a range of stakeholders and as such staff members have become "gate-keepers" of information (**Figure 3**). They can become an important information resource for Agrimark if an effective and formal information and communication system is established to provide feedback to Agrimark's senior management.

Specifically, **Figure 3** indicates that the Agricultural Extension Department and the Service Operations Department are Agrimark's point of contact with the farming community. The two-way internal communication between the Research Department and the Agricultural Extension Department, which in turn maintains a two-way flow with the farming community, indicate that there is likely to be a large body of data and information in these departments. The visual dimension of the external information flow diagram will assist in triggering further questions and may even suggest further actions for organising and disseminating this body of data to facilitate access across Agrimark.

Figure 3. Agrimark: External information flow



2.2.3 Focus group discussions with stakeholders

Focus group discussions are used to obtain feedback and possible consensus from stakeholders with a common interest in a particular subject. Such discussion groups should also include representatives from your organisation to provide any needed clarification about its relationship with these stakeholders. Four factors contribute to the successful outcome of a focus group discussion:

- the presence of a facilitator or moderator who is skilled in eliciting points of views or experiences on a specific aspect of the subject from participants
- preparation beforehand of a list of questions to be asked that will serve different functions during the session. These are:
  - *opening questions:* to get people talking
  - *introductory questions:* to introduce the topic and the participants' connection with it
  - *transition questions:* to link to the key questions
  - *key questions:* The most important questions to obtain the data you need
  - *ending questions:* to ask participants for advice and comment on possible omissions in the discussion[1]
- a group size of about eight persons. This size will encourage individual participation.
- accurate recording of contributions to the discussion either by taking handwritten notes or by using video or audio recording of the session.

[The above factors should be tailored to cultural norms in traditional societies.]

1 CTA, KIT, IICD. 2009. *Smart Toolkit: For Evaluating Information Projects, Products and Services*. (2nd ed) CTA/KIT/IICD. The Netherlands. p. 128.

The success of a focus group discussion is dependent on detailed planning and preparation prior to the event. The following issues must be addressed: purpose of the focus group discussion; identification and selection of stakeholders who should be invited to participate in the session, preparation of invitation letters and inserts that give details on what to expect at the focus group discussion and preparation of different types of questions to ensure that the discussion would achieve its objectives. Agrimark's planning session is detailed in **Appendix VIII**.

The results of the focus group discussion must be reported to the team for inclusion in the analysis of information and communication needs. Essentially the report will identify the topic or topics discussed by each group (if there is more than one group) and the consensus after the discussions. The report will also include a list of participants, names of moderators and where available, audio or video recordings of contributions. **Box 7** provides the consensus of the two stakeholder discussions on the assigned topics.

Box 7. Agrimark: Results of focus group discussion

GROUP A: Representatives from agro-processors, farmers' organisations and rural communities.

Information needs: Information and assistance in developing organic products for export; projected quantities of harvested crops, particularly hot peppers, pineapples.

Services required: Assistance in identifying and managing contract farming arrangements; automatic reports on wholesale and retail prices of fresh produce.

Resources required: Equipment and systems that would facilitate better access to advice from agricultural extension officers and knowledge about market prices for farm produce.

GROUP B: Representatives from agricultural research organisations and staff from the Ministry of Agriculture and Fisheries.

Areas for collaboration: Design of a computerised farmer registration system and a database for providing daily wholesale and retail prices for fruit and vegetables.

Future plans for the agriculture sector: Introduction of organic farming protocols for fruit and vegetables that are in demand in supermarket chains in the U.S.

2.3 Analysis of the current situation

The results of the desk research, intelligence brief, audit and focus group discussion provide inputs for an analysis of the current information and communication situation in your organisation. A SWOT analysis will prepare your team to identify relevant strategic options for inclusion in the ICM strategy document.

2.3.1 Development of a SWOT analysis

A SWOT analysis identifies **s**trengths, **w**eaknesses, **o**pportunities and **t**hreats in an organisation. The results of the internal audit will identify strengths and weaknesses and the intelligence brief will provide information on possible opportunities and threats to your organisation. The SWOT analysis must relate to the achievement of the organisation's goals; this analysis is meaningless otherwise.

It is important for your team to have a clear understanding of how to identify each component in a SWOT analysis. Strengths and weaknesses occur as a result of actions taken by the management of your organisation; therefore they are internal factors. Opportunities and threats occur beyond the control of the management of your organisation. These external factors are captured in your intelligence brief.

Strengths: actions deliberately planned and managed successfully to facilitate the achievement of your organisation's goals. In other words strengths are under the direct control of the management of your organisation – for example, the existence of a critical mass of trained staff, or the high level of staff morale.

Weaknesses: deficiencies in your organisation's procedures or activities that do not advance the achievement your organisation's goals. Weaknesses require better assignment of resources or better monitoring; therefore these are areas that could be improved with better management. One way of identifying weaknesses is by matching documented needs with existing resources. This exercise should span the range of data and information, computers, software, access to the Internet and communication technology. Resources that fall short of supporting identified needs can be classified as weaknesses in the achievement of specified objectives. Some examples of weaknesses in an organisation are training deficiencies, understaffed units, outdated information and inadequate hardware or software programmes

Opportunities: external situations that help your organisation to achieve its goals. Opportunities may result *inter alia* to further strengthen resources, add new products and services to your organisation's portfolio or increase your organisation's visibility in the community it serves.

Threats: situations outside of your organisation that can work as barriers to fulfilment of specified objectives.

An important point to remember in the analysis of the external environment is that opportunities must always be seen in the light of other organisations that offer similar services or depend on the same funding source or who compete for the same clientele. For example if your organisation serves the needs of farmers and there are NGOs and privately run organisations competing for the attention of the same farmers, opportunities and threats need to be identified in relation to these "competitors". They are vying for your target group and sources of funding. Other external factors, such as the availability of new technologies can also be considered as a way of helping your organisation to attain its goals.

In some cases after analysis of your internal resources, weaknesses can be turned into strengths – for example, your inability to complete the research to update your wide range of fact-sheets for farmers. This situation may lead you to revise the series and produce fewer fact-sheets that better meet the specific information needs of this target group.

A threat can also be turned into an opportunity. For example the threat of competition from a new NGO providing assistance to women farmers to market their produce at farmers' wholesale markets could be turned into an opportunity for better utilisation of your scarce resources, if you enter into partnership with this NGO. In this partnership the NGO focuses on delivering this service, while your organisation assists the NGO with technical expertise, by loaning its extension staff to help the women farmers in the field. Together you achieve your joint objective more effectively and efficiently.

Rapid Business Improvement (RapidBi) has provided "simple rules for a successful SWOT analysis:

- Be realistic about the strengths and weaknesses of your organisation
- The analysis should distinguish where your organisation is today, and where it could be in the future
- Be specific and avoid grey areas
- Always analyse in relation to your competition – aim to be better than your competition
- Keep your SWOT analysis short and simple – but only as short and simple as the application or situation demands
- Avoid unnecessary complexity
- There is no point in listing an opportunity if the same opportunity is available to competitors
- It is pointless to say you have strengths when your competition has the same.[1]

1 RapidBi – Rapid Business Improvement. 2012. *SWOT Analysis – History, Definition, Tools, Templates and Worksheets*. By http://rapidbi.com/created/SWOTanalysis/

Table 1 provides the output of the SWOT analysis at Agrimark after a brainstorming session with the team. Input for the analysis was gleaned from the documents and reports that were prepared during the audit.

Table 1. Agrimark: Result of the SWOT analysis

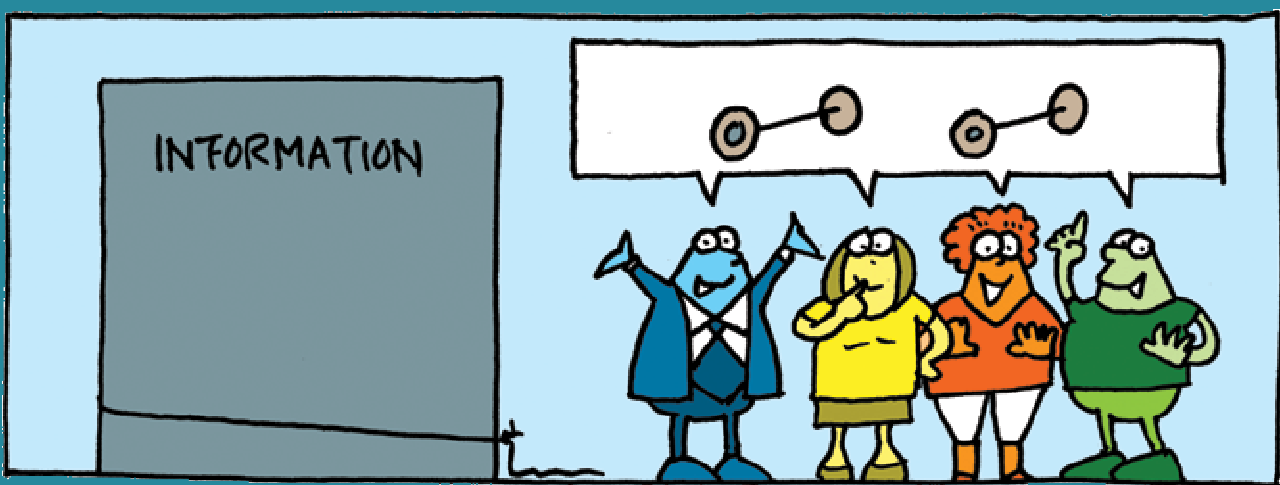
	STRENGTHS	WEAKNESSES
INTERNAL	Critical mass of extension staff Production, marketing and farmer registration data Broadband Internet Strong alliances with stakeholders	Data in paper files Outdated fact sheets Inadequate programmes for training line staff Slow response to requests from rural communities and agro-processors No computerised generation of reports
	OPPORTUNITIES	**THREATS**
EXTERNAL	Demand for organic produce in Europe Pending introduction of mega-farms Widespread use of mobile phones in rural communities Additional telecentres in rural communities New training programmes available online	New NGO to assist women farmers to market produce at farmers' wholesale market Cultural barriers prevent the exchange of information with farm families in remote villages

The results of a SWOT analysis are used to formulate and develop an ICM strategy that will support your corporate objectives.

Module

3

Strategy Formulation and Development



After completion of the SWOT analysis, the team should devise suitable ICM strategic options for your organisation. This is done through brainstorming of ideas on: critical issues that can affect your organisation, results of analyses to determine draft strategic objectives, compilation of strategic option statements linked to the strategic objectives and prioritisation of statements according to specified criteria.

At the end of this chapter, you will understand how to:

- identify critical issues
- formulate and prioritise strategic option statements
- prepare an ICM strategy document with its accompanying implementation plan.

3.1 Determination of critical issues

Critical issues are those that can impact negatively or positively on an organisation. These issues must be addressed to strengthen their positive impact, or to guard against any negative influences that may impede the attainment of an organisation's mandate.

If your organisation is large, several brainstorming sessions may be required to identify and agree on critical issues. Invite your senior managers to participate in these sessions; they will bring management's perspectives to discussions. The following prepared reports will inform your discussions:

- organisation profile (includes its vision, mandate, goals)
- intelligence brief (outlines developments in the external environment)
- audit report (a current analysis of the situation in your organisation)
- SWOT analysis (includes the strengths, weaknesses, opportunities and threats in your organisation).

It is important to first identify and agree on criteria for recognising critical issues. The literature offers guidance for establishing criteria that can be applied to any project or activity. You may find it useful to address the following questions:

- How broad an impact will the issue have? Will it affect the entire organisation?
- How large is the organisation's financial risk/opportunity? Is there a major risk (> 20 per cent of your budget)?
- What are the probable consequences of not addressing this issue? Do we face significant service disruption, financial losses and large cost/revenue setbacks?[1]

Janet Shapiro, in the Strategic Planning Toolkit identifies six criteria to be applied to issues that arise in the preparation of a strategic plan. Any issue that "meets most or all of the following criteria" can be regarded as a critical issue [if it]:

- is related to a core problem
- affects the lives of a significant number of people either directly or indirectly
- can be addressed through the competencies and resources of the organisation or project
- needs to be addressed if the organisation or project is to be able to progress in its work
- builds on the strengths of the organisation or project and/or the opportunities available to it
- addresses weaknesses in the organisation and/or assists the organisation to deal with threats to its work or existence.[2]

1 Bryson, J.M. and Farnum K.A. 'Creating and implementing your strategic plan' *In* Strategic planning: Q & A with Faculty. Martinelli, F. 'How do you know what the "right" critical issues are for your organisation?' Center for Community and Economic Development. University of Wisconsin Extension, USA. http://www.uwex.edu/ces

2 Shapiro, J. *Strategic Planning Toolkit*. http://www.civicus.org/new/media/Strategic%20Planning.pdf p.25

Box 8 illustrates the approach used by the Agrimark strategy development team to determine the critical issues for their organisation. You will notice that in the Agrimark case, their team identified nine preliminary issues. With such a long list of issues, it is possible that discussions may become tedious and lose focus. A thematic approach may be more useful in this case. On the other hand, if your discussions result in several disparate issues you may have no choice but to apply criteria to each issue.

Box 8. Agrimark: Approach to defining critical issues

- Invite senior members of management and representatives from Corporate Services to a brainstorming session with the strategy development team. They will bring management's perspective to the discussions.
- Focus on the organisation's mandate. The intention is to emphasise that the central focus of the brainstorming session is to determine critical issues in relation to the achievement of the organisation's mandate.
- Allow members to contribute freely. Contributions reflected the findings in the audit, SWOT analysis and in the intelligence brief. Nine issues were identified. These were: (1) lack of communication between the Information Department and between the Agricultural Extension Department and the Service Operations Department; (2) production, marketing and farmer registration data held in hard copy files; (3) lack of computerised generation of reports; (4) no structured capacity building programme for staff; (5) stakeholder dissatisfaction with slow response to requests for information and advice; (6) increasing use of mobile phones and personal digital assistants (PDAs) by farm families; (7) installation of telecentres in rural communities; (8) niche marketing opportunities in Europe; (9) repositioning of the agricultural sector to include mega-farms was imminent.
- Group issues into themes. Agrimark's identified four themes and associated issues were: development of ICT capability (Issues #1; #2; #3; #4; #5; #6; #7); application of ICTs in provision of services (Issues #2; #4; #5; #6; #7; #8); responsiveness to needs of direct beneficiaries (issues #2; #3; #5; #6; #7; #8; #9); strengthening capacity building (Issues #2; #3; #4)
- Decide on criteria for examining each thematic issue to determine if it is indeed a critical issue to your organisation. In the case of Agrimark, the team decided that the following three questions would be applied as criteria to assess each issue: (1) Is this a pivotal issue to Agrimark that, if addressed, could create a positive multidimensional effect on the organisation? (2) Would Agrimark have an advantage in the agricultural sector by addressing this issue? (3) What are the possible consequences if Agrimark postpones action on this issue?

Three of the four thematic issues met all the above criteria and were deemed to be critical issues since failure to address them would result in the provision of inefficient extension services, leading to loss of markets, farm income and an influx of competitors who could gain the allegiance of the farming community by providing responses using current information technology already available in rural communities.

3.1.1 Development of strategic objectives and strategic option statements

After identification of critical issues, the next step is to determine the strategic objectives and realistic actions that will achieve the defined objectives. These actions must be expressed as statements. At this stage they are considered to be possible options for consideration and prioritisation. At all times it is important to remember that the focus is on the future direction of your organisation, and so in order to maintain relevance in your deliberations you must continuously refer to the organisation's mandate.

To draft your strategic objectives and accompanying strategic option statements you will need to consult your SWOT analysis and reports on the information audit and focus group sessions. Below is a guide for you to follow:

1 Revisit the list of opportunities. Write down a list of opportunities that you identified in the SWOT analysis. For each opportunity indicate an action in the form of a statement that would allow you to take advantage of any of the opportunities listed in the SWOT, if selected critical issues were to be addressed by your organisation. In other words you will produce a list of redefined opportunities in the form of statements

2 Compare these statements with your organisation's mandate and goals to ascertain that they are not at variance.

3 Verify that the redefined opportunities are in line with the information and communication needs identified in the audit report and the focus group report.

4 Select those redefined opportunities that compare favourably with mandates, goals and needs. Express them as strategic objectives for the ICM strategy.

5 Prepare draft strategic option statements that convey the intention of achieving each strategic objective. To do this, refer to your SWOT in order to identify:

- existing strengths that could be used to realise your strategic objectives
- existing weaknesses that could be remedied to become a possible strength or advantage to achieve your strategic objective. State what action or actions you will take to accomplish this; in other words you will be writing one or several strategic statements to realise your strategic objectives
- existing threats that may derail the realisation of your strategic objectives. State what action(s) you will take to circumvent these threats. These actions will be additional strategic statements to accomplish your strategic objectives

Box 9 illustrates the rationale in the Agrimark scenario as the team works on developing its draft strategic statements.

Box 9. Agrimark: Rationale used for the development of ICM strategic option statements

The following deliberations build on reports and previous deliberations by the team.

Critical issues identified: Development of ICT capability; application of ICTs for provision of services; responsiveness to needs of beneficiaries and stakeholders

Step 1: Revisiting opportunities: If the defined critical issues are addressed, Agrimark would be able to: use agricultural informatics to (i) provide extension services to rural communities, (ii) reduce the response time for processing requests and (iii) create production, marketing and farmer registration databases

Steps 2 and 3: Comparing and verifying redefined opportunities with respect to the mandate and needs. The redefined opportunities in Step 1 are within the scope of Agrimark's mandate and would be responsive to the needs captured in the audit and focus group reports

Step 4: Expressing redefined opportunities as ICM strategic objectives. Examination of the redefined opportunities suggested that there were two common denominators – agricultural informatics and satisfaction of ICT needs of staff and stakeholders. Therefore the brainstorming session agreed to restate the opportunities to reflect one strategic objective: **"Utilisation of agricultural informatics to improve, develop and expand information and extension services to staff and stakeholders"**

Step 5: Preparing draft strategic option statements: The team applied the following questions to the results of the SWOT analysis in order to focus on realistic actions for achieving strategic objectives:

- Which existing strengths could be considered an advantage for pursuing identified opportunities?
- What strategic actions should be taken to address Agrimark's weaknesses?
- What safeguards can Agrimark implement to give it an advantage and to circumvent perceived threats?

Table 2 provides the outcome of the deliberations as the team followed Steps 1 -5 in **Box 9**.

Table 2. Agrimark: Development of strategic option statements

Opportunities	Existing Strengths as an advantage in pursuing defined opportunities	Strategic statements to address Weaknesses	Strategic statements to address Threats
Utilise telecentres & mobile phones to improve and expand services to rural communities Develop computerised production, marketing and farmer registration databases for use by staff and stakeholders	In-house access to high speed Internet System for collection of wholesale and retail prices in the field Alliances in agricultural sector	Digitise hard copy data Develop structured programme for capacity building Upgrade ICT infrastructure	Expand alliances to include village chiefs Target promotional programmes to women farmers in rural communities

After compilation of the strategic option statements, you will need to prepare for a presentation to your senior management and staff members at all levels in your organisation. It is vital that you keep as many members as possible up-to-date with developments so that they continue to “buy-in” to the ICM strategy and the implementation plan. There are past instances where staff members in service areas of an organisation made valuable suggestions and creative solutions to challenges because their perspective was from a different angle. Therefore provision for the participation of all staff is essential. You need to be aware that at the end of the presentation it is very likely that you could have additional options to consider. Three questions are likely to be asked:

A. What will strategic actions achieve? To answer question "A" explanations must accompany the strategic option statements. Preparation of such statements forces the team to think about the need that each strategic option is expected to address. One of Agrimark's strategic option statements and accompanying explanation can be used as an example (see **Table 3**).

Table 3. Agrimark: Example of a strategic statement and accompanying explanation

Strategic Option Statement	Explanation
Develop structured programme for capacity building	Training will be developed to support programmes and projects. In the first instance, the focus will be on the extension programme where there is a need for updated fact-sheets in different formats and for different target groups. Training will be sought for script writing, illustrating and multimedia presentations which can be distributed on DVD, radio, television, mobile phones and through social media e.g., "YouTube", "Facebook" in addition to print.

B. What organisational changes may need to be introduced?

C. What costs are likely to be incurred?

Below is a checklist to enable you to prepare for questions "B" and "C":

Organisational change

- ☐ Merging of departments
- ☐ Elimination of some positions
- ☐ Relocation of staff
- ☐ Introduction of new policies and procedures

Budget items

- ☐ Training programmes
- ☐ Sourcing and maintenance of equipment
- ☐ Acquisition of information resources
- ☐ Contracts for services of a consultant (if necessary)
- ☐ Transportation
- ☐ Additional space for expansion of services
- ☐ Upgrading and/or installation of communication infrastructure
- ☐ Change management counselling

3.1.2 Consulting with departments and stakeholders

Keeping staff informed on progress of the development of the ICM strategy document is essential to maintain "buy-in", gain cooperation during the process and to engender commitment for the implementation phase. You should have already made audio-visual presentations to your members of senior management and it may be necessary to edit your document based on comments received before holding staff consultations.

Staff consultation is one method of encouraging participation in the process. In addition, such consultations serve to allay fears and explain the direction being pursued in the ICM document. Valuable suggestions are likely to be made by staff. In order to get more in-depth feedback, circulate the draft report in advance of the consultation to facilitate prior structured discussions at the departmental level. Expect to receive questions from staff members who are concerned about how they will be affected by any of the proposed strategic options.

Consultations should also be held with stakeholders who may be affected by any of the actions in the draft strategic option statements. For example they may be expected to:

- take on new responsibilities
- deal with the withdrawal of services
- deal with the introduction of new products and services
- collaborate in the preparation of proposals
- share equipment and other resources.

Prepare a summary of the draft ICM strategic options and advantages that can accrue from their implementation for circulation at stakeholder consultations.

At the conclusion of the consultation sessions, you should edit the draft document to address comments and include agreed recommended changes made by participants.

3.1.3 Prioritising strategic options for inclusion in the ICM strategy document

Suggestions from staff and stakeholders may result in additional strategic options or the modification of those already presented by the team. However it may not be possible to implement all of them at the same time, based on the availability of additional human and physical resources, finances, required technology upgrades, time constraints and political considerations. The dilemma that your team could face is how to choose the strategic options to follow. It will therefore be necessary to establish priorities.

After formulation of strategic option statements, your team must identify the pros and cons of each strategic option in order to assess the level of commitment of resources required for implementation. It is very costly to begin a process and later discover that it will fail because a full assessment was not done before implementation. Unforeseen circumstances do occur. The following issues should be taken into consideration when analysing the pros and cons of each strategic option:

Organisational change– some of these changes may occur through the merging of departments, eliminating of some positions, retraining of staff; or the unwillingness of some staff to accept change

Costs associated with the implementation of the strategic option – some of these costs may be assigned to retraining of staff; sourcing and maintenance of equipment; obtaining information resources; or engaging the services of a consultant

Political shifts in government policy – either through a change of government or through a change in policy for the agricultural sector, or even a change in directives for the organisation e.g. a change in mandate

Staff availability– in some cases staff may be available in the organisation but will have to be retrained, leading to a late start in implementation of the specific strategic option

Physical Infrastructure – requirement for additional space to accommodate an expansion of services (if this is required)

Communication infrastructure will also be important especially if most of the strategic options are in the realm of agricultural informatics; information and communication technology upgrades and associated maintenance costs

Presentation of the pros and cons will also assist staff and stakeholders to identify any further risks or costs that may have been overlooked by the team. An estimated budget for each strategy will be a useful input when the team engages in discussions to establish priorities.

Various articles have mentioned methods for setting priorities in a group setting. Some of the articles recommend when each type of method should be used or the advantage of one method over another. The titles of these articles are included as useful reading in the list of references for this manual. Four processes are common in the various methods: establishing criteria, scoring, voting and ranking.

Paired comparisons and a grid analysis were used in the determination of country information priorities during the Caribbean and Pacific information needs assessment studies. Group members were representatives from organisations that participated in the needs assessment studies. If you would like to use this method, it is possible for you to adapt it for use by your team. In your case, group members include your team members, selected staff and stakeholders. The process is explained in instructions[1] which were sent to country participants in the information needs assessment studies[2]; a copy of which is included in **Appendix IX**.

The steps used for prioritising strategic options in the information needs assessment studies were:

1 Compilation of a list of strategic option statements

2 Selection of criteria that will be used to assess and rank the priority of each strategic option statement

3 Assignment of letters (A, B, etc.) to each statement in preparation for comparison pairing (Each statement is compared with the other using agreed criteria)

4 Preparation of a grid in which the rows and columns are marked with the letters assigned to each statement. Block out the rows in which a statement will be compared with itself in the column (In Appendix IV, this is the grey shaded area in the grid table)

5 Comparison of each lettered statement in a row with a lettered statement in a column using criteria selected at the start of the exercise

6 Addition of the number of times a letter (statement) was selected over the other (during comparison of statements)

7 The letters (statements) with the highest totals will emerge as priority statements

8 Preparation of brief supporting statements to justify the choices that were made. This will be of interest to those who did not participate in the selection process

Appendix IX shows an example of the lettered grid table.

1 CTA. 2006. Guidelines for the group priority-setting exercise for the strategic option statements. *CTA, Follow-up to CTA's Needs Assessment Studies for the ACP Caribbean Region – April 2006.*

2 *Needs assessment studies*. http://icmpolicy.cta.int

3.2 Development of the strategy document

At this point in the development of the ICM strategy document, you have defined critical issues and strategic objectives, listed strategic statements and presented these as options in a priority-setting exercise. Priority or core strategic options were selected and recommended to address strategic objectives, thereby supporting the mandate of your organisation.

Attention must now be given to the content of the strategy document in order to provide readers with an overview of the process and the outcome of the deliberations of the strategy development team. The final draft must be circulated to all those involved in the development of the document for final amendments and approval.

3.2.1 Table of contents of the ICM strategy document

An indicative outline of the table of contents (TOC) is presented below. The numbers refer to chapters in the document.

1 Executive summary

2 Background

- Methodology used
- Summary of findings
- Strategic options

3 Strategic objectives

4 Appendices

- Implementation plans
  - Outputs
  - Inputs / requirements

3.2.2 Implementation plans

An implementation plan is an essential component in project documentation and is usually included as an Appendix to the main body of a project document. This type of plan has two basic functions. It provides direction in the form of a list of activities that must be carried out and it specifies mechanisms for monitoring of ongoing activities and for evaluating output upon completion of the project.

An implementation plan therefore provides answers to three important questions:

- What is the objective of the project?
- How will the project be executed?
- How will we know that objectives have been achieved?

Answers to these questions are expressed under specific headings that comprise the plan. The headings and explanations are provided in **Table 4.** Agrimark's implementation plan using the headings in **Table 4** is presented in **Appendix X**. An activity form should be prepared for each member of the implementation team as a commitment to complete the assigned activities within a prescribed time; see **Appendix XI**.

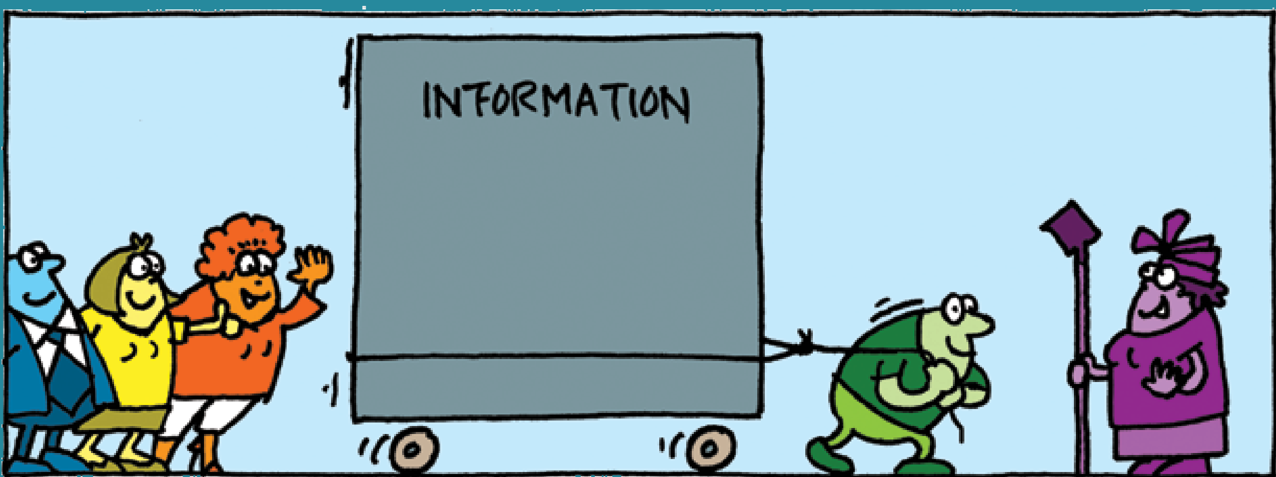
Table 4. Implementation plan: Headings and descriptions

HEADINGS	DESCRIPTION
Title	The title briefly and accurately describes the specific ICM strategy that was selected as one of the priorities for implementation
Justification	Briefly describe the reason for selecting this strategic option as a priority. For example, state the problem/challenge that exists and the reason for its occurrence. If there is commitment from another agency to collaborate in the implementation of the project, mention it here.
Objective	Indicate the purpose or ultimate objective of implementing the defined strategic option
Target audience	Specify all of the groups in your organisation which will perform more effectively, more efficiently, more timely
Benefits	Specify direct and indirect. Group benefits into short-, medium- and long-term. Will be useful in narrowing expectations within a time frame AND will provide a context for evaluating achievements of the project at a later date
Inputs	Requirements for conducting activities. Indicate what inputs you already have e.g. personnel, equipment, communication facilities. Indicate inputs that will need to be acquired, contracted or shared
Outputs	Specify quantitative and qualitative results
Activities	Specify the complete list of activities required for the completion of the project
Roles and responsibilities	Specify activities and delivery dates for each staff member – by name.
Itemised budget	Specify item and costs – direct costs. Some items may be donated by a stakeholder. Specify these as value “in kind” or in time, for example number of hours donated to the project by a stakeholder organisation. Sunken cost should also be identified
Timeline	Duration and completion dates. Include milestones
Monitoring and evaluation	Specify mechanisms that will be used to monitor the project during execution Specify appropriate qualitative and quantitative measures (indicators) for evaluating the achievement of the strategy

Module

4

Implementation, Monitoring and Evaluation



The ICM strategy has now been accepted at the corporate level. Attention must now be given to implementation, monitoring, evaluation and mechanisms for revision to ensure it remains relevant to your organisation's corporate objectives. This chapter discusses the need for:

- communicating with staff and stakeholders
- developing an approach for dealing with difficulties that may arise
- monitoring progress during implementation of the ICM strategy
- evaluating achievement of strategic objectives
- revising and updating the ICM strategy.

At the end of this chapter you will be able to:

- define and segment your stakeholders and staff as required in preparing your communication plan
- recognise staff reaction during different stages of implementing the ICM strategy document
- understand the importance of maintaining communication with staff and stakeholders on the development of the plan at all times
- understand the difference between monitoring and evaluation and identify evaluation methods for further investigation.

4.1 Implementation of the ICM strategy

Successful implementation of an ICM strategy is dependent on your communication strategy since staff and stakeholders are essential to making the strategy a reality. Therefore a communications plan for the distribution of the document is a critical element in the implementation of the strategy. The presentation of the entire document as it is written should be avoided but rather communiqués should be planned in accordance with the message that you would like to convey to a particular group of staff members or to a specific group of stakeholders. The communication plan will include a segmented mailing list, corresponding formats for distribution and a schedule for presentation of the document to each group. For example, you must decide who will receive a printed copy and who an electronic copy in full, who should receive only part of the strategy or implementation plan that relates to their work programme (staff member) or interest (stakeholder). Agrimark's segmentation of groups according to formats for delivery is presented in **Table 5**.

Table 5. Agrimark: Segmentation of groups according to format of delivery of communication

Format of delivery	Target groups
Full document, Executive summary, Excerpts, website,	Board of management, department heads, staff members, trade organisations, universities, government agencies, regional and international organisations
AV presentation	Board of management, farmers' co-operatives, rural communities, staff members
Focus groups, newsletters	Rural communities, agro-processors, staff members in departments
Posters	Rural communities, staff members, farmers' co-operatives
Press releases, newsletters, email messages, social networking sites	Print and electronic media

Deciding on the objective of the communication will assist you in determining the language (free of jargon) format of delivery and the level of detail that will be presented. For example, is your intention to:

- build rapport?
- convey intention?
- ask for feedback or input?
- provide information?
- build credibility?
- seek buy-in?[1]
- change the behaviour of the group? (as is probably the case with staff as new procedures and policies are introduced)

Prepare a communication plan that provides information relevant to each group and to segments within that group. Presentations – oral, written or audio-visual – must be concise and unambiguous.

For staff members include the following elements:

- organisation's mandate or mission and goals
- strategic objectives
- strategic options
- benefits to the organisation and staff
- significance for each department
- management's expectations from individual staff members
- brief indication of changes that may be implemented.

Staff must be allowed to ask questions of concern to them, to express their views and to offer suggestions, even at this stage. Change often brings opposition to new ideas and the presenter must be patient, positive and prepared for what may appear to be objections from those who will be affected by any change or by the introduction of more accountability where there was none before.

1 Australian Government. 2012. *Guide to preparing implementation plans*. Department of the Prime Minister and Cabinet. Cabinet Implementation Unit. http://dpmc.gov.au/implementation/implementationguide.cfm

The team should be alert to reactions from staff as the ICM strategy is put into operation at the department level, as individuals are assigned new or additional responsibilities and as new organisation policy and procedures are put into effect. Even when staff members appear to be committed to the implementation process, resentment to change may occur "as expressed objections". Broadbent[1] identified these as phases with specific characteristics (See **Box 10**).

Box 10. Phases in strategy implementation

Phase I: Uninformed optimism, high morale, a desire to be involved and an acceptance of change.

Phase II: Unforeseen problems are revealed, optimism declines, rumours abound, involvement becomes spotty and change becomes suspect. Many strategies fail during Phase II because of a lack of determination and skill to navigate around the many obstacles to success. Genuine commitment and persistence are called for.

Phase III: A plateau is reached, there is a renewal of hope, the mood of staff improves, and positions become flexible.

Phase IV: is attained, characterised by renewed confidence, a disappearance of doubts, an acceptance of change, and general satisfaction.

In order to successfully get to phase IV, you must be aware of and monitor any evidence of reactions that may surface in the first three phases and try to diffuse them through open discussions, regular team meetings and the provision of guidance in overcoming unforeseen obstacles and challenges. It may be useful to try to identify those gate-keepers who are influential in identifying real or perceived objections and work with them in devising solutions and in diffusing dissatisfaction among staff members. It is important to maintain lines of communication with staff and stakeholders at all times – including reporting on progress and challenges.

1 Broadbent, K.P. 1993. 'Strategic planning: an essential process for research and information centres.' *In* Pejova, Z. and Horton, F.W. (eds) *Consultancy on Strategic Information Planning.* Ljublijana: International Center for Public Enterprises in Developing Countries. 1993 ISBN 92-9038-140-X 214p. p.46

4.2 Monitoring and evaluation

Monitoring and evaluation are important components of project management. Monitoring is usually built into project execution as an ongoing process to check on its progress. If activities are not on schedule, every effort is made to redirect resources to ensure that delays are minimised. If delays are outstanding then the entire schedule may require adjustment. On the other hand, evaluation of a project assesses what was achieved in relation to stated objectives and the designated timeframe. Evaluation may occur at specific phases, especially if the project is a complex one or if the duration of the project is measured in terms of years. Monitoring is also inextricably tied into the evaluation process when monitoring reports are examined in an assessment of project scheduling and related output.

Monitoring may occur at three levels in your organisation, *namely*:

- *Team leader:* checks that activities are on schedule and addresses minor delays
- *Department head:* checks on reports submitted by team leader and queries any variances that may have occurred during the reporting period
- *Corporate management committee:* monitors all departmental reports, particularly as they relate to budgets and financial expenditure for the reporting period; addresses major delays and rescheduling and prepares summary progress reports for donors in cases where a project is externally funded.

Evaluation establishes whether or not the objectives or outcomes documented in the implementation plan have been achieved and if these are still in keeping with the mandate of your organisation. It can be conducted on the accomplishment of specific milestones designated in the timeline of the implementation plan and on completion of the project. Criteria for evaluation should be established before the start of the project and should be based on the achievement of the objectives of your implementation plan.

Evaluation can be accomplished through the use of:

- *indicators:* quantitative or qualitative measures that enable you to assess the degree to which project outputs and impact have been achieved.[2]
- *reviews of annual reports and conference papers:* a source of information on what has been achieved and how improvements can be made in the future
- *interviews with direct beneficiaries:* in Agrimark, for example interviews were used to determine any improvement in the flow of information, attainment of proficiency in the creation, use and provision of computerised databases on the wholesale and retail prices.
- *focus group sessions with stakeholders:* e.g. farmers in rural communities, during which anecdotes can be captured for inclusion in an evaluation report.
- *participatory evaluation: provides involvement in the evaluation process of those with a stake in the program: providers, partners, customers (beneficiaries) and any other interested parties*[3]

2 CTA, KIT, IICD. 2009. *Smart Toolkit: For Evaluating Information Projects, Products and Services*. 2nd ed. The Netherlands, CTA/KIT/IICD p. 128–132

3 USAID Center for Development Information and Evaluation. 1996. *Performance Monitoring and Evaluation: TIPS* Washington, DC, USA. 1 http://pdf.usaid.gov/pdf _ docs/PNABS539.pdf

In the case of the ICM strategy and implementation plan, the evaluation may be conducted internally if it is being wholly funded by your organisation. If there is stakeholder participation or an external funding source, it is generally accepted that there will be an externally appointed facilitator to lead the evaluation process. The method of evaluation should be stated in the project document and it is important for you to determine the objective of the evaluation prior to the approval of the project, since the report will be prepared in accordance with this particular focus.

You will recall that Agrimark's implementation plan indicated that the participatory approach would be used. It also identified the objectives of the evaluation and the interest groups to which the evaluation report would be sent. **Appendix XII** highlights the issues which Agrimark included on its agenda for planning the evaluation of the project: *Capacity building for delivery of extension services*.

4.2.1 Revision and updating of the ICM strategy

Your ICM strategy and implementation plan must be continually monitored and evaluated to determine its relevance to the mission and goals of your organisation. While both can be revised within any time frame set by management, the implementation plan may need to be revisited and revised on an annual basis, for example if timelines have not been met and need to be reworked, while the ICM strategy document may need to be revised every two to four years. When significant internal and external events that may influence your strategic objectives occur, your ICM strategy needs to be revised and updated. Examples of such events are:

- restructuring of the agricultural sector
- mergers of your organisation with another
- assignment of additional responsibilities to your organisation
- new ICT technologies introduced by external stakeholders that could make a positive or negative impact on your organisation
- results of monitoring and evaluation reports.

Revision and updating of your ICM strategy to reflect new situations require:

- reassessment of strengths, weaknesses, opportunities and threats
- updating the profile of your organisation
- auditing of new ICT needs. It is quite possible that updating the audit may require participation from only those departments that will be affected by an event or change
- redefinition of critical issues in terms of the results of the audit and SWOT analysis
- redefinition of strategic objectives and accompanying strategic options in relation to new critical issues
- reassessment and realignment of priorities based on major shifts in corporate objectives and policies.

Review of your ICM strategy could be carried out internally if it is being conducted as part of an internal annual review. Stakeholders will need to be part of the exercise for revision and updating your ICM strategy if the event or the reason for changed circumstances will affect them. Representation from the original strategy development team on the ICM revision team can be an asset. Members will be able to bring new perspectives on pitfalls to avoid and provide responses and clarification on issues relating to previous activities.

The goal of the management of all organisations, whether large or small, operating in industry, agriculture or in the services sector, is to chart a course that will lead its organisation to fulfilling its corporate objectives. The development of an ICM strategy document is a long process which takes time and careful planning. There are no short cuts. A successful strategy should facilitate the continual involvement of staff in the process, prepare and circulate policies and procedures for guiding the implementation process, and provide for monitoring, evaluating, revising and updating of the ICM strategy. A systematic and comprehensive approach to developing an ICM strategy document will lead to a more effective, efficient and proactive use of your information and communication resources as you pursue the achievement of the goals of your organisation.

Appendices

Appendix I – Flow chart for the development of an ICM strategy

Preparation

Start

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Know steps for developing ICM strategies

↓

Identify change agent for introducing an ICM strategy

↓

Focus on sensitising management to benefits

↓

Obtain management approval for the development of ICM strategy

↓

Appoint strategy development team

↓

Develop ToR for team

↓

Create "buy-in" by all staff at all levels in institution

↓

Respond to all questions and concerns from staff

↓

Sensitise stakeholders of the benefits of an ICM strategy

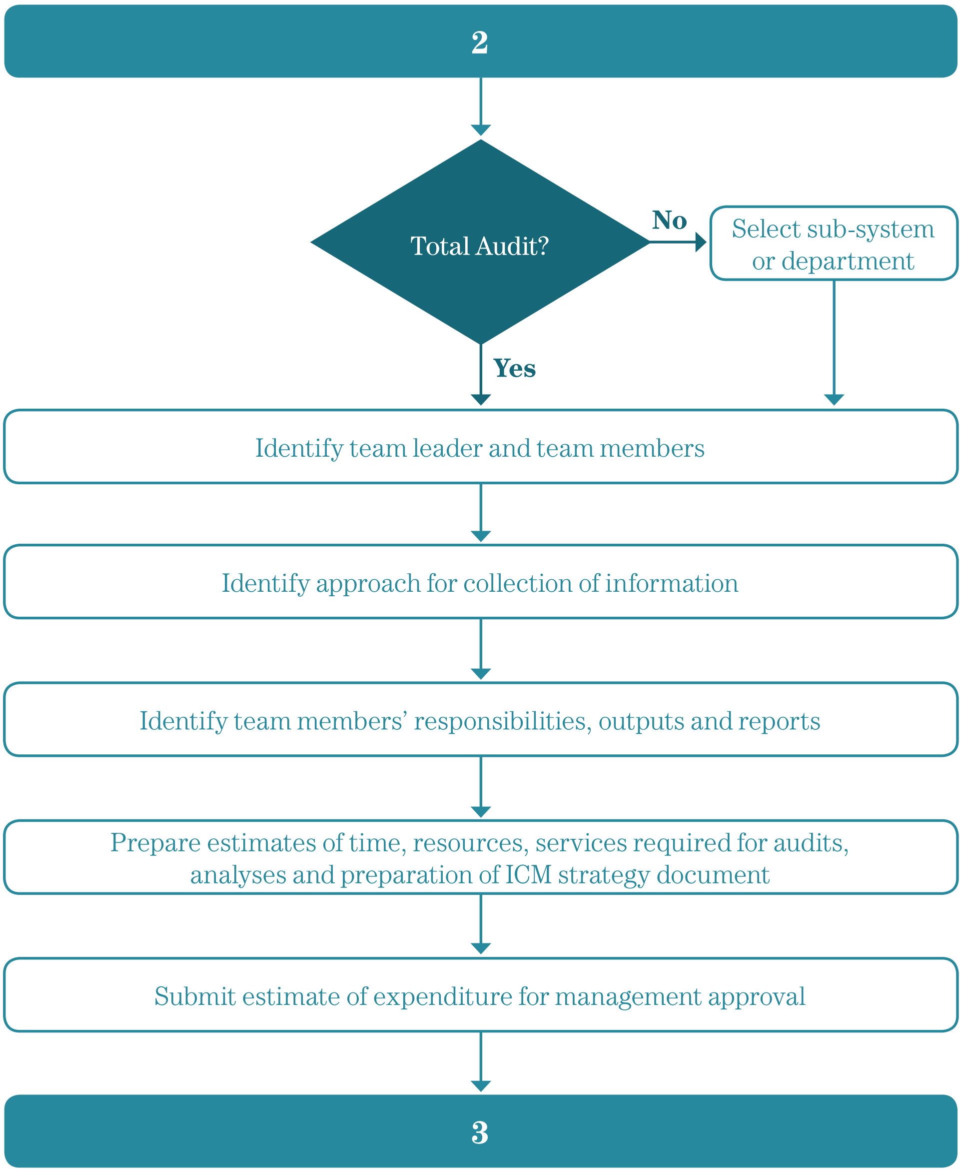
↓

Respond to questions and concerns from stakeholders

↓

2

Planning


2
Total Audit?
No
Select sub-system or department
Yes
Identify team leader and team members
Identify approach for collection of information
Identify team members' responsibilities, outputs and reports
Prepare estimates of time, resources, services required for audits, analyses and preparation of ICM strategy document
Submit estimate of expenditure for management approval
3

Collection of information: desk research, interviews, focus groups

3

↓

Desk research to prepare institutional profile

↓

Desk research to report on external influences

↓

Prepare questionnaire guide for interviews

↓

Test questionnaire on sample users

↓

Conduct role-playing exercise

↓

Conduct interviews and prepare report

↓

Conduct focus group sessions with stakeholders

↓

Prepare report on sessions

↓

4

Analysis of data and information

4

↓

Analyse completed questionnaires from staff and stakeholder interviews

↓

Identify strengths from interview responses

↓

Identify weaknesses from interview responses

↓

Identify and sketch the flow of information from interview responses

↓

Identify opportunities presented in intelligence brief

↓

Identify threats using report in intelligence brief

↓

Analyse focus group reports

↓

Review all analyses in team meetings

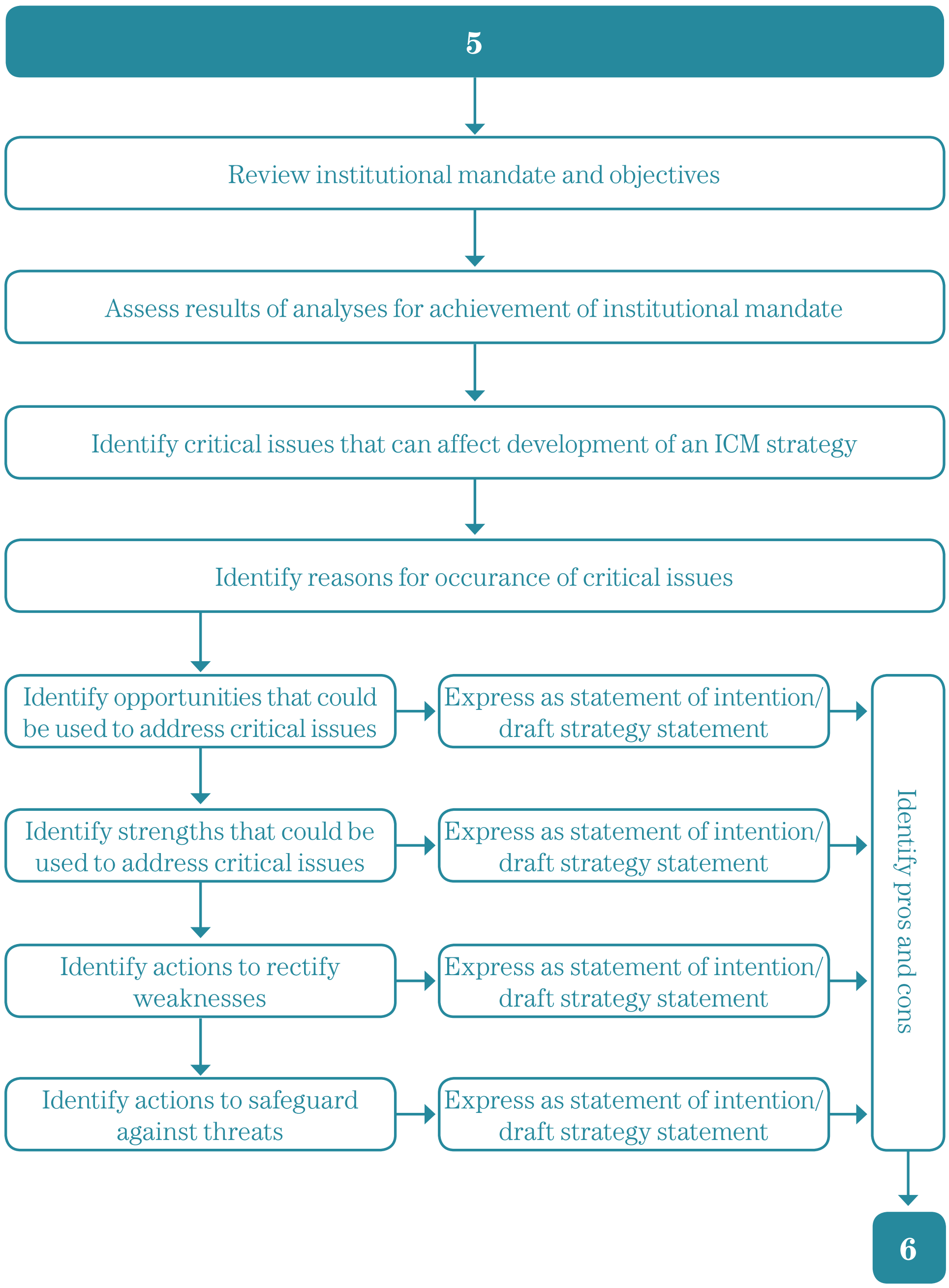
↓

Prepare SWOT analysis

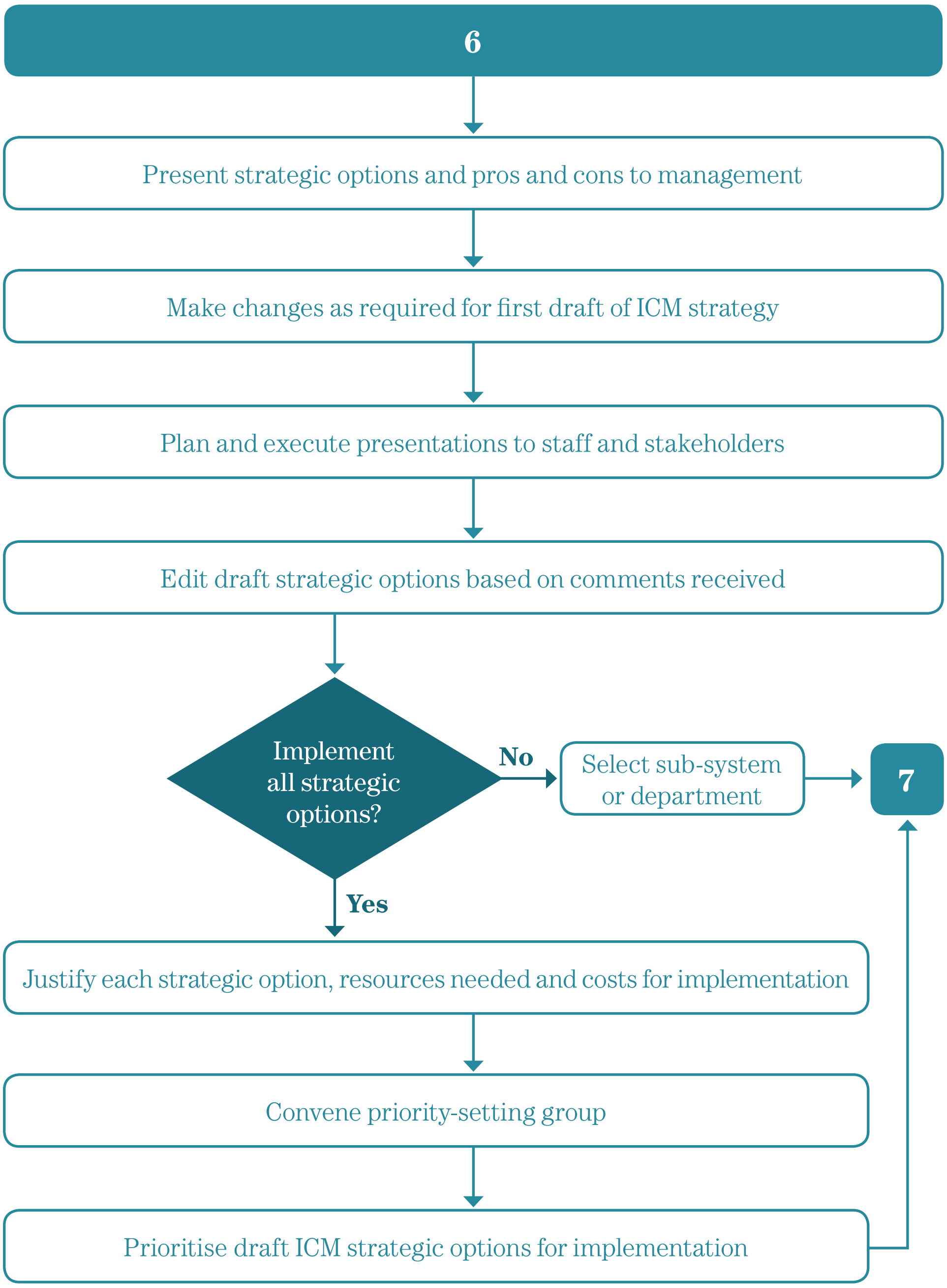
↓

5

Strategy formulation and development



Strategy formulation and development (cont'd)



Approval, implementation, monitoring, evaluation and updating of ICM strategy

7

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Management approval for ICM strategy document

↓

Presentation of document to staff and stakeholders

↓

Prepare implementation plan for ICM strategy document

↓

Prepare and execute communication plan

↓

Monitor and evaluate implementation of strategic options selected

↓

Revise and update ICM strategy as changes occur in institutional mandate and/or external environment, repeating steps 4 to 7

Appendix II – Selection of a subsystem

The following case illustrates one way to identify and select a sub-system that can improve information management across several departments in your organisation.

Background

CARIRI[1] (Caribbean Industrial Research Institute), a laboratory-based applied research institution was established to provide consultancy services to the food and beverage agribusiness sector, the chemical industry downstream of petroleum and natural gas, and the industrial minerals sector. In its early years and even after establishment when it was consolidating its services for the designated industrial sectors, it received an annual subvention from the Trinidad and Tobago Government. It also earned income from its testing services and from contracts for product development from the manufacturing sector.

The Technology Information Service (TIS) was one of six divisions in the institute and its head reported directly to the Chief Executive Officer. TIS provided information to the institute's multidisciplinary staff and also directly to clients from industry. An information specialist/subject specialist was appointed as a member of each project team. The primary contributions to project teams were sourcing, acquiring, and analysing information, as well as functioning either as literary or client editor for completed project reports. TIS developed a marketing orientation in the development of its information services which was offered directly to industry when it was part of a regional information project for Latin America and the Caribbean, funded by the Organisation of American States.

In later years, the institute was forced to revisit its then strategic plan because of four significant changes in the external environment:

1. The economy of Trinidad and Tobago was undergoing a structural readjustment in preparation for trade liberalisation
2. The government's annual subventions to the institute were decreasing
3. The ministry responsible for CARIRI mandated that the institute needed to increase its capacity to earn more of its income from industry
4. A number of competitors emerged on the scene, offering similar testing services to industry.

The strategy development team recommended that CARIRI must develop a strong marketing focus aimed at existing and potential clients in industry in order to meet its new mandate.

Selection of a sub-system

The mandate of the institution had changed. It could no longer depend on a captive market in industry and on a large quantum of funds from the government to cover its overheads, equipment and infrastructural maintenance expenses. If one of the institute's strategic objectives was to develop a marketing focus and earn more of its income from clients in industry, then access to up-to-date data and information on

1 Information management for marketing a consulting R & D organisation: the role of the Technology Information Service. By Barbara Gumbs. *In Consultancy on Strategic Information Planning*. Edited by Zdravka Pejova and Forest W. Horton. Ljublijana: International Center for Public Enterprises in Developing Countries. 1993. ISBN 92-9038-140-X 214p.

clients would be pivotal in fulfilling its mandate. Proactive marketing and timely delivery of services to clients became the focus for earning additional income from clients. One strategy was the development of a client management system. All six divisions in the Institute had some interaction with clients. Therefore the client information sub-system became one of the priority areas for development in order to achieve the institute's corporate objectives.

With the new mandate given to the institute, TIS developed a computerised client management system with technical assistance from the *Centre de Recherche Industrielle du Quebec* and financial support from the International Development Research Centre of Canada. An information needs assessment was launched to determine who needed what type of information on current and prospective clients, which industrial sectors and sub-sectors were important to CARIRI, whether or not current databases were adequate in providing and sharing information about clients and where gaps or shortfalls occurred. It was evident that a selective audit had to be conducted – in relation to clients – and distinct from a total audit of information and communication needs in the institute.

Information audit

TIS adopted a team approach in executing an audit on client information. An information specialist from TIS and an operations research analyst from the computer department conducted the information audit. The team interviewed staff members in departments that interacted with external clients. These staff members included the Chief Executive Officer, division managers, unit heads and administrative assistants in all divisions and the accountant. The accountant was responsible for billing clients and administrative assistants were responsible for maintaining current information on departmental interactions with clients. The purpose of this audit was three-fold:

1 to sell the concept of a client management system;

2 to identify the needs of staff members for information on clients;

3 to identify and verify the flow of client information.

Below are examples of questions which were asked during the interviews.

- Which industrial sub-sectors do you now service?
- What information on clients do you now possess in your department?
- What information on clients do you need?
- Where do you obtain this information?
- Do you have access to this information in digital format?
- What additional client information do you require to enable you to function more efficiently?
- To whom do you send client information generated in your division?
- What interactions do you have with clients?
- Are these interactions captured and recorded on the institute's system?
- Who are the existing clients for the services you offer?
- Who do you see as potential clients for your services?

In addition to responses during interviews, the following sources were also examined for elements of information relating to clients:

- all forms in use in the institute
- the Institute's Procedures Manual
- input to and output from the institute's databases
- the format of reports generated.

A user committee was formed to gain institute-wide support and involvement in the planning stages of the proposed client management system. The committee comprised representatives from each technical division that interacted with clients, in addition to representatives from the computing and systems group, the accounting unit and TIS.

Findings

Client interaction with CARIRI occurred in the preparation and acceptance of proposals, the execution of projects, visits to and from industries, attendance at institute-sponsored workshops and through the commercial licensing of institute-developed projects. From the information audit, it was clear that the need for client information fell into two groups: data derived from service-related interaction with clients and intelligence data on clients. The client management system was developed to provide data and reports for assisting in managing the marketing function of the institute.

Monitoring

In order to integrate the use of the client management system into the operating system of the institute, the team held demonstrations in each operational unit. In addition, reports that were generated from the system were circulated to unit heads and divisional managers. The user committee was reconvened in order to generate feedback on the reports and to upgrade the system in keeping with the needs of users in the institute.

Appendix III – Agrimark: TOR for the development of an information and communication management (ICM) strategy

1. Background and rationale for developing an ICM strategy for Agrimark

Agrimark is a statutory body that was established by an Act of Parliament in 2000 to provide an efficient extension service for rural communities to develop and provide a market intelligence service for the agro sector and to provide assistance for the development of agriculture products. There are two divisions. The Marketing Division is in charge of the Research Department, the Agricultural Extension Department and the Service Operations Department. The Corporate Services Division is responsible for finances and personnel. The Information Department, with responsibility for information technology support and the provision of information, reports to Corporate Services. The overall objective is to assist rural communities and local agro processors to increase farm income and to reduce the food import bill.

A recent needs assessment study indicated that 60% of respondents in rural communities expressed dissatisfaction with the timeliness of responses to enquiries submitted to Agrimark. The government, through the Ministry of Agriculture, has announced an imminent repositioning of the agricultural sector that includes the introduction of mega-farms and a focus on increasing exports of local farm produce. Internally, the management of Agrimark is aware of inefficiencies in data and information collection, resulting in missed opportunities for making an impact on rural communities. It is also clear that there is ineffective information and communication flow within and among departments. The current organisation strategic plan has not addressed the information support that is required. This dilemma needs to be addressed if the organisation is to remain a viable entity in the agricultural sector. The management of Agrimark has identified the need for an accompanying information and communication strategy to guide the organisation in carrying out its three-fold mandate and to address the information deficiencies that exist.

2. Objectives and scope

The overall objective of the consultancy is to build capacity for information and communication management to enable Agrimark to address the information needs of rural communities and agro-processors, its primary stakeholders, as well as the needs of the technical departments in the organisation. More specifically, the consultancy aims to (i) develop an ICM strategy that will enable Agrimark to achieve its mandate and implement its current 3-year strategic plan (ii) prepare an implementation plan that includes a timeline and a budget.

The ICM strategy should focus on enabling the organisation to improve its information and communication services, within the organisation and to rural communities and agro-processors, utilising the new ICT-adapted forms of delivery of information for extension services.

3. Expected outputs

An ICM strategy document that supports the mandate of Agrimark, its current three-year strategic plan, the use of ICTs in the delivery of data and information within Agrimark and efficient provision of assistance and advice to rural communities and agro processors.

An implementation plan containing details for monitoring and evaluation of the ICM strategy with provision for reviewing and updating the plan as a result of annual reviews or as changes occur in the agricultural sector.

4. Issues to be addressed

Information resources needed for preparation of the ICM strategy include: financial resources, personnel, computer hardware, equipment and facilities, software, communication technologies, internally generated data and information (regardless of format), documents including reports, operational manuals and procedures.

Conduct an information audit in Agrimark and focus group discussions with stakeholders to determine:

- core information needs and use of information resources in all technical departments
- communication and interactions within and across departments
- ICT capabilities and usage skills
- gaps in needs, use and communications
- infrastructure and tools (hardware and software) available for effective communication and knowledge sharing with staff and stakeholders
- the external environment focusing on trends and developments that might impact the achievement of the mandate and three-year development plan including but not limited to:
- new communication technologies
- marketing trends
  - changing needs of stakeholders
  - shifts in government's policy for the agricultural sector
  - new "competitors" in the sector
  - prospective alliances and networks
- the strengths, weaknesses, opportunities and strengths (SWOT analysis)
- the strategic objectives and corresponding strategic options.

Prepare an accompanying implementation plan that will identify budget items and a pro forma estimate of costs.

Develop an accompanying communication plan identifying formats for presenting the ICM strategy document to staff and stakeholders including the Ministry of Agriculture.

Identify the links between the ICM strategy and the mandate of Agrimark indicating where policy changes need to be made regarding the management of information and ICTs.

5. Methodology

The strategy should be developed using a team approach. The management of Agrimark will appoint a staff member as the Agrimark facilitator to work with the consultant who will work closely with the team to guide and steer the process. Team members will be drawn from core information gathering and disseminating departments. Additional members may be co-opted as the need arises. The ICM strategy development team should acquire inputs to a SWOT analysis from desk research, information audits and from focus group discussions with stakeholders.

The Chief Executive Officer will occasionally request a meeting with the strategy development team to provide management's perspectives on critical issues.

6. Reporting

A draft copy of the final report of the ICM strategy must be presented to the management committee of Agrimark for approval.

Consultative meetings should be held with staff members to create buy-in, to provide information on progress, to establish rapport and commitment and to launch the implementation plan after approval by management.

Four bound copies of the ICM strategy document inclusive of the implementation plan and communication plan should be submitted to the Chief Executive Officer of Agrimark. Electronic versions of the document in word and PDF formats must accompany the bound copies.

7. Implementation schedule

01 August 2011: Selection of consultant and appointment of the strategy development team

01 September 2011–01 December 2011: Submission of the draft ICM strategy document

15 January 2012: Submission of the draft implementation plan and the draft communication plan

28 February 2012: Submission of copies of the final report

8. Key resources to be made available to the strategy development team:

- Act establishing Agrimark
- Annual Reports 2008–2011
- Departmental Reports 2009–2011
- Three-year Development Plan
- List of stakeholders
- CTA guidelines on developing an ICM strategy
- CTA/KIT/IICD Smart Toolkit for evaluating information projects, products and services

Appendix IV – Agrimark: Organisation profile

Agrimark is a statutory body that was established by an Act of Parliament in 2000 to provide an efficient extension service for rural communities, to develop and provide a market intelligence service for the agro sector and to provide assistance for the development of food products using fruits and vegetables.

The Heads of the Research Department, the Agricultural Extension Department and the Service Operations Department report to the Director of the Marketing Division, while the Head of the Information Department reports to the Director of Corporate Services (finance and personnel).

The functions of each department are as follows:

Information Department: Provision of information and IT support to all departments.

Research Department: Identifies local, regional and international markets for fresh produce; develops facilities and services to improve the quality of fresh produce for export; establishes and maintains relationships with stakeholders.

Agricultural Extension: Provides advice to farmers; prepares information products to educate farmers.

Services Operations Department: Demonstrates prototypes of agricultural machinery for processing local produce

Focus: The themes for the next three years are root crops, green vegetables, fruits, pest management and establishment of better communication with farmer networks.

Established positions: The Information Department and the Research Departments are currently understaffed according to the number of allocated staff positions “on the books”.

Stakeholders: The direct beneficiaries of Agrimark’s services are local farmers who can be found scattered in rural communities across the country. Forty per cent of these farmers are women. Other stakeholders include officers at the Ministry of Agriculture, researchers at agricultural universities, agro-processors, and buyers for supermarkets and small grocery shops.

Internal Committees: There are several committees in operation at Agrimark. These include:

- The executive team, consisting of the CEO, the Director of Marketing and the Director of Corporate Services. This team oversees the management of the entire organisation, sets and reviews policy and is responsible to the Board of Management appointed by the Ministry of Agriculture. Members of this team are also responsible for developing strategic alliances with national, regional and international organisations that focus on agriculture and agro-industry.
- A day-to-day management committee consisting of heads of departments who meet on a bi-weekly basis to review the performance of programmes, monitor the execution of projects and debate issues brought to their attention by individual department heads.
- Representation on external committees: Several senior staff members represent the organisation on government committees or working groups e.g. the committee on standards for exporting fresh produce, the working group on organic farming, and the food manufacturers’ exhibition committee.

Observations about the culture of Agrimark indicate that the management committee recognises the importance of information and information technology in executing the organisation's mandate. The following observations substantiate this opinion:

- The Information Department has autonomy in managing its allocated budget
- The Information Department reports to the Director of Corporate Services
- There is a copy of a Standard Operational Procedure (SOP) manual that is kept in each department. In addition to the documented procedures for each function in the organisation, there are accompanying sample forms for each procedure.
- The standing committees within the organisation facilitate the exchange of information among department heads.
- Each department is required to include a training component in the submission of its departmental budget.
- Project leaders in all departments must include a budget item for sourcing and acquiring information for their programmes or projects.
- The SOP indicates that information specialists must be assigned as team members on projects and programmes and their time must be included in the costing of the project.
- An intranet is being planned to facilitate communication and access to databases by staff members whose departments are located some distance away from the main location.

Appendix V – Agrimark: Intelligence brief

The mandate or mission of Agrimark is to provide an efficient extension service for rural communities, to develop and provide a market intelligence service for the agro sector and to provide assistance for the development of food products using locally produced fruits and vegetables.

The purpose of this intelligence brief is to alert the corporate strategy development team to events that can present opportunities or threats to its proposed ICM strategy.

Repositioning of Agriculture

The Government has announced a new thrust in the development of the agricultural sector that will create a stronger role for agriculture in the agri-business sector. One of the measures announced is *"strong financial and institutional support for agri-business organisations and significant increases in the range and areas of incentives along the agri-business value chain"*[1] Mega-farms have already been distributed to fifteen farmers for pursuing organic farming.[2]

One of the critical dimensions for the success of an effective and dynamic value chain in the agricultural sector is information flow. The important elements identified by Boehlje *et al* are *the accuracy of messages, the strength of these messages, the cost of messaging, the speed of transmitting and receiving messages, the openness of sharing rather than retaining critical information among participants.*[3] There are weaknesses in Agrimark's information technology infrastructure that would not allow the organisation to become a vibrant player in this proposed agriculture value chain.

Organic Farming

The global market for organic food and drink is recovering from the repercussions of the economic crisis. Single-digit market growth was observed for the first time in 2009 because of the economic slowdown reducing industry investment and consumer spending power. Organic food and drink sales expanded by roughly five per cent to 54.9 billion US dollars in 2009. Global revenues have increased over three-fold from 18 billion US dollars in 2000 and double-digit growth rates were observed each year, except in 2009. Healthy growth rates are envisaged to restart as consumer spending power rises and as more countries come out of economic recession. The countries with the largest markets are the US, Germany, and France; the highest per capita consumption is Denmark, Switzerland, and Austria.[4]

1 *Stabroek News.* Business. Friday June 27, 2008.)

2 *Trinidad Express Newspapers.* Dec. 23, 2010. "15 mega farms to come on stream by June 2011". By Ariti Jankie. South Bureau.

3 Boehlje, Michael D. Hofing, Steven L. and Schroeder, R. Christopher *Value chains in the Agricultural Industries* Staff Paper #99-10. August 31, 1999. Department of Agricultural Economics Purdue University c. Agricultural Education and Consulting, LLC http://www.centrec.com/articles.php

4 *The World of Organic Agriculture 2011* http://www.organic-world.net/yearbook-2011.htm

To obtain a larger share of the organic market, producers and exporters in developing countries need to design appropriate marketing strategies, seek more direct links with retailers in importing countries – including through e-commerce – and create partnerships. Fair-trade organisations also play an important role in helping small producers to benefit from trade, including in the area of organic products.[5]

Use of ICTs in Agricultural Extension Services

Agricultural informatics is a new concept that has arisen following the rapid development in information and communication technologies (ICTs) and of the Internet. Referred to as e-agriculture, agricultural informatics is an emerging field which combines the advances in agricultural information, agricultural development and entrepreneurship to provide better agricultural services, enhanced technology dissemination and information delivery through the advances in ICT and the Internet. The e-agriculture concept, however, goes beyond technology, to the integration of knowledge and culture, aimed at improving communication and learning processes among relevant actors in agriculture at different levels i.e. locally, regionally, and globally.[6]

The above publication identifies several projects in which ICTs are being used in the dissemination of agriculture: voice information delivery services, radio: dial-up (agricultural information on demand) and regular radio broadcasts; extension service based on mobile phone and database monitoring; e-learning for basic skills, agricultural education and video-based approaches.

Synopses of many ICT projects and valuable references provide ideas for the introduction and application of *mobile phones, hand-held computers or personal digital assistants (PDAs), smart cards, CD-ROM, geographic information systems (GIS), Global Positioning System (GPS) devices, digital TV and radio, radio-frequency identification (RFID) devices, imaging and acoustic technologies, and of course the web, web 2.0 and e-mail based programmes.*[7]

New Organisation in the Agricultural Sector

A new NGO was registered with the Ministry of Agriculture. This NGO will focus on assisting women farmers to sell their produce at the mid-week wholesale farmers' market in the western region of the country. [8]

5 *Trading opportunities for organic food products from developing countries: Strengthening research and policy-making capacity on trade and environment in developing countries.* Edited by Rene Vossenaar and Els Wynen. UNCTAD/DITC/TED/11. ISBN No. 92-1-112628-2. January 2004

6 *Inventory of innovative farmer advisory services using ICTs.* Prepared for: The Forum for Agricultural Research in Africa (FARA). Prepared by: Mucemi Gakuru, Kristen Winters and Francois Stepman. February 2009.

7 *A Chronicle of ICTs in Agriculture* In *ICT update: Special 50th issue.* Issue 50. August 2009. CTA. http://ictupdate.cta.int

8 *The Chronicle: Agriculture Supplement.* August 19 2011, p.2

Appendix VI – Agrimark: Draft questionnaire

This questionnaire must be tested using a sample of respondents before finalisation for use

The purpose of this questionnaire is to collect information in order to assess information and communication needs, to identify gaps in information resources, to assess the availability of ICTs for the acquisition, generation and dissemination of information and to determine the direction of the flow of data and information among operational departments and between your organisation and stakeholder organisations. Interviewers should document additional information/comments on the attached continuation sheet. Indicate the number of the question for which comment is provided.

Background

1 Name of department: ____________________

2 Department focus areas: ____________________

3 Name of interviewee: ____________________

4 Contact information. Telephone: ____________________
Email address: ____________________

5 Name of position held: ____________________

6 Briefly describe your job functions: ____________________

____
____
____
____

7 Indicate your qualifications and experience:

____
____
____

Information Needs

8 What data or information do you normally require for your job? Be specific e.g. rainfall data, soils analyses, markets etc.

____
____
____
____
____
____

9 Indicate the format in which you currently obtain each type of data or information identified in # 8 e.g. print, electronic, advice/consultations. If you are not satisfied with the current format, specify your preferred format. State your reasons.

Data/information	Current format	Desirable format. State reasons

10 With reference to # 8 indicate the data/information with which you are **not** satisfied. Specify the reason/s for your dissatisfaction. Suggest a solution.

Data/information	Specify reason/s for dissatisfaction	Suggested solutions

Information Sources

11 Identify the source/s from which you obtain each type of information identified in question #8.

Data/ information	Agrimark Dept. (by name)	Stakeholder Org. (by name)	Personal files/ consultants	Internet/blogs/social media; select which are applicable

12 Are you satisfied with data/information you obtain from each of the above sources?

Sources	Satisfied	Not satisfied	Reason/s for dissatisfaction
Agrimark Dept. (by name)			
Agrimark Dept. (by name)			
Agrimark Dept. (by name)			
Stakeholder org. (by name)			
Stakeholder org. (by name)			
Stakeholder org. (by name)			
Personal files			
Consultants			
Internet			
Blogs			
Social media			

Information and Communication Technology (ICT) Needs

13 Do you use information and communication technologies (ICTs) in the execution of your job? Indicate with a ✓ in the appropriate box. ☐Yes ☐No

If your answer is "yes", identify in the space provided below the ICTs that you use. For example computers, tablets, personal digital assistants (PDAs), printers, software, the Internet, intranet, GIS, GPS, telecentres, blogs, social media (Facebook or Twitter) mobile phones, radio telephony.

14 Does your organisation provide you with access to any of the ICTs you identified? Place a ✓ in the appropriate box. ☐ Yes ☐ No

If your answer is "yes", identify those ICTs provided by your organisation. Indicate any perceived problems relating to hardware, software and network operation

ICTs used in your job function	Provided by organisation	Perceived problems (e.g. hardware, software, network operation, access)

Information Generated and Disseminated

15 List the data/information/reports that you generate. Indicate the format by using the letters **Y**-yes; **N**-no in the appropriate columns. Indicate frequency by using the following letters: **D**-daily; **W**-weekly; **Q**-quarterly; **M**-monthly; **A**-annually). Identify the name of the department/s to which data/information/reports are sent.

Data/information/ reports	Print	Electronic	Multimedia	Frequency	Department/s to which sent

16 Identify stakeholder organisations for which you provide advice, data/information, and reports. Indicate the subject content and the means of communication. Use the following letters to indicate means of communication: **V-**visits, **T**-telephone, **F-**fax, **E-**email, **SM-**social media (Facebook, Twitter, YouTube).

Name of stakeholder org.	Subject content provided	Means of communication

In the space provided below, describe any challenges you have encountered in the provision of services to stakeholders and how these may be addressed in the future.

17 Identify any committees e.g. in the agricultural, industrial, manufacturing, or educational sectors on which you sit as a representative of your organisation. Indicate the purpose of the committee.

Committees (name)	Sector	Purpose of the committee

Training Needs

18 Indicate the date of your last evaluation by your supervisor/head of department:

19 Indicate the technical areas that were identified for improvement during your evaluation:

20 Indicate any areas you have identified for further training. State the reasons.

Budget

21 Briefly describe the procedure for preparation of your department's budget.

22 What is your input to the preparation of the budget?

23 Are there specific line items for information-related activities e.g. budget for sourcing data and information, maintaining and updating hardware, software and network infrastructure, capacity building?
Place a ✓ in the appropriate box: ☐Yes ☐No

24 Can you identify any significant budget shortfalls for acquiring, sourcing and management of information within the last two years?
Place a ✓ in the appropriate box ☐Yes ☐No

If Yes, please explain below.

Evaluation of Products and Services

25 Is there an existing system for the evaluation of the department's information services and information products?
Place a ✓ in the appropriate box: ☐Yes ☐No

If your answer is "yes", describe the system and provide a sample of completed evaluation forms/reports.

____
____
____

Signatures

Interviewee: ____

Interviewers: ____

Date: ____

Continuation Sheet

On the attached form, document illustrations, suggestions, and relevant observations that can assist in analysis of responses. Indicate the number of the question to which the comment refers.

Number of question	Comment or illustration provided by interviewee and observations of the interviewer

Appendix VII – Agrimark: Questionnaire annotations

These annotations accompany the questionnaire in **Appendix VI** and are intended for the use of interviewers in order to assist them in understanding the reasons for asking specific groups of questions and the importance of the responses to discussions that will define the ICM strategy.

Numbers in brackets refer to corresponding questions in the draft questionnaire in **Appendix VI**.

Background: (Questions 1–7)

- Provides the context for analysis of the overall needs of the department and the employees in particular. Will indicate functions and experience available in a department and collectively in all the operational departments.

Information Needs: (Questions 8–10)

- Identifies the data or information and format that meet the needs of the respondent.
- If most of the respondents are dissatisfied with formats they receive, the reasons given may provide a path to a solution e.g. upgrading of software, availability of computers and/or access to networks. On the other hand, such a situation may indicate a lack of communication between the provider of the information and the recipient. This may require a simple solution. On the other hand, depending on the percentage of responses this situation may emerge as a weakness that requires further investigation.

Information Sources: (Questions 11–12)

- Information provided will be used to generate a map showing the direction of the internal flow of information among departments and in some cases between individuals.
- You may discover very good but unlikely informal sources that exist – unknown and inaccessible in the formal information flow according to the functional lines in the organisation chart. Some of these sources may be personal contacts in departments.
- If respondents indicate that for specific functions information is sourced outside of the organisation and at a high cost, then this is a red flag for investigating options for lowering costs.
- Many reasons for dissatisfaction with the current sources may be identified and warrant further investigation, especially if those sources are within Agrimark.

ICT Needs (Questions 13–14)

- Deficiencies in the information and communication system and in the infrastructure available to staff will be detected in responses.

Information Generated And Disseminated (Questions 15–17)

- Insight into the types of data, information and formats generated in the department may or may not corroborate with responses provided by the respondent in question #9 and #11.
- Responses will enable the team to "connect the dots" to confirm the direction of the flow of data and information, not only among departments but also between departments and stakeholders.
- The form of interaction with stakeholders, the challenges faced and any possible solutions may enable the team to consider options which may include better communication mechanisms or capacity building in specified areas.

Training Needs: (Question 18–20)

- Responses can assist in determining capacity building needs in departments while linking job functions to existing qualifications and expertise of respondents.

Budget (Question 21–24)

- The objective is to discover how the budget is prepared and if there are specific line items in department budgets and programmes for the acquisition and management of information and communication. Shortfalls in budgetary allocations can be an indication of the importance of information and communication to the management of the organisation. If this is so, the team will need to consider mechanisms to sensitise management and demonstrate the link between the provision for information and the achievement of corporate objectives.

Evaluation Of Products And Services: (Question 25)

- Responses can assist in determining the systems in place for evaluating the department's services or products. The team will be able to assess the responses from users. No indication of user feedback signals the need for mechanisms to improve information and communication management within the organisation.

Appendix VIII – Agrimark: Planning for focus group discussions with stakeholders

The purpose of this stakeholder group discussion was to determine ways of improving the products and services currently provided by the organisation. The leader appointed a subcommittee to plan the focus group session. The following items were discussed:

Identification of Agrimark's stakeholders: from an existing list in the organisation. These stakeholders were agro-processors, farmers' co-operatives, agricultural research organisations and the Ministry of Agriculture. Twelve invitees were selected

Identification of resources: included location of a venue, service providers for audio and video recordings, equipment e.g. chalkboard and stationery

Preparation of invitation letters: which contained the following information:

- A request for a senior representative who was a user of one or more of the following products and services provided by Agrimark:
  - agricultural extension services
  - identification of markets for fresh farm produce
  - preparation of fact sheets on agronomy of selected fruits and vegetables
  - research on varieties of hot peppers suitable for the export market.
- The purpose of the invitation:
  - To obtain stakeholders' perspectives on the introduction of new products and services that would assist them in meeting their organisations' goals.
- The session will be conducted as follows:
  - Invitees will be assigned to one of two groups, each consisting of six representatives to facilitate active participation among members of the group.
  - Notes would be taken of member's contributions. (Enquire in advance if there would be any objections to the audio recording of their representative's contribution).
- The length of the session: Two hours from 10:00 a.m. to noon.
- Transportation will be provided from a central location [ ].
- Light refreshments will be served at the end of the session.
- Each representative will be given a token[1] of our appreciation for participating in the focus group.
- The final date for submitting the name of your representative is [ ].

Selection of a moderator/facilitator: The team consulted with the head of the Faculty of Management of the University [ ]. Two experienced staff members from the Faculty of Management volunteered to moderate the two group sessions.

Assignment of participants to two groups: Agro-processors and farmers were assigned to Group A and researchers and representatives from the Ministry of Agriculture were assigned to Group B.

1 Such tokens can be an item on which the logo of your institution is engraved e.g. a pencil, notepad, or cup.

Compilation of questions: The subcommittee and the moderators agreed on the questions that would be presented for discussion in the groups. Below are sample questions:

- *Opening question.* Introduce yourself to the group, your name and the organisation that you represent and in one minute tell the participants something interesting about your village, town or country.
- *Introductory questions:*
  - What products or services do you associate with Agrimark?
  - Which departments in your organisation use these products and services?
  - Do you find these products and services helpful?
- *Transition questions:*
  - What are the goals of your organisation?
  - What services and products does your organisation provide?
  - Who are the target groups for your services?
- *Key questions:*
  - What improvements would you like to see in the provision of services to farmers?
  - Why have you identified this particular improvement?
  - How will this improvement help women farmers?
  - How do you contact your extension officer?
  - Do you have a computer at home, or access to one at the farmer's co-operative?
  - Do you have a mobile phone?
  - What problems do you have in getting your produce to market?
  - What mechanisms do you currently use for obtaining raw material for manufacturing your pepper sauce?
  - Do you have any problems with the varieties of peppers that you currently purchase?
  - Do you have problems with the quantity of supply of peppers?

Two members of the subcommittee were assigned to collate a draft report on the outcome of the focus group discussions.

Appendix IX – Guidelines for a group priority-setting exercise for strategic option statements[1]

These guidelines were prepared for a group, the members of which represented several organisations in the agricultural sector at the national level. The steps are applicable to ICM strategy team members and co-opted stakeholders in a group priority-setting exercise.

I Introduction

There are five steps to identifying priorities that reflect the pressing information and communication management needs in your country. These steps are set out in **Section II: Steps to prioritising**. The results of this exercise would be more meaningful if the priorities were arrived at by group consensus. We therefore strongly suggest that you undertake this exercise with a group of relevant, interested staff within your institution. Furthermore, to add greater validity to the exercise, you are also encouraged to get together with staff of other institutions (cf. attached list) to present a co-ordinated response. Provided you document which other institutions were involved, this will carry much more weight and is really the only way to present an alternative option, i.e. one that is not listed. This approach is all the more important given that only the top three options per country will be considered for possible intervention by CTA.

II Steps to prioritising

1 Collect basic information on strategic options

CTA has already completed this first step through the agricultural information needs assessment study conducted in your country in the 2003–2005 period. A SWOT (strengths, weaknesses, opportunities, threats) analysis has then been used to arrive at the strategic options statements that apply to your country and which are attached for your use in this exercise.

2 Arrange a group meeting

Make the prioritisation process participatory; use a group meeting. Suggested composition for the group is a fair representation of men and women, the involvement of youth and multidisciplinary staff members. Set a time and date when you and this group of persons from your institution (or from other identified institutions) will meet to examine and prioritise the various strategic option statements. You should allow for a meeting of at least two hours to ensure all options are discussed in detail and properly understood before the priorities are determined.

3 Choose decision criteria

You will need to set and agree on criteria which are the measures used to rank, value, adjust priorities or other procedures. These criteria will prove useful when proceeding to the next step – 4 below. Suggested criteria include, but are not limited to:

- relevance to national agricultural development priorities (as indicated in the national development plan)
- the positive effect of intervention on men, women, youth and farmers in rural areas
- issues of sustainability (possibility of long-term national / institutional support)
- the mandate of your institution
- strengthening your organisation's capacity / capability.

1 Follow-up to CTA's Needs Assessment Studies for the ACP Caribbean Region – April 2006

4 Complete the table

It is sometimes difficult to determine the order of priority when faced with a number of options. However, there is a simple method you can adopt. Start by drawing up a table with enough columns for each option, and include two additional columns. Have an equal number of rows in the table as you have options[1], and two more rows, one for the column header and one at the end for the 'total'. So for example, if there are eight option statements, you need a table with 10 columns and 10 rows (see below).

N°	Strategic Option Statement (SoS)	SoS A	SoS B	SoS C	SoS D	SoS E	SoS F	SoS G	SoS H
A	Xx		A	A	D				
B	Xx			A	D				
C	Xx				C				
D	Xx								
E	Xx								
F	Xx								
G	Xx								
H	xx								
	Total	3	0	1	2				

Starting at the top left corner of the table, compare each SoS with the other by asking the group, 'Is SoS A more important (has a higher priority) than SoS B?' If yes, put 'A' in the first box under SoS B column; then ask 'Is SoS A more important than SoS C?' If yes, then put 'A' in the first box under SoS C column; but if no, then put 'C' in the first box under SoS C column and so on. N.B. The grey shaded area of the table should not be filled in as each option only needs to be compared to the other once.

At the end, when you have asked about the importance all of the options, you will be able to count the number of times that each option appears in the table and put that number in the final row, for each option. In the above example, SoS A has appeared 3 times. You then have a better idea about the priorities; those options which appear more frequently are the top priority.

This is not a fool-proof system, because it relies heavily on the individuals who were selected to be in the group (and who does the selecting). However, it does lead to a lot of, at times, lively discussion and may provide a better understanding of the issues, and is better than just picking blindly.

Every selection by every institution will be counted and all the results tallied. The outcome of this exercise will be made known to you as soon as possible.

1 The options provided have been derived from the agricultural information needs assessment study conducted in your country.

5 Develop brief supporting statements

With the group, draft brief supporting statements for each of the top three priority option statements chosen. This is important as it provides some indication to those not engaged in the process of selection the reason why a particular option was given its respective rank.

III. Return completed table, brief supporting statements and include name(s) of participating institution(s) and staff members

Please return the completed table and brief supporting statements to your country consultant (or alternatively the Regional Coordinator) by fax/email by [ ]. Do feel free to contact your local consultant / Regional Coordinator should you have any queries.

CTA THANKS YOU FOR YOUR COOPERATION

Appendix X – Agrimark: Example of an implementation plan

Project title: Capacity building for delivery of extension services

Justification: Agrimark is mandated to provide an efficient extension service and a market intelligence service. During a needs assessment study, representatives from rural communities expressed dissatisfaction with the extension services. Response time to questions was too slow to deal with problems in the field. Wholesale and retail prices could not be used in negotiations for selling and buying of produce as they were out-of-date. Users of the services are largely dissatisfied with outdated fact-sheets, manual (not electronic) databases and the need for current training in e-delivery of extension services.

A committee of representatives from rural communities agreed to the need for this project and has participated in defining its objective and method of evaluation. The committee will also make in-kind contributions to the project and will actively assist in the preparation of outputs 1 and 2.

Objective: Empower rural communities to increase farm family incomes by facilitating access to information and advice using the most appropriate ICT.

Target audience: Agrimark: agricultural extension officers; agricultural research officers and information specialists. Rural communities: farmers and farmer co-operatives, buyers and sellers of agricultural produce

Benefits:

Short-term: Direct	Medium-term: Direct	Long-term: Direct
Farmers: Shorter time for receiving responses to requests Interactive communication with Agrimark staff	Increased quality and quantity of produce Participation in electronic discussion networks	Farming contracts with agro-processors Introduction of organic farming methods
Agrimark: Training in e-delivery of files and illustrated fact-sheets and the use of social media for networking with farmers' co-operatives	Computerised databases of current production and wholesale and retail market prices	Preparation of DVDs on organic farming Preparation of DVDs on post-harvest technology

Inputs:

Personnel	Equipment	Other
Extension officers, communication specialists, database specialists information specialists (Agrimark staff)	Laptop computers (to be purchased)	Transportation Communications Training courses Animation Digital video recording

Outputs:

1 Three digital video recordings that demonstrate organic farming methods

2 Two self-contained instructional packages with text, images and animations to improve post-harvest handling of produce

3 Computerised databases – production, wholesale and retail prices, farmer registration and agro processors

Outputs 1 and 2 will be prepared in partnership with the major stakeholder, the committee of representatives from rural communities, particularly with reference to the language, case studies and illustrations for the audio-visual material.

Activities:

PHASE I

1 Identify rural communities that have access to wideband Internet services and telecentres.

2 Identify questions submitted to Agrimark from these communities, the responses provided and the time taken to provide that response.

3 Determine the cultural communication mechanisms in use in the community.

4 Review the literature to determine the advantages and disadvantages of current extension methods and ICTs in use for facilitating interactive communication between extension officers and farm families

5 Shortlist the most appropriate ICT as a pilot.

6 Arrange for a visit with the selected rural communities according to their cultural protocol to discuss their needs.

7 Collect baseline data on production and sale of produce from the communities.

8 Prepare an interim report on Phase I for submission to the management of Agrimark and the representatives of communities A and B.

PHASE II

9 Prepare manual data files on production, prices and farmer registration for digitising process.

10 Select software and create computerised databases with report generation capability.

11 Identify and select trainees for participating in online and classroom courses on the preparation of extension materials.

12 Prepare an interim report on Phase II for submission to the management of Agrimark and the representatives of communities A and B.

PHASE III

13 Convene a project meeting to discuss the media and communications options that are suitable for conveying the specific topics required by the rural communities.

14 Visit the communities to provide feedback and to meet with representative who will work with the project team to address language, text and illustrations that will convey the intended messages.

15 Select and contract animation services and digital video recording services.

16 Prepare and distribute the materials to the communities using the Internet.

PHASE IV

17 Plan and prepare to conduct participatory evaluation sessions in rural communities.

18 Write and submit the final participatory evaluation report.

Roles and Responsibilities:

The appointed team leader, in consultation with division managers, selected four team members, each with a different specialisation. After consultations with each member, the leader prepared individual activity forms (See **Appendix XI**). These forms detailed:

- activities for which a named individual would be responsible
- number of hours to be spent on each activity
- output from each activity
- completion date for each activity.

Itemised Budget:

Item	Cost	Total
Equipment 5 Laptop computers		
Transportation Truck rental Bus fares Gasoline		
Training Fees for online courses Fees for extramural courses Textbooks and lab supplies		
Services Animation Digital video recording Facilitator for evaluation		
Communication		
TOTAL DIRECT COSTS		

Agrimark will be contributing [ ] hours of staff time

Agrimark overhead costs for space and administrative costs: [ ]

Community A and Community B will be contributing transportation and refreshment costs for meetings held in their communities

Timeline: (Gantt chart should be attached); milestones at the end of each phase

Duration of the project: 24 months

Monitoring and Evaluation:

Monitoring of project activity will be done using the following mechanisms:

- Submission of monthly reports by each team member
- Bi-weekly team meetings with the committee of representatives from rural communities
- Quarterly meetings with the management committee of Agrimark

Evaluation will be conducted in the rural communities using the participatory approach. The objectives of the evaluation will be to assess the output to:

1 determine which extension package was most useful for increasing family income

2 identify necessary improvements in language, illustrations and style used to convey information

3 determine which method of interactive communication was most useful and relevant to the communities

4 assess the clarity of advice and response times of questions submitted to Agrimark

5 train representatives from the communities in designing and conducting evaluations of their information-sharing programmes, using the participatory approach

6 identify improvement and efficiency in information flow among departments in Agrimark

7 identify results of the role of the availability of computerised production, marketing and farmer registration data in improving the income of farm families.

The evaluation report will be submitted to Agrimark, the committee of rural communities and the Ministry of Agriculture.

Appendix XI – Agrimark: Example of an activity form for a specific team member

Name of team member: [ ]

Project Title: Capacity building for delivery of extension services.

Project code: ICM2011-03-02

Activity	Time (hours)	Output	Completion Date
Identify communities with Internet and telecentres	1.5	Detailed list with names, addresses and locations. Provide an analysis of the use made of Internet and telecentres	05 March
Determine cultural communication mechanisms	3.0	Report including an Appendix with case studies	10 April
Review the questions and responses from each community	6.0	Report providing an analysis and indicate reasons for delays in responding	20 April
Attend all team meetings and brainstorming sessions	10	Active participation in discussions	12 Aug.
Prepare monthly reports on activities detailing any variance and problems	5	Draft report	5^{th} of each month

Signature of team member: ____

Signature of Head of Department: ______________________________________

Signature of team leader: ____

Appendix XII – Agrimark: Planning for the participatory evaluation of the project – capacity building for delivery of extension services

Agrimark's team and representatives from the communities agreed that the participatory evaluation would be conducted at the conclusion of the project. The objectives of the project were deemed to be of primary concern since the project would be evaluated on the achievements of project objectives.

Objectives

- Determine which extension package was most useful for increasing family income
- Identify necessary improvements in language, illustrations and style used to convey information
- Determine which method of interactive communication was most useful and relevant to the communities
- Assess the clarity of advice and response times of questions submitted to Agrimark
- Train representatives from the communities in designing and conducting evaluations of their information-sharing programmes, using the participatory approach
- Identify improvement and efficiency in information flow among departments in Agrimark
- Identify results of the role of the availability of computerised databases on production, marketing and farmer registration data in improving the income of farm families

Based on the above objectives, the meeting realised that there might be three different emphases required in the evaluation report, based on the particular concerns of the interest groups:

Agrimark would be interested in improvement of the management of internally generated information and the provision of accurate and efficient responses to requests for advice and information from rural communities.

The Ministry of Agriculture's primary interest would be in the generation of income for farm families through provision of up-to-date production and marketing information, establishment of stronger linkages between farmers and the local agro-processing industries and the prompt and efficient response to requests for advice from the rural communities.

Both Agrimark and the Ministry of Agriculture would be interested in achievement of objectives within specified time frames and within budgetary allocations.

Since the implementation plan indicated that a participatory evaluation approach would be used, it was necessary for the team to plan and agree on the steps that would be required and a timetable for completion. The following topics were discussed:

- Preparation of terms of references for conducting the evaluation
- Names of people who should be involved and the names of those who might want to participate
- Scheduling of meetings to explain the participatory process and to determine which roles participants were willing to undertake
- Locations at which meetings and training sessions would be held for the collection of information and anecdotes in the field
- Scheduling of training sessions, the content, the teaching aids that would be effective and the level of treatment that would be required
- Agreement on qualitative and quantitative indicators that would provide information for assessing the outputs of the project
- Identification and agreement on the combination of techniques that will be used to collect data and information in the field
- Compilation of a list of persons who were most likely to provide accurate and relevant feedback on the activities to be evaluated
- Method for collection of narratives in the field
- Analysis of the data, information and narratives collected in the field
- Discussion of the findings to determine if there are lessons to be learnt, if in the future there should be any changes in the preparation of instruction packages and the ICTs used in the provision and transmission of the information requested.
- A timetable for the completion of various stages of the participatory evaluation process
- The structure and formats for the completed evaluation report

Appendix XIII – Tips for small organisations

It would be normal for a small organisation with a few members of staff or one with a small membership such as some farmers' co-operatives, to think that:

1 steps for the introduction of an ICM strategy are overwhelming and not applicable to their small organisation

2 an ICM strategy is suitable for organisations with large numbers of staff and stakeholders

3 there may be no staff members who will be able to lead the process for the development of an ICM strategy

4 their staff and their clients do not complain about resources and services available to them, therefore there is no need to spend time and resources in developing an ICM strategy.

No matter how small your organisation may be, there is a reason why it was established. For example the objective of a small organisation may be to negotiate markets on behalf of its membership. Another organisation may be in operation to train its members in post-harvest technology and in packaging for export. In both cases, there is a function to perform and a clientele to be served.

Any organisation needs to remain relevant in a constantly changing operational environment. In many instances there are competitors who may see an advantage in offering similar services or products. It is therefore imperative to find out the changing information needs of your staff and clientele. Similarly it is necessary for a small organisation to monitor developments "on the horizon" that may undercut its funding, compete with its services and products, offer advantages in the formation of new alliances, present opportunities for expansion or result in events that may lead to its demise. Therefore the need to stay informed is paramount for survival.

The size of small organisations provides an environment in which decisions are made in less time than those with large numbers of line staff and several layers of managers who must be consulted. The major steps in determining strategic ICM options that are appropriate for your small organisation are the same as those of a large organisation with many divisions. However you may not have to spend a considerable amount of time in creating "buy-in" for the process. The length of time taken for interviews will be much shorter and discussions to determine and agree on the organisation's information and communication needs could in fact take the form of a joint meeting of all staff members, depending on the size of your organisation.

Similarly preparation of reports, execution of the SWOT analysis, examination of critical issues, identification of ICM strategic option statements and establishment of priorities could be conducted during several joint meetings of staff and stakeholders.

One major challenge that may arise in the case of a small organisation is difficulty in releasing staff to undertake the lead role in this exercise and thereafter to undertake overall responsibility for overseeing and directing the development and monitoring of ICM. The management of small organisations should not be daunted by this prospect. In this situation the services of a consultant will be most useful if a source of funding can be identified and a strong justification is made for the development of an ICM strategy.

Appendix XIV – Checklist for developing an ICM strategy

Below is a checklist which together with the flow chart in Appendix I can assist you in following your progress as you develop your institution's ICM strategy; (numbers in brackets refer to sections in the body of the manual where you can obtain more detailed information). You need to remember that each institution's ICM strategy will be different depending on the findings of your information audit, the needs of staff and the mandate of the institution.

Preparation for introducing the concept of development of an ICM strategy (2.1)

- ☐ Familiarise yourself with the process for developing an ICM strategy (Appendix I)
- ☐ Identify a champion (2.1.1, Box 2)
- ☐ Decide in advance on what steps you will use to introduce the concept (2.1.1, Box 2)
- ☐ Obtain your management's approval (2.1.1)
- ☐ Introduce the concept and the process to all staff through management, making use of meetings, personal contacts, presentations and cases and experiences of other institutions (2.1.1)
- ☐ Plan a separate briefing session for your stakeholders (2.1.1)
- ☐ At meetings allow ample time for questions from staff and stakeholders in order to allay fears of change (2.1.1)

Setting up a strategy development team (2.1.2)

- ☐ Select a strategy development team (2.1.2)
- ☐ Appoint a team leader (2.1.2)
- ☐ Obtain Terms of Reference (2.1.3, Appendix III)
- ☐ Enquire if the strategy is to be developed for the entire organisation or for a department or a sub-system in the organisation (2.1.3, Appendix II)

Planning for the collection of information (2.2)

- ☐ Conduct desk research (2.2.1)
- ☐ Prepare an organisation profile (2.2.1, Appendix IV)
- ☐ Prepare intelligence brief (2.2.1, Box 4, Appendix V)
- ☐ Conduct your internal information audit (2.2.2,)
- ☐ Prepare resource material for the audit (2.2.2 and Box 5, Box 6, Appendix VI, Appendix VII)
- ☐ Agree on questions for interviewing staff members (2.2.2, Appendix VI, Appendix VII)
- ☐ Test questionnaire (2.2.2, Appendix VI)
- ☐ Decide on who should be interviewed (2.2.2)
- ☐ Assign two team members to each interview (2.2.2)
- ☐ Decide on reporting format (2.2.2, Figure 2 and Figure 3)
- ☐ Conduct a role-playing session (2.2.2, Box 6)
- ☐ Host focus group discussions (2.2.3, Box 7, Appendix VIII)

Analysis of current situation (2.3)

- ☐ Develop your SWOT analysis (2.3.1, Table 1)

Strategy formulation (3)

- ☐ Identify critical issues arising from your analyses (3.1, Box 8)
- ☐ Develop strategic objectives and strategic statements (3.1.1, Box 9, Table 2, Table 3)
- ☐ Establish consultations with your management, staff and stakeholders to discuss draft strategic options (3.1.2)
- ☐ Edit the first draft based on comments and suggestions received (3.1.2)
- ☐ Prioritise strategic options for inclusion in the ICM strategy document (3.1.3)

Development of the strategy document (3.2)

- ☐ Prepare the strategy document according to suggested table of contents (3.2.1)
- ☐ Prepare implementation plans (3.2.2, Table 4, Appendix X, Appendix XI)

Implementation, monitoring and evaluation (4)

- ☐ Prepare a communication plan (4.1, Box 10, Table 5)
- ☐ Monitoring and evaluation (4.2, Appendix XII)
- ☐ Institute systems for monitoring, evaluating, revising and updating of your ICM strategy (4.2.1)

Glossary

These terms are defined within the context of the development of an information and communication management (ICM) strategy.

Buy-in: Acceptance of and support for a new concept, idea or activity

Champion: An individual who believes in an idea or concept and is motivated to convince others to add their support to that idea or concept as well

Change agent: Same as champion

Communication plan: A plan that sets out the methods of communication that will be used to convey information about the ICM strategy to staff members and to various segments of stakeholders

Critical issues: Issues that can have a negative or positive impact on an organisation

Critical success factor: Activities that must take place to ensure success in creating buy-in

Culture: The style of management and politics of operation in an organisation

Desk research: Collection of data and information through perusal of documents

Evaluation: Assessment of the outcome of a project or programme to determine if the stated objective was achieved

Focus group discussion: Group interviews of no more than eight participants who have common interest in a particular topic and in which the discussions are moderated by a facilitator. The objective is to arrive at a consensus on a particular topic and to encourage or facilitate interventions by all participants.

Gate-keeper: An individual in an organisation who is recognised as the informal source of pertinent information obtained from sources in the organisation and from those outside of the organisation

Implementation plan: A plan that sets out the justification, objectives, scope of work, activities and schedules for implementing a specific strategy in the ICM strategy document

Information audit: A process to: assess the information and communication needs of staff in an organisation, evaluate the degree to which the organisation' systems and infrastructure provide for these needs, identify gaps in the provision and dissemination of information and to determine if the needs and resources are aligned with the vision and goals of the organisation

Information and communication management (ICM): A multidisciplinary concept or practice spanning four main disciplines – information technology, information management, communication and management

Information and communication management (ICM) strategy: A framework in the form of a document that provides direction and establishes priorities for the management of an organisation's information resources in accordance with corporate strategic objectives. This document usually identifies several specific options or actions expressed as strategic option statements.

Information and communication technologies (ICTs): Technologies that provide access to information utilising communication technologies e.g. the Internet, mobile phones and wireless networks

Information flow: The information exchange within and between departments in an organisation and the information interactions that occur between the organisation and external agencies

Information flow diagram: A visual depiction of the information flow in an organisation (internal flow diagram) and the information flow between an organisation and its stakeholders (external information flow diagram)

Intelligence brief: A document that conveys information about events or developments that can impact negatively or positively on an organisation

Monitoring: A continuous process for tracking the progress of scheduled activities in a programme or project

Opportunities: External situations that present possible favourable avenues for achieving organisation goals

Organisation profile: A brief description of an organisation to enable a reader to gain an overall perspective of its structure, objective, activities and stakeholders

Participatory evaluation: The active involvement in the evaluation process of those with a stake in the project or programme e.g. funders, partners, beneficiaries and any other interested parties

Prioritising: Establishing or ordering the importance of activities or statements based on application of pre-determined criteria

Role-play: Use of drama in which actors assume roles to illustrate or educate about real situations – in this case how to conduct interviews to determine information needs

Scope of work: A statement in a project document that indicates what work must be done

Stakeholders: Agencies, organisations, groups or individuals who are clients, users, beneficiaries or who may exert direct influence on an organisation's projects, programmes

Strategic objective: A broadly defined objective to which the organisation must strive

Strategic option statements: Statements that indicate future actions to enable an organisation to achieve its strategic objectives

Strategy: A future stated action linked to the achievement of a particular objective

Strengths: Assets or resources that are successfully and deliberately managed to facilitate the achievement of an organisation's goals

SWOT: An analysis to determine an organisation's strengths and weaknesses, and the opportunities and threats it may encounter in its external environment

Target audience: Individuals, communities or groups for whom a service or product is developed

Terms of reference (TOR): A document that defines the background, justification, objectives, scope of work, planned activities, inputs, outputs, schedules, budget and form of reports for a project

Threats: Situations that occur outside of your organisation's control and that can become a barrier to fulfilment of specified objectives

Weaknesses: Deficiencies in an organisation's management style, procedures, or activities that become a hindrance to the advancement of its goals

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Acronyms and Abbreviations

ACP	African, Caribbean and Pacific countries
Agrimark	hypothetical organisation used to illustrate the development of an ICM strategy
CARIRI	Caribbean Industrial Research Institute
CEO	chief executive officer
CTA	Technical Centre for Agricultural and Rural Cooperation
EU	European Union
GIS	Geographic Information Systems
GPS	Global Positioning System
ICM	information and communication management
ICTs	information and communication technologies
IDRC	International Development Research Centre, Canada
IICD	International Institute for Communication and Development
KIT	Royal Tropical Institute, The Netherlands
NGO	non-governmental organisation
OAS	Organization of American States
PDA	personal digital assistant
RFID	radio-frequency identification
RUFORUM	Regional Universities Forum for Capacity Building in Agriculture
SOP	standard operational procedure
SoS	strategic option statement
SWOT	strengths, weaknesses, opportunities and threats analysis
TIS	technology information service
TOC	table of contents
TOR	terms of reference
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development

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