REPUBLIC OF RWANDA

**MINISTRY OF
AGRICULTURE AND
ANIMAL RESOURCES**

**MINISTERE DE
L'AGRICULTURE ET DES
RESSOURCES ANIMALES**

KNOWLEDGE MANAGEMENT AND COMMUNICATION STRATEGY FOR THE AGRICULTURAL SECTOR - MINAGRI

2012 - 2015

September, 2012

KNOWLEDGE MANAGEMENT AND COMMUNICATION STRATEGY FOR THE AGRICULTURAL SECTOR - MINAGRI

Contract no. 10/2011

Submitted to

The Ministry of Agriculture and Animal Resources Rwanda

by

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EXECUTIVE SUMMARY

The Government of Rwanda is taking up the challenge of transforming from an agrarian subsistence economy into a sophisticated knowledge-based society. The Rwanda's economy depends primarily on agriculture. However, the Rwandan agriculture is characterized by insufficient use of improved local and advanced knowledge and technologies. To overcome this great challenge, the agricultural sector should be deeply transformed, modernized and commercialised. This will be realised only if the agricultural knowledge generated from research and other sources is turned into action to build a sector that is knowledge-based. Modernisation and transformation of the agricultural sector in Rwanda requires the existence and implementation of a Knowledge Management and Communication Strategy whose main objective is to provide information, evidence and learning about best practice from field activities to inform the Ministry of Agriculture and Animal Resources (MINAGRI) and other sector partners.

MINAGRI, through a Grant from IFAD to support the Project for the Transformation of Agriculture in Rwanda has supported the development of the Knowledge Management and Communication Strategy for the agricultural sector. The Strategy is geared towards building relationships between the various actors in the agricultural sector, both within and outside MINAGRI, through knowledge and information sharing. The knowledge structure of agriculture is changing – knowledge is increasingly relying on multiple knowledge providers, not only that of public and private agricultural research and development R&D) organizations. At the interface of R&D there is a need to generate new knowledge while finding effective ways of linking that knowledge with action to produce clear impact.

The development of the Knowledge and Communication Strategy is in line with main national strategic documents such as Rwanda's Vision 2020, National Agricultural Policy (NAP), National Extension Strategy (NAES), the Economic Development and Poverty Reduction Strategy (EDPRS) and MINAGRI's Strategic Plan for the Transformation of Agriculture in Rwanda – Phase II (PSTA-II). The purpose of this knowledge management and communication strategy is to provide guidance to MINAGRI, its boards, task forces, programmes/projects and agricultural sector partners to communicate the agricultural transformations issues in a more innovative and integrative manner through awareness building, knowledge sharing and training to facilitate the adoption of best bet practices, technologies and approaches and therefore contribute to policy and decision making processes. This strategic document is an important lens with which to view the transformation of the agriculture sector.

At the core of this knowledge management and communication strategy is the development of information and the sharing of that information with partners in the sector to add insights about it – turning the information into knowledge (promotion of learning and adaptation). Knowledge management takes the matters further to ensure information is well organised and accessible (information capturing and management through success stories); optimise the frequency and richness of dialogues (internal and external communication of the information and knowledge through various channels); that take place to solve current/emerging issues and come up with new solutions (experimentation, learning and innovation process); and keep a learning attitude at various levels to ensure continuous improvements of these information and knowledge processes (learning oriented monitoring and evaluation).

The present knowledge management and communication strategy proposes a practical approach to address the challenges and opportunities missed in MINAGRI. It proposes a number of activities to

capture and manage information, enrich it through conversations, increase the recognition of MINAGRII and ensure that agricultural sector partners are supporting it adequately. At the same time, the strategy proposes a structure to support MINAGRI implement it at all levels. This will enable the ministry to create a communities of practices to connect people from various sectors and communities at different levels, expressing that people are at the very heart for successful implementation of this strategy.

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ABBREVIATIONS AND ACRONYMS

AMIS	Agricultural Management Information System
ASWG	Agricultural Sector Working Group
BDC	Business Development Centre
CIC	Community Innovations Centres
CICA	Agricultural Information and Communication Centre
EDPRS	Economic Development and Poverty Reduction Strategy
FFS	Farmer Field Schools
GDAP	General Directorate of Animal Production
GDCP	General Directorate of Crop Production
GDSPPC	General Directorate of Production Support and Chain Development
IFAD	International Fund for Agricultural Development
JAF	Joint Action Forum
KWAMP	Kirehe Community-based Watershed Management Project
LISP	Livestock Infrastructure Support Programme
LWH	Land Husbandry, Water harvesting and Hillside Irrigation
M&E	Monitoring and Evaluation
MINAGRI	Ministry of Agriculture and Animal Resources
NAEB	National Agricultural Export Board
NAP	National Agricultural Policy
NGO	Non-Government Organization
PADAB	Projet d'Appui au Développement Agricole de Bugesera
PAIGELAC	Project d'Appui à l'Aménagement Intègre et la Gestion des Lacs Intérieurs
PAIGELAC	Projet d'Appui à l'Amenagement Integré et la Gestion des Lacs Intérieurs
PAIRB	Bugesera Rural Infrastructure Support Project
PAPSTA	Projet d'appui au plan stratégique de transformation de l'agriculture
PASNVA	Project d'Appui au Systeme National de Vulgarisation Agricole
PDCRE	Project de Développement des Cultures de Rente et d'Exportation
PHHS	Post-Harvest Handling and Storage
PRICE	Project for Rural Income through Exports
PSTA	Plan stratégique de transformation de l'agriculture
RAB	Rwanda Agricultural Board
RSSP	Rural Sector Support Project
SPAT	Strategic Plan for Agriculture Transformation in Rwanda
SPIU	Single Project Implementation Unit
SWAp	Sector Wide Approach
TF	Task Force

1.0 INTRODUCTION

1.1 Background

The Government of Rwanda, through the Ministry of Agriculture and Animal Resources (MINAGRI), obtained a Grant from IFAD, towards the costs of the support Project for the Transformation of Agriculture in Rwanda and applied a portion of the funds to eligibly support the development of the knowledge management and communication strategy for the agricultural sector.

The main objective of the strategy is to provide guidance to process information, evidence and learning about best practices from field activities to inform MINAGRI and other agricultural sector partners.

The strategy specifically aims at: (i) Providing a road map for gathering information on successful stories and innovations from the field by MINAGRI implementers; (ii) Guiding the recording of success and failures of the ministry as a learning and decision-making opportunity; (iii) Providing guidance for crossing of information between financial and results-based measurements; (iv) Providing a broad perspective and variety of media products to publicize the ministry; (v) Providing an arena for the exchange of ideas, innovations and experiences among various interventions in the agriculture sector and beyond; and (vi) Provide guidance in using documented experiences to improve policy dialogue between MINAGRI partners and future investments' formulation.

1.2 Rationale

The purpose of the knowledge and communication strategy is to build relationships between the various actors in the agricultural sector, both within and outside MNAGRI, through knowledge and information sharing. It is intended to empower MINAGRI to communicate the agricultural transformations issues in a more innovative and integrative manner through awareness building, knowledge sharing and training to facilitate the adoption of best bet practices, technologies and approaches and therefore contribute to policy and decision making processes.

The development of the Knowledge and Communication Strategy is in line with Rwanda's Vision 2020, which emphasizes on transforming the Rwanda economy from an agrarian to a knowledge-based economy; National Agricultural Policy (NAP) which focuses on turning agriculture into a professional, profitable, non-seasonal and income generating activity; National Extension Strategy (NAES) which put emphasis on agricultural knowledge information system, and technology transfer; the Economic Development and Poverty Reduction Strategy (EDPRS) which provides a medium term framework for achieving the country's long term development aspirations as embodied in Rwanda Vision 2020, and asserts that knowledge acquisition and deepening of knowledge is an essential strategy to achieve the human development and MINAGRI's Strategic Plan for the Transformation of Agriculture in Rwanda – Phase II (PSTA-II) which emphasizes on strengthening the entities in the sector charged with the development of productive technologies, applied knowledge and imparting this knowledge to farmers

Increasing knowledge and awareness of agricultural transformation to a wider audience will be achieved through activities which include:

- The development of targeted knowledge and information sharing materials to promote dialogue and discourse among development partners and general public on various aspects of agricultural transformation;

- The promotion of public debates on various issues related to strategic plan for agricultural transformation among the stakeholders in the agricultural sector;

- Engaging media through training to increase their level of awareness and reporting on various issues related to agricultural transformation to the targeted stakeholders and general public; and,

- Developing the capacity of farmers, private sector and other development partners to enable them better participate in the process of agricultural transformation and thus integrate key issues pertaining to the transformation into their plans.

The main challenge facing MINAGRI is the lack of clear and a harmonised framework for knowledge management. There is lack of synergy and a defined model for information flow of different agricultural initiatives and programs at different levels. There is a lack of information sharing framework within the Ministry, among different MINAGRI organisations, and outside with partners and entire general public.

MINAGRI is carrying out different activities and it has achieved a lot over the years with many success stories. But the challenge is that most stakeholders in the sector and the general public are not clearly aware of those achievements and the endeavours the Ministry is enforcing to realise its goals. To overcome that requires a comprehensive plan, hence the idea of a Knowledge Management and Communication Strategy. This Strategy therefore, comes as a way of elaborating plans on how the Ministry will be managing and sharing agricultural knowledge and information with different stakeholders and the entire general public.

1.3   Methodology

The development of the KMC Strategy followed a general methodological approach that involved the key stakeholders. By this means, it is intended that these stakeholders would assume ownership of the Strategy after it is completed and that they would ensure its implementation. This approach reflected the following two main objectives, to be adopted in order to obtain quality results:

- That the strategy should respond to the needs of the stakeholders based on up-to-date information about the situation in the agricultural sector in the country
- That the implementation of the strategy should be made possible through genuine stakeholder commitments and inputs

To achieve these objectives, various methods and approaches were employed in the development of the Strategy. These include: a desk study to review main documents in the agricultural sector, face to face interview with key actors in the Ministry, consultation with key informants through e-mail and a two-day participatory workshop of key stakeholders in the agricultural sector.

The desk study involved review of various documents in the agricultural sector. These included Strategic Plan for the Transformation of Agriculture in Rwanda – Phase II (SPAT II); Rwanda Vision 2020; Economic Development and Poverty Reduction Strategy (EDPRS), National Agricultural Policy (NAP), National

Agricultural Extension Strategy (NAES), Monitoring and Evaluation Framework for the Agriculture and Animal Resources Sector, 2011, and PASNVA Evaluation report.

Several consultative meetings with key actors in the Ministry were held to acquaint with the existing system and get overall views of knowledge of the subject matter among various actors. The consultation was done with the Director General, Directorate of Strategic Planning & Programs Coordination, Deputy Director General for Agriculture Extension (RAB), Acting Deputy Director General for Research (RAB), Coordinator (CICA), MIS Specialist (CICA), Communication adviser to the Minister, Programme 4 M&E specialist and Coordinator, (PAPSTA/KWAMP), Animal Production Policy and M&E Expert in the Directorate of Animal Resource Development

A two-day participatory workshop of key stakeholders in the agricultural sector was held in January 2012 in La Pallise Hotel, Kigali. The workshop was facilitated by the Consultant in collaboration with MINAGRI staff mainly from CICA. During this workshop, relevant information from the stakeholders was collated and all the perceptions expressed in the workshop were documented. The workshop involved a number of stakeholders within and outside MINAGRI such as senior and middle level management officials of departments and various projects within MINAGRI. Various national and international experts working with MINAGRI were also among the various participants in the workshop. The draft Strategy was produced on the basis of the review of various MINAGRI reports and strategy papers, consultations with key informants in MINAGRI, outcome of the stakeholders' workshop and discussions with various key partners.

The draft version of the strategy was submitted and reviewed by a team of MINAGRI staff then a KMCS workshop held at CICA meeting room on 6th August, 2012 to validate the draft Strategy. The workshop involved a number of MINAGRI staff and officials and facilitated by a team of consultants from IFAD and PICO. The objective of the workshop was to foster a shared understanding of MINAGRI KMC Strategy, formulate steps and support to operationalize the MINAGI draft KMCS, review contribution of KMCS to the agricultural sector transformation and identify gaps and formulate steps and support to fill the identified gaps. The participants worked in groups to analyse the KMCS presented by the Consultant whereby they were supposed to mention between 3 and 5 important issues that need clarification and further discussions to be able to implement the draft KMCS. They worked on how to implement the draft KMCS in terms of reviewing the activities required for each output, prioritise them and identify concrete steps and support needed to implement each activity. Also the participants reviewed the extent to which the draft KMCS will achieve the objectives of the transformation of Agriculture in Rwanda by identifying gaps and propose the steps to fill the gaps. They also analysed the draft MINAGRI KMCS in terms of Knowledge Management and Learning (KM&L) for improved performance system to establish if it is in line with the framework and suggest steps to fill the gaps. Finally, they proposed the key steps required to fill the gaps and operationalize the MINAGRI KMC Strategy pointing out the support needed from outside MINAGRI and responsible persons/institutions to provide that support.

2.0 MINAGRI KNOWLEDGE MANAGEMENT AND COMMUNICATION SITUATION

2.1 Knowledge Management and Communication Scenario in the Rwandan Agricultural Sector

- *Knowledge Needs Assessment:* Agricultural sector goals and strategies are generally clear; knowledge was used in planning these goals and strategies although knowledge management might have not been a priority. So there are generally no systems for determining knowledge needs on a routine basis in the sector as a whole but a few projects have conducted knowledge needs assessment. These include, HUGUKA ASBL and its partners (MINAGRI-PASNVA), who conducted an assessment of needs of rural and agricultural populations in information and communication (Ndekezi and Musabyimana, 2010).

- *Knowledge Availability Assessment:* The MINAGRI staffs are generally aware of information within their units and departments that could form a large pool of information in the agricultural sector. Through the PASNVA project the Agricultural Information and Communication Centre (CICA) was established, which is currently the custodian of information in the agricultural sector. The CICA operates a documentation centre (Library) *(http://library.minagri.gov.rw)*, Information and Communication Technology/Agricultural Management Information System (AMIS) & eSOKO, the MINAGRI newsletter, agricultural extension material development service, audio-visual material development service and Soil Survey/GIS services. AMIS is the main information gateway for the agricultural sector in Rwanda. This site was designed as a tool to collect, centralize and share information in the agricultural sector of Rwanda, between the various actors and partners. It is an exchange platform for all stakeholders within the sector ranging from governmental institutions, public sector, governmental projects, non-governmental projects, local NGOs, private sector (agri-business and consulting companies), training institutions and international bodies. CICA is also connected to Community Innovations Centres (CIC) and Business Development Centres (BDC). These centres are established across the country and present an opportunity for knowledge sharing, communication and exchange of information between agricultural sector partners and farmers. CICA has a wealthy of information so different partners in the sector need to consult with the CICA to benefit from its services.

- *Knowledge Acquisition/Development:* The Agricultural sector depends largely on research, NGO's, bilateral programmes/projects, universities, regional networks among others for the development and acquisition of new knowledge. The most common means of knowledge acquisition across the sector include field technical reports, use of ICTs (website, e-books), interactions with other sector actors and acquisition of various publications. CICA has produced a significant amount of extension materials (brochures, leaflets, posters, training manuals and booklets, as well as radio spots and discussion, weekly broadcasts from local radios, documentary radio series and press and radio conferences, TVR broadcast, and DVD distribution. Research and development projects are generally formal means for knowledge development in the sector. There are a number of projects in MINAGRI whose implementation generates information and knowledge worthy sharing to a wider audience. There is an evidence of spontaneous knowledge capture through interaction of partners especially when there are pockets of success stories and best practices. Some have documented such success stories and best practices and thus contribute to knowledge development exercise. However, the generated information needs to be validated at the Ministry level for it to receive standardization and a proof to be shared to a wider range of users. The audience for validation needs to be created or a green favour to be delegated to each information developer to validate and disseminate the newly produced information.

- *Knowledge Sharing:* The CICA has become an important unit in terms of agricultural information and communication. There are some established platforms for sharing knowledge within the sector such CICs and BDCs of which CICA has established collaboration and it provides them with support of extension materials. Different agricultural extension material such as booklets, brochures, leaflets, posters, training manuals, booklets and billboards as well as radio spots and discussion, weakly broadcasts from local radios, documentaries radio series and press and radio conferences, TV broadcast, and DVD distribution with technical information are accessible to the farmers in very simple language. The simplified reading materials are produced in the local language (Kinyarwanda) and distributed at village level to enable farmers access information on various agricultural practices such as crop and animal production, pest and disease management and soil management. Other materials are produced in French and English for different beneficiaries both within and outside Rwanda. Soft copies of these materials are also available on AMIS. AMIS provides discussion forum but the service has not been used on a large scale. The use of CICA is limited to students/researchers and MINAGRI staff. The system offers easy access to information by the actors and partners as well as receiving information relating to the achievements of other stakeholders. However, the system may not be accessible to the key and primary stakeholders who are smallholder farmers and livestock producers because of lack of appropriate infrastructures for them to access, lack of technical skills including language barrier in the use of ICT. The information shared in the AMIS will be added value by the communication strategy that will guide how the information is to be collected, processed, packaged and disseminated to each category of stakeholders. These efforts are however hampered by limited resources in the sector. If more resources were available the sector actors can interact more frequently and share more knowledge than it is currently practiced.

- *Knowledge Application/Use:* In generally, limited access to appropriate information leads to inability of the actors to apply new knowledge as quickly as expected. A few farmers have access the knowledge through BDCs and CICs. Despite efforts by CICA to establish AMIS and produce a significant amount of extension materials, the use of the CICA resources is limited to students/researchers and a few MINAGRI staff hence links with local agricultural advisory service providers remains limited. This situation applies mostly to sector client agencies and DAs. NGOs however face the challenge of acquiring information to solve client-related problems and for modifying interventions.

- *Knowledge Process Evaluation:* The impact of the establishment of CICA was expected to be proportional to the improved access to agricultural information; however, this applies mainly for students, researchers and MINAGRI staff. Through CICs the extension materials reach smallholder farmers while through the local radios the weekly broadcasts messages reach farmers in the rural areas. The development of linkages with CICs and BDCs might in the long term contribute to improved access to written materials at lower levels. These findings are based on a one time evaluation conducted on the PASNVA project. There is no systematic means of determining what information is necessary or otherwise. There is a need to develop a system to monitor and evaluate knowledge processes and outcomes of all projects in MINAGRI to be able to determine which knowledge needs should be updated to meet current stakeholders' demands.

2.2 An Inventory of MINAGRI Knowledge Assets

MINAGRI possesses a wealthy of knowledge assets which include intellectual resources, AMIS Rwanda, eSoko, library, audio-visual (TV & Radio), weekly flash news, agricultural shows/exhibitions, GIS/mapping, Hinga Worora magazine & other print materials and voucher system.

The assets are in different forms like: intellectual resources in form of ideas, learning, information, technical skills and experience, AMIS Rwanda in form of a website, eSoko in the form of sms-web system, library in form of databases and documents; audio-visual (presentations, TV & Radio programs) in the form of documentaries, interview and advertisements; weekly flash news in the form of e-newsletter; agricultural shows in the form of exhibitions; GIS/mapping: electronic, software and documents (maps and reports), Hinga Worora magazine, printing materials in the form of booklets, documents (magazine) and voucher system in the form of database. These assets are located within the Ministry and its different organisations. For example, Intellectual resources are at MINAGRI-HQ, CICA, RAB, NAEB, Task forces and Projects; AMIS Rwanda and eSoko, library, audio-visual, GIS/mapping, Hinga Worora magazine & Printing materials and weekly flash news are in MINAGRI/CICA; Agricultural show is in MINAGRI and voucher system is in MINAGRI/Post harvest Unit.

There are different uses of these assets but most of them are mainly for knowledge management and sharing. The Intellectual resources are used to develop and store knowledge (this knowledge contained in intellectual resources is tacit and implicit and needs to be codified). AMIS Rwanda is used to store and share agriculture information; eSoko is used for agricultural products price information sharing; the library is used for documentation and easy access to agricultural information; audio-visual is for agricultural information sharing; weekly flash news is for sharing information on weekly activities in the sector; agricultural shows is for sharing agricultural innovation, success stories and best practices; GIS/mapping is for sharing spatial information on agriculture; Hinga Worora magazine & printing materials are for sharing and disseminating information in agriculture and voucher system provide information on agricultural inputs.

These assets are accessible in different ways like the intellectual resources are through interaction with human resources in the Ministry and its organisations. AMIS Rwanda, eSoko, Library, Agricultural show, Hinga Worora magazine, GIS/mapping, audio-visual are accessible physically at CICA and some electronically in the internet. The Voucher system accessibility is limited to selected major crops (wheat and maize) and weekly flash news is internal and accessed through emails.

2.3   Main Intended Audiences

Knowledge sharing and communication is about connecting stakeholders such as target institutions and individuals to the best practices, knowledge, and expertise they might need in order to perform their duties and create value. Ten broad categories of stakeholders have been identified, with their specific concerns. These stakeholder categories include Government ministries; International Development Partners; National Level development partners; Farmer and Farmer Institutions; Academic Institutions; Financial Institutions; Religious Organizations; Private Sector; Media houses and Regional Networks. This strategy addresses these concerns which include knowledge gaps and communication.

3.0 FRAMEWORK FOR MINAGRI KNOWLEDGE MANAGEMENT AND COMMUNICATION

Knowledge management process for the agricultural sector in Rwanda is therefore envisaged to have the following seven steps (Figure 1).

1) Step 1: Identification of knowledge needs related to transformation of agriculture in Rwanda.
   - This involves mapping sector-wide knowledge needs geared towards Agricultural Transformation in the following aspects:
     o Intensification and development of sustainable production systems (Soil and water conservation, Crop diversification and intensification, Animal Resource development, Marshland and Irrigation development, Supply and use of Fertiliser and agrochemicals, Supply and use of Certified seeds and other inputs and Food security and vulnerability management).

     o Support to the professionalization of the producers (Promotion of farmers' organisations and capacity building for producers, Restructuring of proximity services for producers and Research for transforming agriculture).

     o Promotion of commodity chains and agribusiness development (Creating an environment conducive to business and entrepreneurship development and market access, Development of traditional exports (Coffee, Tea, pyrethrum), Development of non-traditional high-value export products, Production and value addition for domestic staple products, Market-oriented rural infrastructure and Strengthening of rural financial systems).
2) Step 2: Inventory collation of existing agricultural knowledge in Rwanda
   - Make an inventory of available agricultural knowledge as regards to the needs identified in step 1
3) Step 3: Acquisition of agricultural knowledge and/or creation of new agricultural knowledge based on the identified knowledge needs
   - This step strengthens acquisition of the knowledge on the subject matter from various sources – *Partners, Libraries, and Archives etc.* In case the needed knowledge is not readily available it facilitates designing of knowledge development activities through projects, research, experimentation, demonstration, training and documentation of best practices.
   - Identify and document success stories and innovations on the above thematic areas

4) Step 4: Storage and organization of the acquired and/or created knowledge in a designated central repository system, preferably CICA
   - Improve capacity of CICA to facilitate storage and easy retrieval of the information
   - Process and package the success stories and innovation into forms easy to share to stakeholders
   - Store knowledge in various forms – Print/Electronic
   - Organize for easy retrieval and accessibility
5) Step 5: Sharing/Dissemination of the agricultural knowledge to various audiences
   - Design knowledge sharing and communication (internal and external) methods such as
     o Face to Face – Meeting, training, workshops, seminars, dialogue, social-cultural events, storytelling, and mentorship, Field Schools/Farmer Learning Alliances, Innovation Clusters, Innovation Platforms, Community of Practice and Network of Practice, joint action forums (JAF) and agricultural sector working group (ASWG)

- o Print – Reports, policy briefs, publications, bulletins, flyers
- o Electronic media – websites, emails, blog, social media, wikis
- o Mass Media – Radio and TV
- o Group media – video/slides shows, exhibitions, study tours

6) Step 6: Use and application of the knowledge
- This step facilitates converting the knowledge into use to enhance experiential learning, innovation, adoption and adaptation of agricultural transformation agenda through:
  - o Establishing mentorship programmes within MINAGRI whereby junior staffs are attached to seniors to build their capacity in various areas identified to enhance agricultural transformation in Rwanda.
  - o Facilitating expert networks, Community of Practice/Network of practice to link various actors in the agricultural sector for knowledge sharing.
  - o Building collective action among local communities to enhance their capacity to network and share experience among themselves (social capital).

7) Step 7: Monitoring and evaluation of impact of knowledge shared
- This step involves the assessment of the impact of the shared knowledge in the sector's development. This will be done through series of participatory monitoring and evaluation (PM&E) involving all relevant actors in the sector.
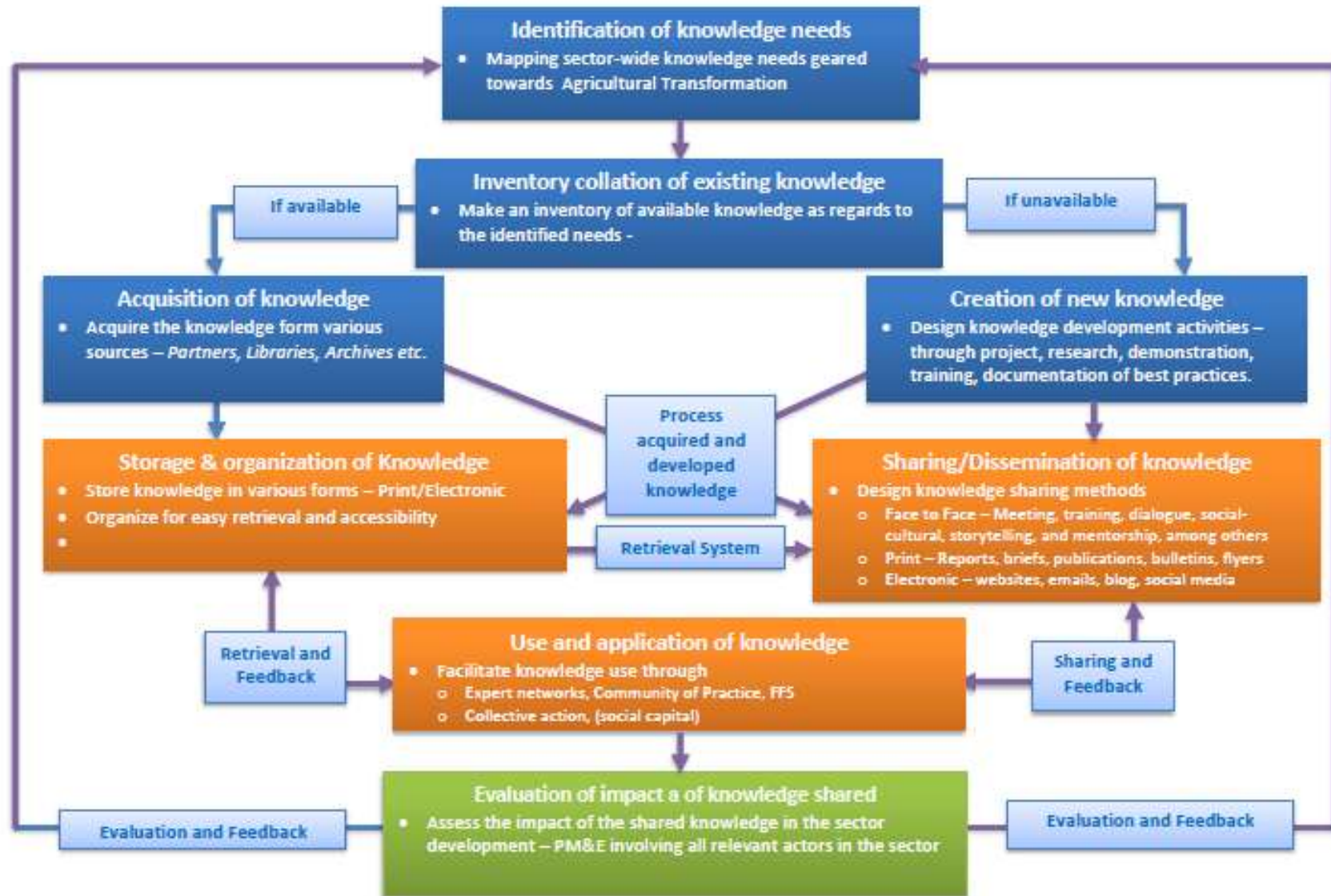
Identification of knowledge needs
- Mapping sector-wide knowledge needs geared towards Agricultural Transformation

Inventory collation of existing knowledge
- Make an inventory of available knowledge as regards to the identified needs -

If available

If unavailable

Acquisition of knowledge
- Acquire the knowledge form various sources – *Partners, Libraries, Archives etc.*

Creation of new knowledge
- Design knowledge development activities – through project, research, demonstration, training, documentation of best practices.

Process acquired and developed knowledge

Storage & organization of Knowledge
- Store knowledge in various forms – Print/Electronic
- Organize for easy retrieval and accessibility
-

Retrieval System

Sharing/Dissemination of knowledge
- Design knowledge sharing methods
  o Face to Face – Meeting, training, dialogue, social-cultural, storytelling, and mentorship, among others
  o Print – Reports, briefs, publications, bulletins, flyers
  o Electronic – websites, emails, blog, social media

Retrieval and Feedback

Use and application of knowledge
- Facilitate knowledge use through
  o Expert networks, Community of Practice, FFS
  o Collective action, (social capital)

Sharing and Feedback

Evaluation of impact a of knowledge shared
- Assess the impact of the shared knowledge in the sector development – PM&E involving all relevant actors in the sector

Evaluation and Feedback

Evaluation and Feedback

Figure 1: Schematic presentation of knowledge management and communication process

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3.1 The Logical Framework of the Knowledge Management and Communication Strategy

The Logical framework gives highlight of how the strategy is going to be planned, implemented and there after monitored and evaluated. The framework is presented in Table 1.

Table 1: Logical framework for the knowledge management and communication strategy

KNOWLEDGE MANAGEMENT AND COMMUNICATION OBJECTIVE AND MAIN TARGETS		
Objective of the Knowledge Management Strategy To provide guidance to process information, evidence and learning about best practices from field activities to inform MINAGRI and agricultural sector partners.	**MAIN TARGETS** i. Providing a road map for gathering information on successful stories and innovations from the field by MINAGRI implementers; ii. Guiding the recording of success and failures of the ministry as a learning and decision-making opportunity; iii. Providing guide for crossing of information between financial and results-based measurements; iv. Providing a broad perspective and variety of media products to publicize the ministry; v. Providing an arena for the exchange of ideas, innovations and experiences among various interventions in the agriculture sector and beyond; and vi. Provide guidance in using documented experiences to improve policy dialogue between MINAGRI partners and future investments' formulation.	
TARGET 1: To provide a road map for gathering information on successful stories and innovations from the field by MINAGRI implementers		
OUTPUT: Gathering of information on successful stories and innovations from the field by MINAGRI implementers established and implemented		
RESULT: Success stories and innovations from various projects in MINAGRI identified, gathered and documented		
OUTCOME: The capacity of MINAGRI projects Implementers to gather success stories and innovations enhanced		
Indicators	**Means/Sources of Verification**	**Important Assumptions**
• Number of success stories gathered and documented from various projects in the field of intensification and development of sustainable production systems, support to the professionalization of the producers, promotion of commodity chains and agribusiness development and institutional development.	• MINAGRI Directorates reports (monthly, quarterly and annual) • MINAGRI Projects and Programmes reports (monthly, quarterly and annual) • MINAGRI Boards and Taskforces reports (monthly, quarterly and annual) • MINAGRI weekly flash	• MINAGRI Management take ownership of KM strategy and facilitates its implementation

	• Website postings	• MINAGRI M&E activities are integrated in knowledge management activities
TARGET 2: To guide the recording of success and failures of the Ministry as a learning and decision-making opportunity		
OUTPUT: Recording of success and failures of the Ministry as a learning and decision-making opportunity established		
RESULT: A framework for experiential learning among main policy and decision making actors in the Ministry established and facilitated		
OUTCOME: Through experiential learning, MINAGRI actors use appropriate mechanisms in decision making **The national 'knowledge architecture' around agricultural transformation is strengthened.**		
Indicators	**Means/Sources of Verification**	**Important Assumptions**
• Number of experiential learning sessions through master-apprentice relationship (mentorship) facilitated among main policy and decision making actors in the ministry • Inventory of appropriate mechanisms identified for decision making • Number of documented decisions made as a result of experiential learning of success and failures of the Ministry	• MINAGRI Directorates reports (monthly, quarterly and annual) • MINAGRI Projects and Programmes reports (monthly, quarterly and annual) • MINAGRI Boards and Taskforces reports (monthly, quarterly and annual) • MINAGRI weekly flash • Website postings	• MINAGRI decision makers are exposed and give priority to experiential learning
TARGET 3: To provide guide for crossing of information between financial and results-based measurements		
OUTPUT: Crossing of information between financial and results-based measurements enhanced		
RESULT: The M&E system based on the logical framework developed		
OUTCOME: The KM system serves as a source of reference for documenting experiences and providing data to feed into the M&E system.		
Indicators	**Means/Sources of Verification**	**Important Assumptions**
• Number of KM activities monitored • Number of result-based KM activities evaluated	• MINAGRI Directorates reports (monthly, quarterly and annual) • MINAGRI Projects and Programmes reports (monthly, quarterly and annual) • MINAGRI Boards and Taskforces reports (monthly, quarterly and annual) • MINAGRI weekly flash • Website postings	• A sound results-based management system that includes specific, quantifiable indicators connected to

		financial expenditure is in place.

TARGET 4: To provide a broad perspective and variety of media products to publicize the ministry

OUTPUT: A broad perspective and variety of media products to publicize the Ministry identified

RESULT: Appropriate multiple channels for knowledge transfer are identified to publicise the ministry

OUTCOME: A wide range of priority audiences are aware of key issues, the challenges and opportunities involved in the agricultural sector and what the Ministry is doing through various media publicity products

Indicators	Means/Sources of Verification	Important Assumptions
• Number of media products used to publicize the Ministry • Area coverage by the various media used to publicize the Ministry	• MINAGRI Directorates reports (monthly, quarterly and annual) • MINAGRI Projects and Programmes reports (monthly, quarterly and annual) • MINAGRI Boards and Taskforces reports (monthly, quarterly and annual) • MINAGRI weekly flash • Website postings	• Media houses are ready to publicize the Ministry

TARGET 5: To provide an arena for the exchange of ideas, innovations and experiences among various interventions in the agriculture sector and beyond

OUTPUT: The exchange of idea, innovations and experiences among various interventions in the agriculture sector and beyond facilitated

RESULT: Various stakeholders in the agricultural sector are informed and knowledgeable about various interventions for agricultural transformation

OUTCOME: The capacity of MINAGRI scientists, the media, and other agricultural sector players, is enhanced by having better access to available knowledge and by being part of knowledge sharing networks. Also the attitude among various stakeholders in the agriculture sector on agricultural transformation is changed

Indicators	Means/Sources of Verification	Important Assumptions
• Number of knowledge sharing events conducted • Number of Inter-project knowledge transfer activities conducted between different project implementers and farmers • Number of personal relationships activities undertaken between experts and knowledge users in relation to agricultural transformation	• MINAGRI Directorates reports (monthly, quarterly and annual) • MINAGRI Projects and Programmes reports (monthly, quarterly and annual) • MINAGRI Boards and Taskforces reports (monthly, quarterly and annual) • MINAGRI weekly flash • Website postings	• Stakeholders are willing to exchange ideas, innovations and experiences among themselves

TARGET 6: To provide guidance in using documented experiences to improve policy dialogue between MINAGRI partners and future investments' formulation

OUTPUT: Use of documented experiences to improve policy dialogue between MINAGRI partners and future investments' formulation enhanced

RESULT:	Policy forums involving MINAGRI partners to discuss issues about future investments' formulation related to transformation of agriculture in Rwanda designed		
OUTCOME:	New experience based knowledge is generated to enrich policy dialogue and to improve design of future projects and programmes, and decision makers who shape and influence agricultural sector policies are more informed and able to do their jobs better by making more informed policy choices based on the best available evidence.		
Indicators		**Means/Sources of Verification**	**Important Assumptions**
- Number of policy forums involving MINAGRI partners - Number and categories of MINAGRI partners involved in policy forums - Number of new knowledge used to enrich policy dialogue and design future projects/programmes		- MINAGRI Directorates reports (monthly, quarterly and annual) - MINAGRI Projects and Programmes reports (monthly, quarterly and annual) - MINAGRI Boards and Taskforces reports (monthly, quarterly and annual) - MINAGRI weekly flash - Website postings	MINAGRI partners are willing to participate in policy forums

4.0 KNOWLEDGE MANAGEMENT AND COMMUNICATION ACTION PLAN FOR RWANDA AGRICULTURAL SECTOR

The KM action plan is presented in Table 2. The plan proposes the implementation of the strategy showing outputs, activities responsibilities, time frame and the budget.

Table 2: Proposed action plan for the knowledge management and communication strategy

TARGET 1	To provide a road map for gathering information on successful stories and innovations from the field by MINAGRI implementers					
OUTPUT	Gathering of information on successful stories and innovations from the field by MINAGRI implementers established and implemented					
OUTCOME	The capacity of the MINAGRI projects Implementers to gather success stories and innovations enhanced					
ACTIVITIES	STEPS	TIME FRAME	DELIVERABLES	RESPONSIBLE INSITUTIONS	SUPPORT NEEDED	BUDGET (USD)
Identify existing	• Conduct baseline survey	Y1Q3	Baseline report,	MINAGRI MIS	• Financial support	• 25,000

gaps/challenges in the current practice of identifying success stories	• Conduct stakeholders' consultative workshop	Y1Q3	stakeholders' workshop Proceedings and training manual	Officers, CICA, MINAGRI Projects[1] and Programmes[2] Task Forces[3] and LG (district & sector)	• Technical support	• 12,500
	• Train the staff	Y1Q4				• 8,000
Define criteria for a success story and innovation	• Conduct stakeholders' consultative workshop	Y2Q1	Proceedings of the stakeholders' workshop		• Capacity building • Financial support	• 12,500
	• Disseminate the criteria at grassroots level	Y2Q2				• 15,000
Identify and document success stories and innovations from various projects on intensification and development of sustainable production systems, support to the professionalization of the producers, promotion of commodity chains and agribusiness development and institutional development.	• Identify success stories and innovations form various projects • Document relevant success stories and innovations	Y2Q1, Y2Q2	Bulletins, reports, fliers, multi-media materials - video, presentations, web postings of success stories & best practices in MINAGRI programmes and projects	MINAGRI KM Officer, CICA, MINAGRI Projects and Programmes	• Capacity building on methodologies for documenting success stories • Financial support	• 20,000
Process and package the success stories and innovations into forms easy to share with stakeholders	• Translate the success stories and innovations into easy to understand languages • Package them into appropriate knowledge sharing products	Y2Q1, Y2Q2	Success stories and innovations which are translated and packaged		• Capacity building • Financial support	• 7500
Continuous updating of the stories and innovations	• Collect feedback from the usefulness of the success stories and innovations • Review the success stories and innovations and updating	Y1Q4, Y2Q4, Y3Q4	Updated success stories and innovations		• Capacity building • Financial support	• 15,000

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[1] PAPSTA/KWAMP/PRICE SPIU, LWH/RSSP 2 SPIU, PADAB, PAIGELAC, PAIRB and LISP SPIU.
[2] Programmes 1 - 4
[3] Irrigation and mechanization TF and PHHS TF

TARGET 2	To guide the recording of success and failures of the Ministry as a learning and decision-making opportunity					
OUTPUT	Recording of success and failures of the Ministry as a learning and decision-making opportunity established					
OUTCOME	Through experiential learning, the MINAGRI actors use appropriate mechanisms in decision making (Change of mindset)					
ACTIVITIES	**STEPS**	**Time Frame**	**DELIVERABLES**	**RESPONSIBLE INSITUTION**	**SUPPORT NEEDED**	**BUDGET**
Build capacity in the area of process documentation within MINAGRI involving various actors in the agricultural sector	• Identify the activity needs • Choose persons to be trained • Conduct training • Follow up and assessment	Y1Q3	Process documentation training manuals and proceedings	MINAGRI directorates[4], boards[5]/Task Forces & partners	• Financial support • Technical support • Staffs • Responsible staffs	• 5,000
Facilitate experiential learning among main policy and decision making actors in the ministry (This includes establishing CoP, NoP)	• Understanding the Agric. policy • Learning through the policy • Organize field visit	Y1Q3	Method guides, Process documentation manuals and field visit reports	MINAGRI KM Officer, CICA	• Technical support for assessing experiential learning	• 35,000
Practical implementation of the process documentation exercise for various implementers and actors in the sector	• Identify the topics and group work • Organize a meeting/workshop • Data collection	Y1Q4, Y2Q4, Y3Q4	Reports on documented process	MINAGRI directorates, boards/Task Forces & partners	• Training on how to conduct process documentation	• 25,000
Identify MINAGRI failures	• Discussion leading to pointing obvious failures • Brainstorm on how to improve for better outcomes		Report on the results of the discussion and brainstorm sessions	MINAGRI KM Officer, CICA LG (district & sector)		• 15.000
TARGET 3	To provide guide for crossing of information between financial and results-based measurements					
OUTPUT	Crossing of information between financial and results-based measurements enhanced					
OUTCOME	The KM system serves as a source reference for documenting experiences and providing data to feed into the M&E system					
ACTIVITIES	**STEPS**	**Time Frame**	**DELIVERABLES**	**RESPONSIBLE INSITUTION**	**SUPPORT NEEDED**	**BUDGET**
Establish KM results-based	• Develop a mechanism to	Y1Q2	Knowledge	MINAGRI	• Expertise to	• 7,500

[4] GDSPPC, GDCP, GDAP

[5] RAB and NAEB

measurements system	track KM practices at all levels		Management Systems	M&E, KM Officer and CICA	develop a mechanism to track KM practices	
Monitor the planned KM activities	• Set a continuous data collection mechanism		KMS monitoring workshops and reports		• Expertise in developing a data collection mechanism	• 30,000
Evaluate KM result - impacts	• Analyze the KM sharing and use results against financial implication at various levels • Conduct feedback workshop	Y1Q2, Y2Q2, Y3Q2	KMS evaluation workshops and reports		• Expertise to analyze KM sharing and use results against expenditures	• 25,000

TARGET 4	To provide a broad perspective and variety of media products to publicize the ministry
OUTPUT	A broad perspective and variety of media products to publicize the Ministry identified and used
OUTCOME	A wide range of audiences in the sector are aware of what the Ministry is doing through various media publicity products

ACTIVITIES	STEPS	TIME FRAME	DELIVERABLES	RESPONSIBLE INSITUTION	SUPPORT NEEDED	BUDGET
Inventory of target audience	• Brainstorming • Information gathering and screening • Establish agricultural target/ audience database	Y1Q1	Report of the results of the brainstorming session and audience database	CICA, KM Officers in SPIU. Public relations, etc.	• Communication Officers from Projects, T Forces, Boards and MINAGRI central (Communication Team) • Financial support • External Technical support	• 7,500
Inventory of existing products and development of new ones based on demand	• Brainstorming • Information gathering & screening • Document agricultural production records	Y1Q1	Report of the results of the brainstorm session and agricultural product records	CICA, PSF, NGOs Media high, council, etc.		• 7,500
Inventory of potential media for publicizing MINAGRI	• Brainstorming • Information gathering &screening • Media/ channels records	Y1Q1	A range of high quality publications and other knowledge products and distributed to target audiences through appropriate channels (from short	MINAGRI programmes and project coordinators. KM Officer, CICA and Media High Council		• 7,500
Identify and use appropriate multiple channels for knowledge transfer to publicize the ministry	• Inventorise the available channels • Select the appropriate channels to use	Y1Q2				• 15,000

Develop a range of high quality publications and other knowledge products and distribute to target audiences through appropriate channels (from short briefing notes to more substantive reports, and including video, audio and multi-media material).	• Identify thematic areas for publication and knowledge products preparation Distribute appropriate products to relevant audiences	Y1Q3 Y2Q1, Y2Q3,Y3Q1, Y3Q3	briefing notes to more substantive reports, and including video, audio and multi-media material).		• 15,000
Conduct a series of workshops and events bringing stakeholders together to debate on agricultural transformation issues	• Workshop preparation • Official launching	Y1Q2, Y1Q3, Y1Q4	A series of workshops and events bringing stakeholders together to debate on agricultural transformation issues (including high level policy debates on agriculture development, national and zonal level agricultural exhibitions, public affairs and media engagement programmes to publicize MINAGRI's programmes and projects)	MINAGRI KM Officer, CICA, and Media High Council	• 25,000
Organise a public affairs and media engagement programme to establish the profile of MINAGRI programmes and projects with clear and consistent messages.	• Identify thematic areas for coverage in public affairs and media	Y1Q2, Y2Q2, Y3Q3			• 35,000
Evaluation of products & media	• Conduct workshops • Public affairs engagement • Conduct surveys	Y1Q4	Workshop proceedings and survey reports	MINAGRI & Stakeholders	• 12,500
TARGET 5	**To provide an arena for the exchange of ideas, innovations and experiences among various interventions in the agricultural sector and beyond**				
OUTPUT	The exchange of ideas, innovations and experiences among various interventions in the agriculture sector and beyond facilitated				
OUTCOME	Through experiential learning, the MINAGRI actors use appropriate mechanisms in decision making				

ACTIVITIES	STEPS	TIME FRAME	DELIVERABLES	RESPONSIBLE INSITUTION	SUPPORT NEEDED	BUDGET
Review existing framework for exchange of ideas, innovation and experience	• Identify (make a list) existing framework: M&E + KMCS framework • Develop criteria to critically assess the existing framework : M&E + KMCS • Critical assessment of existing framework (what does this respond to? What is missing?) • Filling the identified gaps so that the framework becomes complete and implementable	Y1Q3	Appropriate framework for exchange of ideas, innovation and experiences among various stakeholders in the agricultural sector	MINAGRI projects, KM Officer and CICA	• Expertise to conduct critical assessment of existing frameworks	• 7,500
Establish conducive environment for exchange of ideas, innovations and experiences among various stakeholders in the agricultural sector	• Identify ideas, innovation and experience gaps • Identify available innovations and experiences among stakeholders • Develop appropriate platform for the exchanges among stakeholders	Y1Q4	Inventory of ideas, innovation and experience gaps		• Expertise to develop /establish platforms for the exchanges	• 10,000
Conduct an Inter-project knowledge transfer between different project implementers and farmers	• Assess knowledge needs between the projects • Facilitate cross project knowledge sharing through various means (exchange visit, discussions/dialogues etc)	Y1Q4, Y2Q4, Y3Q4	Inter-project knowledge transfer events (exchange visits, innovation platforms/clusters, communities of practices, network of practices etc) between different project implementers and farmers		• Expertise to conduct knowledge needs assessments	• 20,000
Facilitate exchange of idea, innovations and experiences among various interventions in the agriculture sector and beyond	• Identify available innovations and experiences among interventions • Develop appropriate platform for the exchanges	Y1Q4, Y2Q4, Q13			• Expertise to develop knowledge exchange platforms	• 10,000

ACTIVITIES	STEPS	TIME FRAME	DELIVERABLES	RESPONSIBLE INSITUTION	SUPPORT NEEDED	BUDGET
Supporting personal relationships between experts and knowledge users in relation to agricultural transformation	• Create conducive environment or experts to relate with knowledge users • Facilitate the personal relationship through visit, discussions, field days, exhibitions etc	Y1Q4, Y2Q4, Q14			• Expertise to facilitate expert-users personal relationship sessions	• 25,000
Establish and incorporate an online community space as a sub-section of the MINAGRI website providing social networking and related discussion tools	• Identify the exiting users of the website • Create an online community space in the MINAGRI website • Invite the users to subscribe to the space • Initiate online interactions and encourage users to participate	Y1Q2,	Online community space for social networking among Rwandan agricultural sector actors District/Sector/Cell level Innovation Platforms/Clusters		• Orientation to facilitate online interactions including moderation	• 7,500
Design face-to-face events to encourage networking, knowledge sharing and support.	• Identify the main stakeholders and themes for the events • Identify appropriate venue for meeting • Invite the stakeholder to participate in the events	Y1Q2, Y2Q2, Y3Q3	Face-to-face events for networking among Rwandan agricultural sector actors District/Sector/Cell level Innovation Platforms/Clusters		• Expertise to establish appropriate face-to-face knowledge sharing/exchange events	• 15,000
TARGET 6	**To provide guidance of using documented experiences to improve policy dialogue between MINAGRI partners and future investments' formulation**					
OUTPUT	Use of documented experiences (success stories and innovations) to improve policy dialogue between MINAGRI partners and future investments' formulation enhanced					
OUTCOME	New experience based knowledge is generated to enrich policy dialogue and to improve design of future projects and programmes					
ACTIVITIES	**STEPS**	**TIME FRAME**	**DELIVERABLES**	**RESPONSIBLE INSITUTION**	**SUPPORT NEEDED**	**BUDGET**

Design policy forums involving MINAGRI Partners to discuss issues about future investments' formulation related to Agricultural transformation in Rwanda	• Identify relevant policy partners • Conduct a policy partners introductory meeting	Y1Q4, Y2Q1	National Agricultural Transformation Policy Forum	MINAGRI KM Officer and CICA	• Expertise to design/develop policy forums	• 20,000
Conduct policy forums involving MINAGRI Partners	• Conduct policy forums with all partners	Y1Q4, Y2Q4, Y3Q4	Series of meetings/workshops of the NATPF		• Expertise to conduct policy dialogues	• 35,000
Generate new experience based knowledge to be used for enriching policy dialogue and improve design of future projects and programmes.	• Document new experience emerging from the forum • Share the knowledge for future project formulation	Y2Q3, Y3Q3	A series of proceedings and policy briefs with deliberations from NATPF meetings/ workshops		• Expertise to capture new experience based knowledge from policy dialogues	• 15,000

4.1 The Knowledge Management and Communication Strategy Coordination and Implementation

4.1.1 Proposed Structure of Implementation of KM&C Strategy in Rwanda

Implementing this strategy requires excellent leadership and coordination from within MINAGRI and for this matter CICA still offers high opportunity to do so. Therefore, CICA needs strong partnerships with a range of internal and external organisations to form a network to collaborate and work with to achieve the objectives of the KM Strategy. The implementation of the Strategy will involve day-to-day KM&C activities that will be carried out by MINAGRI implementers and partners. The table below gives examples of different kinds of arrangements.

Table 3: Proposed examples of implementation of KM&C Strategy in Rwanda

Type	Examples
MINAGRI Implementers	- CICA MIS/website developer to improve the design and appearance of the MINAGRI website with up-to-date information and knowledge including providing technical backstopping to other MINAGRI organisations which have websites - CICA to coordinate editing & production work for agricultural sector publications in collaboration with other scientist within MINAGRI - CICA communication officer to develop tailored briefing series for senior policy makers, drawing on expert input from MINAGRI research and extension bodies, programmes, projects and other potential partners - RAB and NAEB to work hand in hand with the MINAGRI Directorates to shape and produce the sector's annual research and extension review targeting creation and synthesis of agricultural knowledge.
MINAGRI national partners	- Commission national level academic institutions to work with MINAGRI to shape and produce the agricultural education and extension review to strengthen agricultural education and extension in tertiary institutions - Sponsor media houses to engage local journalists in covering national agricultural transformation debates, prepare special set of feature articles on priority themes, and conduct media training at local level on this - Work with the national and local media players to publicise MINAGRI activities including vision, mission and strategic plan for agricultural transformation - Commission experienced information services to do special editions of documentaries, newsletters, policy briefings, or other bulletin series on priority programmes and sub-programmes such as intensification and development of sustainable production systems, support to the professionalization of the producers, promotion of commodity chains and agribusiness development and institutional development

| Regional partners | ▪ Engage with well-known regional knowledge networks such as CAADP-NEPAD, EAC, CEPGL to expand coverage of Rwandan agricultural policy/vision engagement in the region. |
| | ▪ Commission leading knowledge players to develop online resources on transformation of the agricultural sector |

4.1.2   Proposed Knowledge Management Levels

The knowledge management and communication activities are proposed to happen at five levels (Table 4):

Table 4: Proposed Knowledge Management Levels and Respective Implementation Teams

Knowledge Management and Communication Levels	Knowledge Management Teams
National level tasks will be handled by MINAGRI as key national player to ensure that lessons and priorities from programmes and projects are fed into national level debates and policy processes, and contribute to strengthening the national agricultural knowledge base around transformation of agricultural sector in Rwanda	National KM team comprising of a KM Coordinator[6] and a Communication Officer[7] to be based at CICA.
Zonal level having a task of supporting Zonal level knowledge management network, capacity building or policy processes	Zonal KM teams, comprising of a KM Coordinator[8] and a Communication Officer[9] at zonal level to be based in each zone preferably at RAB zonal centres
District level with the task of feeding into district level knowledge management network/platform and support policy processes	District KM teams with the same job profiles to operate at district levels and to be based at each district council
Sector level with the task of coordinating sector level knowledge sharing networks/platform and support learning, innovation and adaptation processes	Sector KM Teams including Agronomist, RAB Veterinary officer, CIC and BDC
Cell level with the task of coordinating cell level knowledge sharing networks/ clusters and support local learning, innovation and adaptation processes	Integrated development program officer, farmer groups

There is a need to hire the services of KM Coordinators and Communication officers at different levels with qualifications as highlighted in the footnote below.

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[6] M.Sc.in extension, development communication with graduation in agriculture (B.Sc. Ag)
[7] M.Sc. in development communication, extension, journalism, or Public relation
[8] B.Sc.in extension or development communication
[9] B.Sc. in development communication, extension, journalism, or Public relation

4.1.3 Roles and Responsibilities of the Proposed KM&C Teams at Each Level

These teams will perform their work together and very intimately to ensure coherence in implementing the Strategy. The National KM team will guide the establishment of KM systems and protocols and support capacity development and learning to the Zonal and District KM teams. With time an increasing proportion of KM tasks will be taken up by zonal and district KM teams. The main roles of the KM teams at each level are presented in table 5 below.

Table 5: Roles and responsibilities of the proposed KM&C Teams at each level

National Team	Zonal Teams	District Teams	Sector Teams	Cell Teams
Knowledge Management and Communication Strategy Oversight				
▪ Manage, plan and oversee implementation of the main sector-wide KM&C strategy ▪ Develop overall editorial/branding/ communication guidelines ▪ Manage overall KM M&E, integrating national sector-wide inputs ▪ Foster learning and adaptation at National level	▪ Develop and manage zonal level KM&C action plans ▪ Interpret editorial/branding/ communication guidelines for Zonal roll out ▪ Coordinate M&E of zonal level KM&C activities ▪ Foster learning and adaptation at Zonal level	▪ Develop and manage district level KM&C action plans ▪ Interpret editorial/branding/ communication guidelines for District level roll out ▪ Coordinate M&E of district level KM&C activities ▪ Foster learning and adaptation at District level	▪ Develop and facilitate sector level KM&C action plans ▪ Customize communication guidelines for Sector level roll out ▪ Coordinate M&E of sector level KM&C activities ▪ Foster learning and adaptation at Sector level	▪ Develop and facilitate cell level KM&C action plans ▪ Customize communication guidelines for Cell level roll out ▪ Coordinate M&E of cell level KM&C activities ▪ Foster learning and adaptation at Cell level
MINAGRI Knowledge Management and Communication Tasks				
▪ Overall management of MINAGRI website including editorial control of the website/information systems ▪ Manage commissioning /editing/ production of national KM&C outputs ▪ Manage marketing &	▪ Editorial control over Zonal information portals ▪ Manage commissioning/ editing /production of Zonal KM&C outputs (some will be customized local versions of national	▪ Editorial control over District information portals ▪ Manage commissioning/ editing/production of District KM&C outputs (some will be customized local versions of zonal outputs) ▪ Manage marketing &	▪ Facilitate production of Sector level KM&C outputs (some will be customized local versions of district outputs) ▪ Facilitate marketing & distribution of Sector level KM&C outputs via	▪ Facilitate production of Cell level KM&C outputs (some will be customized local versions of sector outputs) ▪ Facilitate marketing & distribution of Cell level KM&C outputs via range of local channels

distribution of national agricultural sector outputs via a range of channels • Coordinate national events, policy dialogues, media work, online discussions & networks • Facilitate National level innovation and experimentation	outputs) • Manage marketing & distribution of Zonal agricultural sector KM&C outputs via a range of local channels • Coordinate Zonal events, policy dialogues, media work, online discussions & networks • Facilitate District level innovation and experimentation	distribution of District agricultural sector KM&C outputs via a range of local channels • Coordinate District events, policy dialogues, media work, online discussions & networks • Facilitate Zonal level innovation and experimentation	a range of local channels • Coordinate Sector events, policy dialogues, media work, discussions & networks in CIC/BDC • Facilitate Sector level innovation and experimentation	• Coordinate Cell events, policy dialogues, media work, discussions & networks in integrated development programmes and farmer groups • Facilitate Cell level innovation and experimentation
Knowledge Management and Communication Partnerships Development				
• Establish and manage Knowledge management relationships between MINAGRI implementers and other national level agricultural sector partners • Support and facilitate capacity building, innovation & learning among MINAGRI actors and among agricultural sector partners • Support communication (internal and external) at MINAGRI/National level	• Establish and manage relationships with zonal agricultural sector partners • Support capacity building, innovation & learning among zonal level agricultural sector partners • Support agricultural sector communication (internal and external) in the Zone	• Establish and manage relationships with district agricultural sector partners • Support capacity building, innovation & learning among district level agricultural sector partners • Support agricultural sector communication (internal and external) in the District	• Establish and manage relationships with Sector level agricultural partners • Support capacity building, innovation & learning among Sector level agricultural partners (esp. in CIC, BDC and cooperatives) • Support agricultural sector communication (internal and external) in the Sector	• Establish and manage relationships with Cell level agricultural partners • Support capacity building, innovation & learning among Cell level agricultural actors (e.g. farmers groups and cooperatives) • Support agricultural sector communication (internal and external) in the Cell

4.1.4 Interaction of KM&C Teams at Different Levels

The partners will be selected among a wide range of agricultural sector stakeholders based on the role they can play to help MINAGRI deliver its KM&C objectives. This will include taking advantage of professional skills, a range of audience base, and their established standings and networks. It is through interaction that partnerships would be most productive in events where MINAGRI KM&C objectives are nearly closely aligned with those of partner organisations, but where complementary approaches and experience from partners is anticipated. This kind of rub shoulders approach will help build the capacity of partner organisations, avoid duplication of efforts, and increase the impact the agricultural sector can have on economic growth.

The KM&C teams and wider group of partners would interact during KM&C process as illustrated in Figure 2 below. Each of the Cell, Sector, Zonal and District teams will create partnerships as part of their individual level KM&C plans. Over time, the Cell, Sector, Zonal and District level KM&C teams will be linked together in various ways by sponsoring collective learning events and creating networking of practices at local levels. This will start at Cell level, and in due course it will extend to the Sector, Zonal, District and National levels, so MINAGRI can help create a formal National Network/Platform of partners involved in KM and communication in the agricultural sector. It is preconceived that by linking partners together in this way will encourage two-way learning, facilitate capacity building and strengthen the 'knowledge architecture' in the agricultural sector.
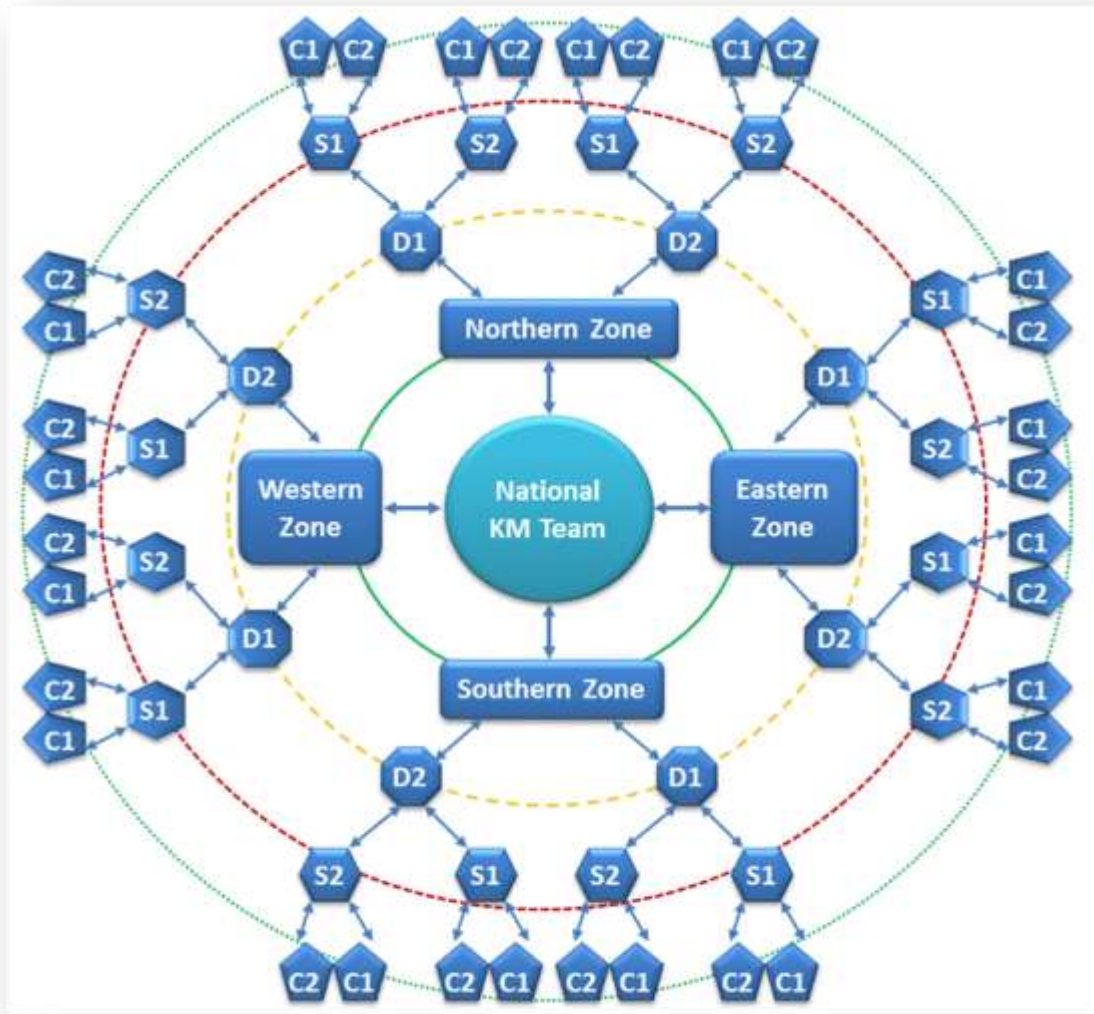
Figure 2: Diagram illustrating the interaction of KM&C teams at National, Zonal, District, Sector and Cell levels

4.2   Knowledge Management in Promoting Innovation and Learning

Knowledge management is an art of providing the right information to the right people at the right time. It includes two aspects, *'managing'* the knowledge that already exists in the organization, as well as enhancing the ability to create *'new knowledge'.* Most KM programs emphasize knowledge sharing and integration. However now, more effort in KM programs is put in the area of knowledge creation and learning. When the management of knowledge is introduced it is the past events that are harnessed to promote and facilitate the innovation process. Thus, innovation is one of the objectives of an effective KM program. Therefore, in order to stimulate the invention part of innovation there is a need to have innovation mechanisms that support knowledge creation, sharing, and integration. Innovation is the use of new knowledge to provide new products or services that stakeholders want. It is a new way of doing

business. Therefore the Knowledge management program that focuses on the creation, acquisition, integration, distribution, and application of knowledge is likely to improve the operational effectiveness and competitive advantage of an organization. For the KM program in the agricultural sector in Rwanda to succeed, it has to focus on innovation mechanisms. Table 6 shows the relationship between knowledge management and relevant innovation mechanisms.

Table 6: Relation between Knowledge Management and Innovation Mechanisms

KM Elements	Innovation Mechanisms
Creation	• Introduce and facilitate change – setting, groups, viewpoints • Encourage and facilitate experimentation and ignore experts
Acquisition	• Encourage and facilitate education and learning – often alternative • Rely on internal & external sources – user communities • Opportunistic outlook – look outside the box
Integration	• Integration of functional knowledge with process knowledge • Challenge existing practices to stimulate innovativeness • Use different perspectives as part of idea sharing
Distribution	• Connecting those that know with those that need to know • Design transfer mechanisms • Encourage and facilitate idea sharing • Keep ideas alive and a reality – not just an archive, make tangible if possible
Application	• Offer freedom to experiment – model, pilot, test good ideas

This KMC strategy will facilitate experimentation with new ideas by MINAGRI staff and other stakeholders at any level, inside and outside the MINAGRI as part of its implementation. It will enable the KM team to continuously gain experience with new ideas and approaches. Such attitude will foster creativity and inclusive problem solving and will allow for rapid scaling up of good ideas during project implementation. This will involve sourcing of new ideas and innovations; seeking and embracing new opportunities; enriching new ideas through communities and networks of practices; trying out new ideas and ways; and using competitions to foster innovation.

4.3 Monitoring and Evaluation of Knowledge Management Process

Monitoring and evaluation (M&E) process is an action-oriented management tool and an organizational process for generating knowledge to improve decisions about policies, programs, and organizations. The KM M&E enables the assessment of the impact of knowledge sharing and communication activities. It differs from other conventional tools which focus on tracking the indicators and activities. It can be among the most effective ways to foster learning for sustainable innovation promotion. For an M&E system to enhance learning and innovation, it must have the ability to mobilise in a positive way those people who are going to be the future users of the system, triggering their interest in learning and innovativeness based on the rigorous, systematic observation of reality and informed analysis and interpretation thereof. Learning-oriented M&E focuses on tracking indicators and activities. It also

focuses on process monitoring, which looks deeply at the effectiveness and efficiency of the way that results are supposed to be achieved. It sets learning questions to which answers are sought by trying out ideas and learning lessons continuously and provides the right information at the right time for decision making and adaptation.

Integrating learning into M&E includes improved adaptive and responsive management of the innovation process by fostering a broad learning approach to implementation and creating a more inclusive working condition to bring beneficiary and participants' perspectives into consideration. It also contributes to organisational development and management capacity development and promotes active use of a theory of capacity and its development and a theory of change, both of which improve the quality of design and implementation of capacity development processes. It provides avenue for using errors or failures as learning opportunities, rather than treating them as something to be hidden or falsified; and it promotes an evaluative culture in which enhanced learning, multiple accountabilities, transparency and organisational understanding of change and impact become the norm.

Learning oriented M&E will be achieved through setting benchmarks, indicators & learning questions; collecting qualitative and quantitative data; analysis of information & data; tracking and assessing KM progress & challenges; monitoring of KM process and continuous follow-up on progress & performance. Thus it needs to start at the beginning and be directly linked to each activity identified in the proposed action plan. This will help to ensure that the KM is refined and improved. Monitoring will deal with the collection of information in the course of implementing the strategy. By tracking outputs and KMC activities as well as effectiveness and efficiency of the process as the work goes along, it is possible to address pitfalls as they occur at an earlier stage and undertake corrective action. Evaluation is about measuring impact. Monitoring and evaluation allows for the prudent use of resources since these can be reallocated to address other critical areas of intervention during the implementation of the strategy. The oversight of the monitoring and evaluation of the knowledge management and communication activities will be by KM Officer, CICA and overall MINAGRI M&E team, which will in turn report to the MINAGRI. The CICA will advise its implementation partners on the approach to the M&E process (e.g. training of partners on the M&E framework), the time frames for evaluation and the lead time for reporting.

Table 7: Monitoring and evaluation framework for knowledge management and communication strategy

TARGET 1: To provide a road map for gathering information on successful stories and innovations from the field by MINAGRI implementers				
RESULT: Success stories and innovations form various projects in MINAGRI identified, gathered and documented				
OUTCOME: The capacity of the MINAGRI projects Implementers to gather success stories and innovations enhanced				
Outputs	**Indicators**	**Frequency**	**Data source**	**Responsibility**
Gathering of information on successful stories and innovations from the field by MINAGRI implementers established and implemented	• Number of identified and documented success stories and innovations from various projects on intensification and development of sustainable production systems, support to the professionalization of the producers, promotion of commodity chains and agribusiness development and institutional development	Every three months	• MINAGRI Directorates • MINAGRI Projects and Programmes • MINAGRI Boards and Taskforces	MINAGRI M&E, KM Officer and CICA
	• % of identified and documented success stories and innovation processed and packaged into forms easy to share to stakeholders	Every three months		MINAGRI M&E, KM Officer and CICA
	• Number of KM&C activities conducted in the respective period in various projects and programmes	Every three months		MINAGRI M&E, KM Officer and CICA
	• % of updated versions of the stories and innovations	Every three months		MINAGRI M&E, KM Officer and CICA
TARGET 2: To guide the recording of success and failures of the Ministry as a learning and decision-making opportunity				
RESULT: A framework for experiential learning among main policy and decision making actors in the Ministry established and facilitated				
OUTCOME: Through experiential learning, the MINAGRI actors use appropriate mechanisms in decision making				
Output	**Indicators**	**Frequency**	**Data source**	**Responsibility**
Recording of success and failures of the Ministry as a learning and decision-making opportunity established	• Number of experiential learning sessions through master-apprentice relationship (mentorship) facilitated among main policy and decision making actors in the ministry	Every three months	• MINAGRI Directorates • MINAGRI Projects and Programmes • MINAGRI Boards and Taskforces	MINAGRI M&E, KM Officer and CICA
	• Number of capacity building sessions in the area of process documentation within MINAGRI involving various actors in the agricultural sector	Every three months		MINAGRI M&E, KM Officer and CICA
	• Number of appropriate mechanisms identified for decision making			MINAGRI M&E, KM Officer and CICA
	• Number of documented decisions made and practically implemented as a result of experiential learning of success and failures of the Ministry	Every three months		MINAGRI M&E, KM Officer and CICA

TARGET 3: To provide guidance for crossing of information between financial and results-based measurements				
RESULT: M&E system based on the logical framework developed				
OUTCOME: The KM system serves as a source reference for documenting experiences and providing data to feed into the M&E system.				
Output	**Indicators**	**Frequency**	**Data source**	**Responsibility**
Crossing of information between financial and results-based measurements enhanced	• Number of KM results-based measurements system established	Every three months	• MINAGRI Directorates	MINAGRI M&E, KM Officer and CICA
	• Number of KM activities monitored	Every three months	• MINAGRI Projects and Programmes	MINAGRI M&E, KM Officer and CICA
	• Number of result-based activities KM evaluated	Every three months	• MINAGRI Boards and Taskforces	MINAGRI M&E, KM Officer and CICA
TARGET 4: To provide a broad perspective and variety of media products to publicize the ministry				
RESULT: Appropriate multiple channels for knowledge transfer are identified to publicise the ministry				
OUTCOME: A wide range of audiences in the sector are aware of what the Ministry is doing through various media publicity products				
Output	**Indicators**	**Frequency**	**Data source**	**Responsibility**
A broad perspective and variety of media products to publicize the Ministry identified	• Number of potential media used to publicize MINAGRI	Every three months	• MINAGRI Directorates	MINAGRI M&E, KM Officer and CICA
	• Number and frequency of appropriate multiple channels identified and used for knowledge transfer to publicise the Ministry	Every three months	• MINAGRI Projects and Programmes • MINAGRI Boards and Taskforces	MINAGRI M&E, KM Officer and CICA
	• Area coverage by the various media used to publicize the Ministry	Every three months		MINAGRI M&E, KM Officer and CICA
TARGET 5: To provide an arena for the exchange of ideas, innovations and experiences among various interventions in the agriculture sector and beyond				
RESULT: Various stakeholders in the agricultural sector are informed and knowledgeable about various interventions for agricultural transformation				
OUTCOME: Attitude among various stakeholders in the agriculture sector on agricultural transformation is changed				
Output	**Indicators**	**Frequency**	**Data source**	**Responsibility**
The exchange of ideas, innovations and experiences among various interventions in the agriculture sector and beyond facilitated	• Review existing framework for exchange of ideas, innovation and experience	Every three months	• MINAGRI Directorates	MINAGRI M&E, KM Officer and CICA
	• Number of knowledge sharing events conducted	Every three months	• MINAGRI Projects and Programmes	MINAGRI M&E, KM Officer and CICA
	• Number of Inter-project knowledge transfer activities conducted between different project implementers and farmers	Every three months	• MINAGRI Boards and Taskforces	MINAGRI M&E, KM Officer and CICA
	• Number of activities for exchange of idea, innovations and experiences conducted among various interventions in the agriculture sector and beyond	Every three months		MINAGRI M&E, KM Officer and CICA
	• Number of personal relationships activities undertaken	Every three		MINAGRI M&E, KM

	between experts and knowledge users in relation to agricultural transformation	months		Officer and CICA

TARGET 6: To provide guidance in using documented experiences to improve policy dialogue between MINAGRI partners and future investments' formulation

RESULT: Policy forums involving MINAGRI partners to discuss issues about future investments' formulation related to transformation of agriculture in Rwanda designed

OUTCOME: New experience based knowledge is generated to enrich policy dialogue and to improve design of future projects and programmes.

Output	Indicators	Frequency	Data source	Responsibility
Use of documented experiences (success stories and innovations) to improve policy dialogue between MINAGRI partners and future investments' formulation enhanced	• Number of policy forums designed and conducted involving MINAGRI partners	Every three months	• MINAGRI Directorates	MINAGRI M&E, KM Officer and CICA
	• Number and categories of MINAGRI partners involved in policy dialogues	Every three months	• MINAGRI Projects and Programmes	MINAGRI M&E, KM Officer and CICA
	• Number of new knowledge generated and used to enrich policy dialogue and design future projects/programmes	Every three months	• MINAGRI Boards and Taskforces	MINAGRI M&E, KM Officer and CICA

5.0 KNOWLEDGE MANAGEMENT AND COMMUNICATION TERMS AND CONCEPTS

It is important that we explore meanings of some key terminologies used in the knowledge management and communication arena in order to have a precise planning and use of such terms to avoid confusion on the way.

Communication: The process of sharing or conveying information.

Communication strategy: Refers to a tool that guides various ways which an organisation will deliver messages or share information and knowledge to its audiences to help achieve the aims of that organisation in an organised and targeted way. It is a tool that articulates, explains and promotes a vision of an organisation and a set of well-defined goals to create a consistent, unified "voice" that links diverse activities and goals in a way that appeals to partners or stakeholders. The communication strategy is a cornerstone of the knowledge management strategy.

Dissemination: The act of distributing information to various audiences in forms appropriate to their needs. Dissemination aims to increase the wider awareness of research products and, in turn, to enhance the speed of uptake of technologies.

Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information.

Knowledge management: Refers to a plan that describes how an organisation will manage its knowledge better for the benefit of that organisation and its stakeholders. It involves an organisation consciously and comprehensively gathering, organising, sharing, and analysing its knowledge in terms of resources, documents, and people skills. A good knowledge management strategy is closely aligned with the organisation's overall strategy and objectives.

Knowledge management strategy (**KMS**) comprises a range of strategies and practices used in an organization to identify, create, represent, distribute, and enable adoption of insights and experiences. Such insights and experiences comprise knowledge, either embodied in individuals or embedded in organizations as processes or practices.

Stakeholders: These can be individuals, groups of people or organizations, or even segments of a population that are actively involved in the project, or whose interests may be affected as a result of project execution or project completion. They may also exert influence over the project's objectives and outcomes.

Knowledge assets refer to the accumulated intellectual resources of an organization. It is the knowledge possessed by an organization and its workforce in the form of information, ideas, learning, understanding, memory, insights, cognitive and technical skills, and capabilities. Your workforce, databases, documents, guides, policies and procedures, software, and patents are repositories of the organization's knowledge assets. Knowledge assets are held not only by an organization but reside within its customers, suppliers, and partners as well.

6.0 REFERENCES

1. MINAGRI, 2011. Monitoring and Evaluation Framework for the Agriculture and Animal Resources Sector. Draft Report, Ministry of Agriculture and Animal Resources (MINAGRI). June 2011. Pp 59.

2. Republic of Rwanda (RoR), 2009. Strategic Plan for the Transformation of Agriculture in Rwanda – Phase II (PSTA). Final Report. Ministry of Agriculture and Animal Resources (MINAGRI). February 2009. Pp 114.

3. Republic of Rwanda, 2000. Rwanda Vision 2020. Ministry of Economic Planning and Finance (MINECOFIN). July 2000.

4. Ndekezi, E and Musabyimana, T., 2010. An Assessment of Needs of Rwandan Rural and Agricultural Population in Information and Communication, HUGUKA ASBL