



# Strengthening Knowledge Management for Greater Development Effectiveness in the Near East, North Africa, Central Asia and Europe

National Writeshops Report









# **National Writeshops Report**

# **Developing Capacity Building and Innovation Plans for Moldova, Morocco and Sudan**

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Knowledge, Knowledge Management, Management, KM, MGMT, Knowledge Sharing, Sharing, Knowledge Creation, Creation, Knowledge Discovery, Discovery, Knowledge Storage, Storage, Knowledge Curation, Curation, Information, Data, Data Curation, Capacity Development, Capacity, Development, Research for Development, R4D

# **Prepared by**

International Center for Agricultural Research in the Dry Areas (ICARDA)

# Project

Strengthening Knowledge Management for Greater Development Effectiveness in the Near East, North Africa, Central Asia and Europe (SKiM)

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## Report

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Established in 1977, the International Center for Agricultural Research in the Dry Areas (ICARDA) is a nonprofit, CGIAR Research Center that focusses on delivering innovative solutions for sustainable agricultural development in the nontropical dry areas of the developing world. We provide innovative, science-based solutions to improve the livelihoods and resilience of resource- poor smallholder farmers. We do this through strategic partnerships, linking research to development, and capacity development, and by taking into account gender equality and the role of youth in transforming the non-tropical dry areas.

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# **Abbreviations**

AETTGD ARC Sudan ATTS AUW CNA CIHEAM Bari	Agricultural Extension and Technology Transfer General Directorate of Sudan Agricultural Research Corporation - Sudan Agricultural Technology Transfer Society Ahfad University for Women Capacity needs assessment Centre International de Hautes Études Agronomiques Méditerranéennes – Bari
CoP	Community of practice
CPIU IFAD	Consolidated IFAD Programs Implementation Unit of Moldova
CCU IFAD	Central Coordination Unit for IFAD Co-Financed Projects of Sudan
ENA Meknes	National School of Agriculture
GLDC	CGIAR Research Program on Grain Legumes and Dryland Cereals
IAV Hassan II	Agronomic and Veterinary Institute
ICARDA	International Center for Agricultural Research in the Dry Areas
ICT	Information and communication technology
IFAD	International Fund for Agricultural Development
INRA	National Agricultural Research Institute
KariaNet	Knowledge Access to Inter-connected Rural Areas Network KM
КМ	Knowledge Management
KS	Knowledge Sharing
MARDE	Ministry of Agriculture, Regional Development and Environment of Moldova
MoAF	Ministry of Agriculture and Fisheries of Morocco
MoANR	Ministry of Agriculture and Natural Resources of Sudan
MoAR	Ministry of Animal Resources of Sudan
NARS	National Agricultural Research Systems
NFFM	National Farmers Federation of Moldova
NGO	Non-governmental organization
ONCA	National Office for Agricultural Extension
PROCASUR	Procasur Corporation
SAUM	State Agrarian University Moldova
Selectia	Research Institute of Field Crops "Selectia"
SKiM	Strengthening Knowledge Management for Greater Development Effectiveness in the Near East, North Africa, Central Asia and Europe (acronym used after November 2019)
SKS	Sudan Knowledge Society
UofK	University of Khartoum
USARB	Alecu Russo State University of Bălți
VT	Virginia Tech

# Introduction

The project "Strengthening Knowledge Management for Greater Development Effectiveness in the Near East, North Africa, Central Asia and Europe" aims at facilitating and supporting the knowledge management activities in the institutions of Morocco, Sudan and Moldova, (with the possibility of extending them to two additional countries) through increasing the capacities of the participating public institutions, by providing the necessary facilities and systems at a country and regional level, ensuring that the knowledge being developed can be effectively managed for longer term growth and development.

The project aims to elaborate the knowledge management (KM) innovation plan as a tool to support the project partners and stakeholders in adopting an approach capable of identifying existing **gaps – related to 1**) policy, **2**) technology, **3**) skills – in different knowledge management processes – **1**) discovery and detection, **2**) acquisition and creation, **3**) storage and curation, **4**) sharing and transfer – and related feasible solutions in order to act through capacity development actions. This processes and gaps matrix are the Capacity Development and Innovation Plan (CapDevInP) matrix.

The pivotal step will be the identification of the knowledge and resources in the possession of each institution partner, in order to enhance what them and prioritize what they need and what could be done. Each organization will contribute to design a plan of actions for better knowledge management, aiming at improving the knowledge produced and that is in coherence with the institution's strategy, vision and mission. These "innovation plans" will support the institutions involved in the project to enhance the existing KM framework or its development, outlining a set of activities and interventions tailored for their development.

The "National Writeshops to Develop Capacity Building and Innovation Plans" for Moldova, Morocco and Sudan were conducted to gather the information needed to inform the Innovation Plans, which is based on them and will link their proposed solutions with the Capacity Needs Assessment (CNA) previously conducted in said countries. The writeshops were conducted on a) basic introduction to KM that could be used as a guideline for partners to b) identifying needs related to the KM processes and the feasible solutions to be proposed at capacity building level.

The National Writeshops contribute directly to the component **"1. KM capacity assessment for enhanced formulation of learning needs"** through **"KM capacity & learning needs assessments (gap analysis) conducted"** with the project stakeholders.

# Summary

The writeshops were conducted in the three key countries, Moldova, Morocco and Sudan in the following order by date and with listed project implementing organizations. The "participating organizations" took active part in the assessments, while the "additional organizations" acted as observers and learners.

Country	Location	Date	Participating Organizations	Additional Organizations
Morocco	Rabat	17-18 June 2019	IAV Hassan II, INRA, ONCA	ENA Meknes, MoAF
Moldova	Chisinau	15 October 2019	CPIU-IFAD, SAUM, Selectia, USARB	MARDE, NFFM
Sudan	Khartoum	22-23 October 2019	AETTGD, ARC Sudan, ATTS, AUW, IFAD-CCU, MoANR, SKS, UofK	MoAR

#### Table 1. Writeshops conduction

The participatory approach employed has made possible using mixed methodologies to gather inputs from the institutions and provide training through a) presentations, b) questionnaires, c) interviews, d) flipchart exercises. These methods have been structured into a set of assessments:

- A) The Preliminary Assessment on KM (Annex 1) consists of a set of questions on the KM status in the institution in 2019 to the writeshop. The participants have compiled the questionnaire or given frontal presentations based on such questions.
- B) The Primary Assessment on KM (Annex 2) consists of four tables inquiring the structure of KM processes in the target institutions, requesting feedback from the respondents and going deeper into perceived needs and potential solutions to improve KM.
- C) Key informant interviews on the subject matter of KM and the role of SKIM project in supporting the institutions moderated by ICARDA.
- D) The Needs, Loops and Synergies exercise has been conducted on flipchart by reviewing (B), analyzing the perceived needs in KM within the institutions in four aspects of knowledge – identification, creation, storage, dissemination – and highlighting acting loops, potential synergies between the partners, and responsive areas of intervention for project intervention.

The project presentation and the writeshops presentation were also regularly given by ICARDA and CIHEAM Bari as overview of SKIM and as injection of the perspective on KM developed within the project framework.

The combination of the several knowledge probing methodologies has effectively provided insights on the institutions needs and improvable assets. However, not all methodologies were preferred by the participants and applied in each country, while the Primary Assessment has been consistently carried out by all institutions. Hereby a summary of methodologies applied by country and institution:

Country	Partner	Preliminary Assessment – PPT	Preliminary Assessment – Written	Primary Assessment	Key Informant Interviews	Needs, Loops and Synergies Exercise
Morocco	IAV Hassan II			Х		
Morocco	INRA		Х			
Morocco	ONCA		Х	Х		
Moldova	CPIU IFAD			Х		Х
Moldova	SAUM	Х		Х		Х
Moldova	Selectia		Х			Х
Moldova	USARB			Х		Х

Sudan	AETTGD	Х	Х	Х	Х
Sudan	ARC Sudan	Х	Х	Х	Х
Sudan	ATTS		Х		Х
Sudan	AUW		Х		Х
Sudan	CCU-IFAD		Х		Х
Sudan	MoANR		Х		Х
Sudan	SKS		Х	Х	Х
Sudan	UofK	Х	Х	Х	Х

In this report, the resulting information gathered by country – from the documentation of all methodologies employed and related exercises summarised – is provided, as well as a further elaboration of the recommendations in the perspective of the CapDevInP matrix, moving forward toward the Innovation Plans what already started with the Capacity Needs Assessment (CNA).

# Morocco, 17-18 June 2019, Rabat

Country	Partner	Preliminary Assessment – PPT	Preliminary Assessment – Written	Primary Assessment	Key Informant Interviews	Needs, Loops and Synergies Exercise
Morocco	IAV Hassan II			Х		
Morocco	ONCA		Х	Х		
Morocco	INRA		Х			

Table 3. Methodologies employed in Morocco and respondent institutions

# Introductory Presentations

ICARDA provided a summary overview of the SKIM project to the partners with the presentation "Strengthening knowledge management for greater development effectiveness in the Near East, North Africa, Central Asia and Europe", <u>https://hdl.handle.net/20.500.11766/10087</u>.

CIHEAM Bari introduced the subject matter of KM with the presentation "Capacity Development and Innovation Plan for Knowledge Management", <u>https://hdl.handle.net/20.500.11766/10561</u>.

# Preliminary Assessment on the Current Status of KM

#### INRA

1. What is the current status of knowledge management systems in your institution? □ Not present (no strategy, no policy, no workflow) □ Essential (only strategy) □ Intermediate (strategy and policy); □ Advanced (strategy, policy, workflow)

A knowledge management system is its infancy at INRA. First attempt was made with a Scientific and technical management system that involve collecting, processing and storing the produced information material generated from INRA research activities

2. Please, describe briefly your institutional growth plan for KM and related steps:

Two information systems are being implemented regarding STI (Scientific and Technical information) and the MIS (Management information system for research activities management)

3. Is there a completed/draft (please, specify) knowledge management strategy in your institution? Is it published or will it be published?

There is no formal knowledge management strategy. This concept is new, though in our daily activities we are doing KM.

4. Is there a completed/draft (please, specify) knowledge management policy in your institution? Is it published or will it be published?

#### Idem for KM policy as for KM strategy

5. Is there a completed/draft (please, specify) knowledge management workflow in your institution? Is it published or will it be published?

For knowledge management flow, some reports made by Bureau d'études (service company) as part of the MIS implementation point out the information/knowledge flow within INRA.

6. Which figure exercises supervision and overall authority on KM processes in your organization? Please specify its title and role in the institution.

There is no authority at INRA for KM processes. The two Division (Scientific and information are coordinating informally KM within INRA)

7. Which is your institutional KM Focal Point, the go-to person for counselling, materials and documentation about KM programs or projects? Is it a person or unit (e.g libraries, archives, IT dept.)?

both IT dept and Libraries and the Scientific Division

8. Are there any specific departments in your institutions assigned to KM duties? Are there division-levels of working units or individuals for KM?

No.

9. Have you received any specific knowledge management training for new technologies? If yes, please write down the title and subject matter; if not, please list which ones you would like to receive by subject matter.

As part of the AARINENA project for setting an KM system within MENA region (2003-2012).

10. Which technologies are presently employed in your organization for managing knowledge? Please answer the question with an "x". In case a methodology is "Not Included", please list one or more actions you would recommend to improve your institutional workflow for knowledge with the related technology.

Technology	Included	Not Included	Recommend Actions
Internet	х		
Intranet	х		
Management Information	x		
System			
Expert Networks	Х		
E-mail	Х		
Video conferencing	Х		
Webinars		x	Tele-Visioconference platform using existing sites in the cloud (Google meeting or any similar system)
Data warehousing			Just implemented as part of the Management information System
Browsers			
Content Management	х		
Knowledge Portals		x	A tool that can respond to our expectations in term of KM taking into account the existing Information and knowledge resources with Moroccan NARS
Data support systems			
Information Technology	х		
E-Learning		x	Using existing E-learning systems that provide appropriate Knowledge for agriculture
Groupware	х		Google docs is a good tool for group collaboration but is it safe when it comes to work on a very sensitive document

Data management systems	х		
Communities of Practice		x	Setting forum between researchers to interact on a specific subject of interest
Story Telling		х	
Online Communication	х		
Web Writing	х		

## ONCA

1. What is the current status of knowledge management systems in your institution?

 $\Box$  Not present (no strategy, no policy, no workflow)  $\Box$  Essential (only strategy)  $\Box$  Intermediate (strategy and policy);  $\Box$  X Advanced (strategy, policy, workflow)

As far as the Management Information System is concerned, the National Office for Agricultural Advisory has an advanced status.

2. Please, describe briefly your institutional growth plan for KM and related steps:

Our institutional growth plan for Knowledge Management (KM) goes as follows:

- Development of technical and techno-economic frameworks of the principal production chain.
- Dissemination of knowledge by the media, radio and TV through the production of radio and TV programs covering agricultural thematic.
- Production and design of written and visual brochures covering the production chain's best agricultural practices.
- Dissemination of knowledge on the various digital platforms of agricultural advisory (ARDNA, website, social media...)
- Transfer of knowledge through agricultural advisory actions for the benefit of farmers as well as local stakeholders (awareness-raising days, trainings, contact visits, Farmers field schools "FFS", study tours)

3. Is there a completed/draft (please, specify) knowledge management strategy in your institution? Is it published or will it be published?

Yes, the office has at its disposal a complete draft of the knowledge management strategy, which is inspired of the agricultural advisory national strategy.

4. Is there a completed/draft (please, specify) knowledge management policy in your institution? Is it published or will it be published?

Yes and as far as the management of knowledge goes, the National Office for Agricultural Advisory has at its disposal a completed document about the Agricultural Advisory National Strategy, which presents the global framework of the institution's policy.

5. Is there a completed/draft (please, specify) knowledge management workflow in your institution? Is it published or will it be published?

As a matter of fact, the National Office for Agricultural Advisory owns a regional information system for the planning and monitoring of the agricultural advisory activities (good governance, operationalization of the monitoring tools, assessment and management of the agricultural device).

6. Which figure exercises supervision and overall authority on KM processes in your organization? Please specify its title and role in the institution.

The supervision and the overall authority on the Knowledge Management (KM) is assured by the division of knowledge management and technologies' facilitation and transfer which falls within our institution's agricultural

advisory engineering directorate. Furthermore, its role is built around the following tasks:

- Developing, managing and monitoring the knowledge management device.
- Producing the agricultural information tools and ensuring the diffusion and transfer of knowledge for the farmers.
- Facilitating and strengthening farmers' abilities as well as ensuring a proper promotion of the rural women.
- Organizing and managing the event communication, and arrange the participation of professionals in the various agricultural manifestations on the regional level, national level, and international level.
- Ensuring the characterization of the agricultural space, the typology of the agricultural holdings; and, based on this typology, the identification of the communication processing and contents takes place.

7. Which is your institutional KM Focal Point, the go-to person for counselling, materials and documentation about KM programs or projects? Is it a person or unit (e.g libraries, archives, IT dept.)?

Our focal institutional Knowledge Management focal point is the head of the Knowledge Management and technologies' facilitation and transfer division.

8. Are there any specific departments in your institutions assigned to KM duties? Are there division-levels of working units or individuals for KM?

The division of knowledge Management and technologies' facilitation and transfer is the one in charge, and it is under the supervision of the agricultural advisory director, in conformity with the text currently in force, in terms of the Agricultural Advisory National Strategy, and as far as Knowledge Management goes. Moreover, This division is reinforced by 4 services which work altogether towards the accomplishment of the assigned tasks. These services are as follows:

- SGDMC: Management of the Knowledge Management Device Service
- SAALF: Organization of Local Actors and Training Service
- SCDOMC: Production and Development of Knowledge Management Tools Service
- SMC: Marketing and Communication Service.

9. Have you received any specific knowledge management training for new technologies? If yes, please write down the title and subject matter; if not, please list which ones you would like to receive by subject matter.

If we were to receive any knowledge management training, we would opt for the following:

- Theoretical concepts for the development of a knowledge management device.
- Design of a matrix for the knowledge management device.
- Digitalization of the knowledge management device as well as the management information system.
- Storytelling practices.
- Data base management system.
- Knowledge management system and data support systems
- expert networks
- video conferencing and webinars
- Data Warehousing
- Content Management and knowledge portals
- E-Learning
- Groupware
- Storytelling
- Online communication and Web Writing.

10. Which technologies are presently employed in your organization for managing knowledge? Please answer the question with an "x". In case a methodology is "Not Included", please list one or more actions you would recommend to improve your institutional workflow for knowledge with the related technology.

Technology	Included	Not Included	Recommend Actions
Internet	х		
Intranet			x
Management Information			x
System			
Expert Networks			х
E-mail	х		х
Video conferencing			х
Webinars			х
Data warehousing			x
Browsers			x
Content Management			x
Knowledge Portals			x
Data support systems			x
Information Technology			x
E-Learning			х
Groupware		х	
Data management systems			x
Communities of Practice		х	
Story Telling			x
Online Communication			x
Web Writing			х

# Primary Assessment on the Current Status of KM

# IAV Hassan II

A. Knowledge Discovery and Detection	on
--------------------------------------	----

Where is Knowledge in your institution? Investigate if and how the institution tracks its knowledge.	We organize periodical meetings (Yearly, weekly), in order to discuss, exchange and analyze the existing Knowledge. Our Knowledge is not centralized in one repository;
Are there any strategies to track the knowledge within your company?	Until now, we don't have any strategy to track knowledge, but there are some initiatives to implement new policies, and new strategies. Talent strategy IAV Hassan 2nd is retaining the right people to
	create the needed culture and to track the knowledge and skills.
What person or team has knowledge	Faculty members;
about a specific subject?	Researchers;
	Engineers and administrative staff;
Is it the job of specific department? Or is it viewed as everyone's job and	Until now, it is viewed as everyone's job and everybody contributes to it.
everybody contributes to it?	However, we hope create the Knowledge Management Unit, and implement our own KM strategy.
Is it possible to know what knowledge degree this person has? (skills and competence)?	Without Knowledge Mapping, it is difficult to locate knowledge and skills, and identify who owns it. However, it is not impossible; it depends on person and his culture or his personality.
What are the tools, technologies used?	Some departments organize a periodic "Knowledge Cafés/Tea" to provide the opportunity for staff to discuss and exchange their knowledge.
	We created our Directory of Expertise (Faculty members), but it is saved as a PDF file, so we seek to create an interactive Directory of Expertise based on new ICTs.

NEEDS				
What are the needs you identified? Please specify the needs you encountered in your institution at the				
three levels: policies, technologies, skills. <b>Policies</b>				
We need to implement new policies and procedur	res to track knowledge:			
Technologies	es to track knowledge,			
We need IT tools to locate our experts and resear	charcy			
•	ng knowledge and to create new knowledge (by sharing,			
discussing, collaborating). Skills	ig knowledge and to create new knowledge (by sharing,			
We need to locate, track and exploit skills of our s	taff.			
We need to broaden our knowledge and improve				
SOLUTIONS				
	? Please specify the solutions you suggest for your es, skills.			
	Ir knowledge and skills, and review the existing policies.			
Policies to track and categorize knowledge (Tacit,				
Policies to exploit tacit knowledge of our retirees;	-			
Technologies				
•	w pages) to automatically search expertise (faculty			
members, researches);				
Platform to archive, discuss and exchange best practices that will help us to track and identify knowledge and skills.				
Skills				
Creation of our knowledge Map;				
Training programs adequate with KM strategy;				
Cooperation and partnership with others organiza	tions (Mobility programs, training, education);			
B. Knowledge Acquisition and Creation				
Description: How to do you identify the organizational knowledge and create new one. Hereby are some questions that could help you as examples in order to complete this session.	To create new knowledge or to identify hidden knowledge, IAV Hassan 2nd organize training programs for its staff. (Periodically) => Outputs: Internship report, Activity Report) We create a list of job descriptions, in order to detect knowledge and skills of our staff;			
Does top management take active interest in it	Yes, of course;			
and supports it continuously?	The top management is aware about the importance of KM.			
Is It a part of organizational strategy & culture?	Talent strategy:			
	Recruiting and retaining the right people to create the needed culture is one key to cultural change in IAV.			
Is it the job of specific department? Or is it	Recruiting youth engineers and faculty members.			
Is it the job of specific department? Or is it viewed as everyone's job and everybody	Until now, it is viewed as everyone's job and everybody contributes to it.			
contributes to it?	However, we hope create the Knowledge			
	Management Unit, and implement our own KM strategy.			
le it possible to know what knowledge degree	Without Knowledge Manning, it is difficult to lesste			

Is it possible to know what knowledge degree this person has? (skills and competence)

Without Knowledge Mapping, it is difficult to locate knowledge and skills, and identify who owns it.

However, it is not impossible; it depends on person

and his culture or his personality.

SKiM

What are the tools, technologies used?	We create knowledge by:
	Brainstorming (Meetings, workshops, or in any situation where a group can find a space to work together;
	Acquire new ideas or experience form external sources (Mobility, training aboard, cooperation).
	Interaction face-to-face: we interact with other people through face-to-face communication, we discuss during "Knowledge Café" (In Moroccan's
	context we will call it "Knowledge Tea". We use IT tools, Like traditional tools (Email, Microsoft office).
	Faculty members create data and knowledge by sharing their experience and knowledge with students (Conference, course, training)
	Students and researchers create knowledge through their thesis and scientific research;
	Multidisciplinary journal of IAV: https://www.agrimaroc.org
	We create knowledge by publishing original research articles and literature reviews in the fields of
	agriculture, agronomy, rural engineering, topography, forestry, horticulture, food, nutrition, animal husbandry and veterinary science.

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

Knowledge creation takes place through the transformation of tacit knowledge to explicit and vice versa. IAV Hassan 2nd needs tools to extract, track, and transform knowledge.

Policies

Implementation of KM strategy (adequate with IAV's context);

Organizational strategy & culture

Technologies

We need to improve our infrastructure in terms of ICTs.

We need ICTs to create suitable environment for users to share and create knowledge;

Skills

Improve the level of students and researchers to create new knowledge;

Training programs (staff, faculty members and students.

### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

Policies

Implement new policies and procedures to track knowledge;

Creation of unit/department of KM;

### Technologies

Implementation of anti-plagiarism system (If students and PhD students are aware of the fact that we have a plagiarism checkers, then they will not attempt to copy the work of others, that is to say, IAV Hassan 2nd will create an original knowledge);

E-learning platform;

Skills

Training programs

Encourage students and professors to create knowledge to improve their skills;

Users/individuals or people should learn how to create knowledge and how exploit it in their professional life;

C. Knowledge Storage and Curation	
Description: regarding to whom the captured /created knowledge is addressed and where that one could be applied. How knowledge can be accessible/used for the whole institution? Hereby are some questions that could help you as examples in order to complete this session.	Via IT tools: Website, Intranet, Data-bases, Traditional tools (email, Excel). Sharing: Participation in research and development projects. Bibliographical Catalog can be consulted from any computer connected to the IAV network, without needing to be in the Documentation center itself.
Are documented procedures centrally stored for ease of access across the institution?	No, but we work to create one base or repository to facilitate access to all procedures
Are all your informal discussion or meeting recorded?	We write meeting minutes after each meeting in which we note the main points, calendar, decisions
Are there any strategies to store the knowledge within your company?	No, we do not have any strategy, but in Agricultural Documentation Center, we work on implementation of new policies to storage documents and data.
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	It is viewed as everyone's job and everybody contributes to it.
Is it possible to know what knowledge degree this person has? (skills and competence)	Codification of tacit knowledge is difficult and sometimes outright impossible. Without Knowledge Mapping, it is difficult to locate knowledge and skills, and identify who owns it. However, it is not impossible; it depends on person and his culture or his personality.
When a new project begins, is searching some information in previous project knowledge databases? If yes, what kind of information is searched? If not, what kind of information could be searched?	Yes, we could search information related to project report: Project schedule Project's tasks, Resources management Financials issues Outcomes, outputs of the projectetc.
What are the tools, technologies used?	Taxonomy/Ontology e.g. to index our knowledge in Documentation Center we use the well-known thesaurus "AGROVOC" in order to describe the content of documents, and to classify and categorize knowledge, we use AGRIS Classification (Developed by FAO). Library Management System (LMS): We just implemented the OPAC (Online Public Access Catalog), it provides an interface to search and browse over 30.000 bibliographic records, and full- text access to +3000 thesis, scientific journals Backup (Hard Disk, servers, USB, CD/DVD);

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

### Policies

KM strategy: to organize all procedures related to cataloging, indexing and storage of data.

We need to define new procedures to follow KM strategy

Procedure for storing and classifying new knowledge.

### Technologies

We have 2 campuses (Rabat and Agadir) and we need to create one Knowledge Base. (E.g., we do not have access to thesis defended in Agadir, and Vice Versa).

We need to tools to transform our archives to digital format; (We have about 1.5 million pages to scan); **Skills** 

Our community should be aware about the importance of Document Management and storage of data; That why, we need improve their Data & Document Management skills;

#### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

#### Policies

Implementation of archives policy;

Implementation of knowledge storage policy;

Procedure for data entry and validation

#### Technologies

Electronic Document Management system (EDMS);

Document scanning project (To save and extract knowledge: data mining...);

Using ICTs to manage and storage data and information.

Using taxonomy and classification systems to organize and store documents.

#### Skills

Exchange the good practices used in Data Management (Cooperation & Partnership, training ...) Data Management training;

D. Knowledge Sharing and Transfer	
Description: regarding the knowledge flow (captured or created) within organization making knowledge available to people how does your institution disseminate and share knowledge? Hereby are some questions that could help you as examples in order to complete this session.	As many universities, knowledge sharing among academic staff of IAV Hassan 2nd is through training courses, lessons, workshops, seminars and conferences, membership of professional associations/societies and readiness to share knowledge and other resources with colleagues. knowledge sharing is a critical factor in the survival of educational institutions across the globe, that why, our Institute encourage academic staff, student and researchers to share their knowledge and experiences via the existing tools (Conference, courses,
Does your institution have any strategy for sharing/transfer knowledge?	We share and transfer our knowledge, but we need KM strategy to organize this activity (Sharing & Dissemination)
Do People at workplace share their experiences and knowledge willingly?	It depends on persons and his cultural background, generally when we create suitable environment and if we have a compelling reason to share, People will share their experiences and knowledge willingly.
What are the formal channels for knowledge sharing (like meeting, courses, tours and similar activities)?	Courses, seminar, conferences Meeting (weekly, yearly) Workshops Mobility, training aboard

Are there rewards for knowledge sharing?	Yes, we valorize our knowledge; we improve the visibility of our scientific findings. Reuse and create new knowledge
	Promote innovation by sharing new ideas and good practices.
Does your organization actively create and support "Communities of Practice*(CoP's)"	Yes, we have groups of researchers working on similar problems (Epidemiology, Agronomy, Water ). They share their knowledge and expertise through courses, conference, training
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	It is viewed as everyone's job and everybody contributes to it.
Is it possible to know what knowledge degree this person has? (skills and competence)	<ul> <li>Codification of tacit knowledge is difficult and sometimes outright impossible.</li> <li>Without Knowledge Mapping, it is difficult to locate knowledge and skills, and identify who owns it.</li> <li>However, it is not impossible if we encourage people to share, (it depends on person and his culture or his personality).</li> </ul>
What are the tools, technologies used? use of modern technologies to increase awareness, communication and networking for improved research and teaching activities	<ul> <li>Multidisciplinary journal of IAV: https://www.agrimaroc.org</li> <li>We share and disseminate knowledge by publishing original research articles and literature reviews in the fields of agriculture, agronomy, rural engineering, topography, forestry, horticulture, food, nutrition, animal husbandry and veterinary science.</li> <li>Website (http://www.iav.ac.ma/)</li> <li>OPAC (Online Public Access Catalog) allows us to share more than 25.000 bibliographic records (On going)</li> <li>Traditional too Policies Is: Excel, Email</li> <li>Dropbox: to share documents, collaborate in real- time</li> </ul>

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

#### Policies

We need to organize procedures of sharing.

We need to implement our KM policies adequate with IAV's context.

Review our communication policy (e.g. Visibility of our Journal and Scientific research,).

#### Technologies

Platform to share document management, good practices, project management, group calendars, business emails, and notes.

We need to improve our IT infrastructure ...

We need to make people aware about the importance the role of Information and Communication Technologies (ICTs) in sharing knowledge.

#### Skills

Exchange the good practices used in sharing and dissemination of Data and knowledge.

We need tools and skills to codify tacit knowledge.

Lack of adequate training, so we need to train the staff to improve his skills in knowledge sharing

#### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

### Policies

Pay-for-performance compensation schemes will discourage knowledge sharing if employees believe that knowledge sharing will hinder their personal efforts to distinguish themselves relative to their coworkers. That why, we should encourage people to share their knowledge by other techniques / ways. Sharing of knowledge is most valuable if there is a compelling reason (e.g. a collective report that needs to be generated on a deadline, colleague that needs our experience to resolve their problems...

KM strategy should not be about the software or IT tools, because with this picture people would share more if only, they had a platform to do so. This is not necessarily the case.

Knowledge sharing should be an activity that took place automatically.

#### Technologies

Implementation of E-learning platform, to share lessons, documents...

Platform to encourage students, professors and staff to collaborate and share their knowledge and skills. Portal creation: we should make it useful by adding document management and sharing functionalities, project management, group calendars, business emails, and notes

#### Skills

Recruiting and retaining the right people to share and create new knowledge;

Retraining the staff to reuse and exploit the knowledge shared;

#### ONCA

A. Knowledge Discovery and Detection			
Where is Knowledge in your institution? Investigate if and how the institution tracks its knowledge.	Agricultural advisors (training programs and experience)		
	Partner structures via partnerships agreements (INRA, ICARDA, IAV)		
	ONCA's accrued capital through management and organization		
	Farmers		
Are there any strategies to track the knowledge within	Agricultural Advisory National Strategy (SNCA)		
your company?	ONCA's missions and responsibilities		
	Partnerships agreements		
	Meetings, workshops, management board meetings, management committees and email correspondence.		
What person or team has knowledge about a specific subject?	The Division of Knowledge Management, Facilitation and Technologies Transfer (DICA).		
Is it the job of specific department? or is it viewed as everyone's job and everybody contributes to it?	In fact, it falls within the missions of the Division of Knowledge Management, Facilitation and Transfer of Technologies.		
Is it possible to know what knowledge degree this person has? (skills and competence)?	Agronomists and communication specialists.		
What are the tools, technologies used?	ARDNA platform		
	Agricultural advisory call centre		
	Farmer Field Schools (FFS)		
	Email correspondence		

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

The development of an integrated knowledge management scheme.

Better access to the information produced by other partner institutions (INRA, IAV...)

Strengthening ONCA's staff abilities in terms of knowledge management.

#### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

Design and development of the integrated knowledge management scheme

Development of a new vision of partnership between different institutions.

Elaboration and implementation of training programs.

ONCA's involvement in the production of knowledge along with research institutions. (implementation of research programs)

B. Knowledge Acquisition and Creation			
Does top management take active interest in it and supports it continuously?	The top management's interest is expressed through the organization of management committees' meetings (central et regional level), organization of forums, elaboration of technical handbooks proper to ONCA, and the development of an information system.		
is It a part of organizational strategy & culture?	Indeed, it is part of the National agricultural Strategy (SNCA).		
Is it the job of specific department? or is it viewed as everyone's job and everybody contributes to it?	In fact, it depends on one's level of responsibility and missions within the institution ONCA.		
Is it possible to know what knowledge degree this person has? (skills and competence)	Different competency profiles and level of trainings on top of the experience these individuals possess.		
What are the tools, technologies used?	Digital: ARDNA platform and the information system		
	Exchange with partner institutions		
	Experimental: FFS, Farmer to Farmer		

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

Technical assistance in terms of the design and development of an integrated knowledge management (KM) scheme.

Adhesion and involvement of partners in the operationalization process of the communication and advisory-support virtual platform « ARDNA »

Capitalisation on tacit knowledge at the level of farmers and agricultural advisors.

Enhancement of the utilization of the information produced by partners (IAV, ENA, ICARDA, INRA...)

#### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

Design and development of an integrated knowledge management (KM) scheme.

Organization of multidisciplinary exchange workshops that aim to capitalize on tacit knowledge.

Reinforcement of actors' abilities in terms of knowledge management (ONCA & its partners)

Sensitizing knowledge holders, especially farmers and agricultural advisors

C. Knowledge Storage and Curation			
Are documented procedures centrally stored for ease	ONCA's technical handbooks		
of access across the institution?	Archives management		
	Repertoire and file-system management		
Are all your informal discussion or meeting recorded?	Yes, through the elaboration of minutes, complete		
	reports, press releases and meticulous update of ONCA's website.		
Are there any strategies to store the knowledge within your company?	The development of a data centre in addition to		
	archive services.		
Is it the job of specific department? or is it viewed as everyone's job and everybody contributes to it?	The Division of knowledge management, facilitation and transfer of technologies (DICA) is in charge with everything that deals with technical knowledge.		
	As far as the administrative knowledge goes, each entity deals with the matter depending on its missions.		
Is it possible to know what knowledge degree this person has? (skills and competence)	Different competency profiles and level of trainings		
	on top of the experience these individuals possess.		
What are the tools, technologies used?	Digital: ARDNA, Website		
	Paper-based materials / numeric materials		
	Script-audio-visual		

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

Technical assistance for the design and development of an integrated knowledge management (KM) scheme.

Enhancement and upgrade of the storage space

An update system for the Information that will be retained.

## SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

The design and development of an integrated knowledge management (KM) scheme

Development of a smart scheme for a secured storage.

Technical assistance in the process of developing a classification system for different types of knowledge (Keywords, domains...)

#### D. Knowledge Sharing and Transfer

D. Knowledge sharing and Transfer		
Does your institution have any strategy for sharing/transfer knowledge?	Indeed, it falls within the missions of the SNCA; ONCA's core mission consists of monitoring the	
	farmers, which involves a permanent transfer of knowledge.	
Do People at workplace share their experiences and knowledge willingly?	Very frequently	
What are the formal channels for knowledge sharing	Workshops open houses, forums, agricultural	
(like meeting, courses, tours and similar activities)?	events, ARDNA, Website and the various agricultural advisory actions.	
Are there rewards for knowledge sharing?	No, ONCA is a public institution.	
Does your organisation actively create and	Yes	
support "Communities of Practice*(CoP's)"		
Is it the job of specific department? or is it viewed as everyone's job and everybody contributes to it?	In fact, it depends on one's level of responsibility and missions within the institution.	
Is it possible to know what knowledge degree this person has? (skills and competence)	Different competency profiles and level of trainings in addition to experience.	
What are the tools, technologies used?	ARDNA Platform	
	Information System	
	Website	
	Social media	
	Radio &TV: production of programs	
	script-audio-visual supports	
	Awareness-raising days, training programs, contact visits, FFS, study trips.	

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

Technical assistance for the design and development of an integrated knowledge management (KM) scheme.

Enhance knowledge accessibility via the agricultural advisory digital platforms

Specialized dissemination channels in agricultural advisory

Reinforcement of agricultural advisors' abilities

#### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

Design and development of the integrated knowledge management (KM) scheme;

Reinforce ONCA's communication strategy, in terms of knowledge pooling;

Organization of training programs in favour of agricultural advisors;

# Updated Recommendations for Moroccan Partners

STAKEHOLDER	KM BY PROCESS	GAPS BY LEVEL		UPDATED RECOMMENDATIONS
			Implementation of a previous KM system failed.	Analyse reasons for failure and try to address these through a new system, ensuring no overlaps of mandate between the institution and the MoAF.
			Weather data is only available upon payment.	Update the policy in agreement with partners.
			Efforts are often duplicated, and synergies are lacking between NARS and actors in Morocco.	The implementation of a nation-wide KM system with access for all stakeholders will enhance communication and KS and reduce duplication of efforts.
		POLICY	Learning opportunities with regards to KM are limited and networks are missing.	Participate in training within the project, learning from exchanges with project partners and engage in regional networks and CoP.
0. OVERALL		Efforts for setting up a regional agricultural system in order to facilitate KS failed.	Analyse the reasons for failure, renewing the policy approach on how to continue, follow up or create something new.	
INKA	INRA MANAGEMENT		There is no formal knowledge management strategy.	Develop a KM strategy.
			There is no formal knowledge management plan.	Develop a KM plan.
			There is no authority at INRA for KM processes.	Set up a KM department/unit.
			No centralized, national system for producing publications is in place.	Set up a KM system.
		TECHNOLOGY	There are gaps in knowledge generation and management.	Participate in targeted training to address KM, sharing KM experiences and success stories between NARS.
			Lack of a KM Portal and E-Learning tools	Implement a KM portal.
			Loss of knowledge due to unsatisfying storage solutions.	Implement a KM platform to avoid loss of knowledge due to stuff turnover.
		SKILLS	Shortage in human resources due to older staff retiring.	Receive and provide entrepreneurial training.

# Table 4. Updated recommendations for Moroccan partners

SKiM

			Previously implemented tools are not being updated, so a move towards new tools has been adopted but training for the new tools has not been carried out.	Participate in training on the use of new tools that have been implemented.
			Internal communication can be improved.	Define communication processes and participate in training.
			Monitoring is mainly external and comes through feedback from stakeholders.	Review monitoring processes and making use of M&E platform.
			Lack of training in KM.	Have a training regarding knowledge management processes, policies, technologies and skills.
			Lack of engagement in a network	Participate in knowledge exchange with national and international partners through engagement in a KM Community of Practice.
		POLICY TECHNOLOGY	Previous implementation of KM systems failed.	Analyse reasons for failure and try to address these through a new system, ensuring that no overlaps of mandate between the institution and the MoAF.
			Information system needs to be upgraded.	Upgrade information system and train staff accordingly.
			Old documents need to be digitalized.	Formulate an approach and participate in training to facilitate digitization of documents.
IAV HASSAN II 0. OVERALL MANAGEMENT			There is a need for institutional KM systemization to prevent knowledge loss and enhance accessibility caused by staff turnover.	Review / analyse processes and set-up a KM plan and processes.
	MANAGEMENT		Loos of knowledge due to unsatisfying storage solutions.	Implement a KM tool to prevent knowledge loss due to staff turnover, the digitization of publications/documents should be established/enhanced.
			Lack of human resources.	Boost efficacy of current capacity.
		SKILLS	Lack of KS and exchange in the sector.	Foster engagement in networks and strategic partnerships.
			No training targeted at KM and KS has been provided.	Participate in training for KM and KS and learn from exchanges with project partners.
			Skills in project management, M&E and outreach are insufficient.	Participate in training to enhance capacities in these areas.

			Institutional processes for KS are not existing or exhaustive and training opportunities are insufficient.	Define processes for internal KS and KM, setting up a KM Plan.
			Funding is rare for projects targeting KM.	Learn from partners in the project engaging in CoP and utilize networks to leverage funding or synergies.
			Lack of expertise on KM.	Have a training regarding knowledge management processes, policies, technologies and skills.
			Lack of engagement in a network.	Participate in knowledge exchange with national and international partners through engagement in a KM Community of Practice.
		POLICY	Need to implement new policies and procedures to track knowledge.	Review policy in the perspective of a KM strategy.
	A. DISCOVERY AND DETECTION SKILLS	TECHNOLOGY	Need IT tools to locate our experts and researchers, identify and detect the existing knowledge and to create new knowledge.	Implement an M&E platform allowing for tracking of capacity and resources.
		SKILLS	Need to locate, track and make use of skills of our staff.	Provide training on KM and adequate tools.
			Need to broaden our knowledge and improve our skills.	Engage in a CoP and partnerships for improvement.
		POLICY	Need of implementation of a KM strategy.	Produce a KM strategy.
		-	Lack of an organizational strategy & culture.	Creation of unit/department of KM.
ACQU	B. ACQUISITION AND CREATION	Need to improve our infrastructure in terms of ICTs.	Implementation of anti-plagiarism system (If students and PhD students are aware of the fact that we have a plagiarism checkers, then they will not attempt to copy the work of others, that is to say, IAV Hassan 2nd will create an original knowledge).	
			Need of ICTs to create suitable environment for users to share and create knowledge.	Implement an e-learning platform.
		SKILLS	Improvement of the level of students and researchers to create new knowledge.	Training programs (staff, faculty members and students.

 POLICY
 Need to organize all procedures related to cataloguing, indexing, classifying and store data in a KM strategy.
 Implementation of a KM strategy.

 TECHNOLOGY
 Need to create one knowledge base with digitalized knowledge.
 Implementation of suitable IT solutions, such as Electronic Document Management system (EDMS), Document scanning project, repositories with taxonomy and classification systems to organize and store documents.

 SKILLS
 Need to improve data and documents management skills of the capacity.
 Exchange the good practices used in Data Management training;

 Need review of communication and publication
 Implement reverde for arisinal knowledge

				organize and store documents.
		SKILLS	Need to improve data and documents management skills of the capacity.	Exchange the good practices used in Data Management (Cooperation & Partnership, training ), receiving data management training;
		POLICY	Need review of communication and publication policy for sharing.	Implement rewards for original knowledge production and sharing.
	D. SHARING	TECHNOLOGY	Need for a platform to share document management, good practices, project management, group calendars, business emails, and notes.	Implement a knowledge portal and/or an institutional portal.
	AND TRANSFER		Need to improve IT infrastructure.	Acquire the necessary tech.
			Need to make people aware about the importance the role of Information and Communication Technologies (ICTs) in sharing knowledge.	Provide training on KM.
		SKILLS	Lack of adequate training in knowledge sharing. Provide training on KM.	
		POLICY	Need to gather information on other successful KM institutional systems and policies.	Start a review of the current KM system, ensuring that no overlaps of mandate between the institution and the MoAF.
ONCA	0. OVERALL MANAGEMENT	TECHNOLOGY	Loss of knowledge due to unsatisfying storage solutions.	Implement a KM tool to prevent knowledge loss due to staff turnover, the digitization of publications/documents should be established/enhanced
		SKILLS	Extensive training for extension agents is needed.	Participate in training of trainers or similar to enhance capacities of extension agents in the long-term.
			Lack of skills in KM.	Have a training regarding knowledge management processes, policies, technologies and skills.

C. STORAGE

AND

CURATION

		Lack of engagement in a network.	Participate in knowledge exchange with national and international partners through engagement in a KM Community of Practice.
A. DISCOVERY AND	POLICY	Needs development of an integrated knowledge management scheme.	Design and development of an integrated knowledge management scheme, developing a new vision of partnership between different institutions.
DETECTION	TECHNOLOGY	Needs better access to the information produced by other partner institutions.	Receive training on knowledge identification.
	SKILLS	Need to strengthen staff abilities in terms of knowledge management.	Elaboration and implementation of training programs on KM.
	POLICY	Need for a better way to acquire and capitalise tacit knowledge of farmers.	Organization of multidisciplinary exchange workshops that aim to capitalize on tacit knowledge.
B. ACQUISITION AND CREATION	TECHNOLOGY	Need for adhesion and involvement of partners in the operationalization process of the communication and advisory-support virtual platform «ARDNA»	Reinforcement of actors' abilities in terms of knowledge management (ONCA & its partners), ssensitizing knowledge holders, especially farmers and agricultural advisors.
	SKILLS	Need for design and development of an integrated knowledge management (KM) scheme.	Technical assistance in terms of the design and development of an integrated knowledge management (KM) scheme.
C. STORAGE AND CURATION	TECHNOLOGY	Need for enhancement and upgrade of the storage space, an update system for the Information that will be retained.	Implement a repository and receive related metadata training.
	POLICY	Need to reinforce communication strategy, in terms of knowledge pooling.	Contextualize a Communication strategy in the framework of a KM strategy.
D. SHARING AND TRANSFER	TECHNOLOGY	Need to enhance knowledge accessibility via the agricultural advisory digital platforms.	Creating more specialized dissemination channels in agricultural advisory.
	SKILLS	Need to reinforce of agricultural advisors' abilities needed.	Organization of training programs in favour of agricultural advisors.

# Moldova, 15 October 2019, Chisinau

Country	Partner	Preliminary Assessment – PPT	Preliminary Assessment – Written	Primary Assessment	Key Informant Interviews	Needs, Loops and Synergies Exercise
Moldova	CPIU IFAD			Х		Х
Moldova	SAUM	Х		Х		Х
Moldova	Selectia		Х			Х
Moldova	USARB			Х		Х

Table 5. Methodologies employed in Moldova and respondent institutions

# **Introductory Presentations**

ICARDA provided a summary overview of the SKIM project to the partners with the presentation "Strengthening knowledge management for greater development effectiveness in the Near East, North Africa, Central Asia and Europe", <u>https://hdl.handle.net/20.500.11766/10596</u>.

ICARDA introduced the subject matter of KM with the presentation "National Writeshop on Capacity Development and Innovation Plan for Knowledge Management", <u>https://hdl.handle.net/20.500.11766/10595</u>.

# **Additional Presentations**

#### NFFM

NFFM provided a summary overview of the KM status within the organization, plus a summary of the KM assets and activities relevant in 2019 with the presentation "Federatia Nationala a Fermierilor din Moldova", <u>https://hdl.handle.net/20.500.11766/10594</u>.

# Preliminary Assessment on the Current Status of KM

#### SAUM

SAUM provided a summary overview of the KM status within the institution, plus a summary of the KM assets and activities relevant in 2019 with the presentation "State Agrarian University of Moldova", <u>https://hdl.handle.net/20.500.11766/10593</u>.

#### Selectia

0. General information about your institution.

Selectia Research Institute of Field Crops(RIFC) was found in 1944 as an Experimental Station with the initial aim to do trials on separate technological operations. The idea of foundation the Experimental Station belongs to prof. Docuceaev V.V. who has visited these places during his pedological expeditions in 1893.

Very soon it was realized the significance of a larger fields of activities, including:

a) crop breeding for majority of field crops grown in Moldova

b) seed multiplication for new local created varieties and hybrids and for imported seeds

c) working out technologies of growing field crops in the frame of crop rotations and innovative farming systems. For this purpose long-term field experiments are conducted on:crop rotations and monocropping;different systems of soil tillage, irrigation and fertilization in crop rotations on Chernozems(the duration of such experiments is 60

years);new long-term field experiments on sustainable farming systems, including ecological and conservation agriculture

These directions of activity are actual until nowadays. Simultaneously Selectia RIFC is involved in the educational work in cooperation with Alecu Russo State University. Cooperation with different research institutions

What is the current status of knowledge management system in your institution?
 Not in existence at all
 Introduction base
 Intermediate base
 Growth stage Specify please if possible, the status of each KM process: identification, creation, storage and sharing /transfer)

The paradox is that we are producing knowledge, but we don't have a strong system for knowledge management. All scientific publications of our research staff is stored in the institute library, but without systematization on authors or topics.

A significantly better situation is at Alecu Russo Balti State University which has a specialized library with an excellent systematization of information.Regularly biobliographical books are edited for the majority of educational staff; exibitions are organized on different topics of interest for students, masterands, researches etc. Library staff is preparing thematic information for different chairs and individuals according the request.

2. Is there a written knowledge management policy or strategy in your institution?

We don't have a written knowledge management policy. It would be good to know what are the main components of such a guiding document.

3. Is there an informal one?

The department of information is preparing information for the exibitions and is collecting data regarding the participation of researchers at different seminars,TV and Radio broadcasts

4. Is it carried out by certain divisions, departments units and not at the institution level?

The department of information at the institutional level is responsible for the accumulation and distribution of the information.

5. Who exercises overall authority on KM processes in your organization? Job title

The work is done by the department of information(one person) and by the 23ibliography(other person working for the library)

6. Who or where is your institutional knowledge point of contact: to whom do people go, or to whom they are referred if there is a need for historical materials or documents about prior programs or projects?

People are working in the library or archive in order to find some historical documents. It was a tradition in the institute to organize annual scientific conferences on the results of scientific activity. At least each 10 years the institute is publishing the results of scientific activity dedicated to celebration of 40-50-60 and 70 years from the foundation

7. is there a central functional unit at institutional level? (such as library, archives, records management, IT department, KM department?) please specify

The library and the archive is collecting all the materials related to scientific information produced by the institute.

8. is there a division level work units or individuals who has KM responsibilities to only that division? We go to different units, depending on the info we are looking for?

The information can be found at the institution level in the library or in archive

9. What staffing is dedicated to responsibility in KM processes?

No persons in the institute staff responsible for KM process.

10. Have you received any knowledge management training for new technologies? if yes in which ones, if not which ones do you need to follow-up

No. Training should be organized for the whole process of KM.

11. Which of the following are presently being used by employees in your organization for Managing Knowledge? Please answer with yes or no and if no whether it could be a recommended action

Technology	yes	no	recommended
Internet	yes		
Intranet		no	
Management Information System		no	
Expert Networks		no	
E-mail	yes		
Video conferencing		no	
Data warehousing		no	
browsers		no	
Content Management	yes		
Knowledge Portals		no	
Data support system		no	
Information Technology		no	
E- Learning		no	
Groupware		no	
Data management system		no	
Community of Practices			
Story Telling		no	

# Primary Assessment on the Current Status of KM

## **CPIU-IFAD**

A. Knowledge Discovery and Detection			
Are there any strategies to track the knowledge within your company?	No strategy		
What person or team has knowledge about a specific subject?	Communication and knowledge specialist		
Is it the job of specific department? or is it viewed as everyone's job and everybody contributes to it?	Knowledge specialist but everybody contributes		
Is it possible to know what knowledge degree this person has? (skills and competence)?	Business administration, communication		
What are the tools, technologies used?	Monitoring and evaluation reports		

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

A Knowledge strategy to follow

#### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

We can use our knowledge and skills to elaborate a knowledge strategy

B. Knowledge Acquisition and Creation		
Does top management take active interest in it and supports it continuously?	Yes	
is It a part of organizational strategy & culture?	Yes, we plan activities one year ahead	
Is it the job of specific department? or is it viewed as everyone's job and everybody contributes to it?	Communication and knowledge specialist but everybody contribute	
Is it possible to know what knowledge degree this person has? (skills and competence)	Business administration, communication	
What are the tools, technologies used?	Project documentation	

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

To find information more easily and readily, for better content creation

#### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

Be aware of best practices of our beneficiaries, also to improve the quality of our content creation and dissemination

	SKiM
C. Knowledge Storage and Curation	
Are documented procedures centrally stored for ease of access across the institution?	Yes, as documentation available on intranet
Are all your informal discussion or meeting recorded?	No
Are there any strategies to store the knowledge within your company?	We have standardized reports
Is it the job of specific department? or is it viewed as everyone's job and everybody contributes to it?	Reports are done by the Monitoring department, while every department is responsible for its own data
Is it possible to know what knowledge degree this person has? (skills and competence)	Every capacity is a specialist and complies toward this duty
When a new project begins, is searching some information in previous project knowledge databases? If yes, what kind of information is searched? If not, what kind of information could be searched?	Yes. Impact information to set better criteria for the new project.
What are the tools, technologies used?	Reports from past projects
<b>SOLUTIONS</b> A platform for direct communication with direct	beneficiaries could be of support.
D. Knowledge Sharing and Transfer	
Does your institution have any strategy for sharing/transfer knowledge?	Planning one year ahead activities and dissemination
Do People at workplace share their experiences and knowledge willingly?	Yes
What are the formal channels for knowledge sharing (like meeting, courses, tours and similar activities)?	Internal weekly meetings. External workshops, meetings and exhibitions
Are there rewards for knowledge sharing?	It is part of the job
Does your organisation actively create and support "Communities of Practice*(CoP's)"	CPIU created farmer schools, where farmers can share their knowledge
Is it the job of specific department? or is it viewed as everyone's job and everybody contributes to it?	Internal M&E. External communication.
Is it possible to know what knowledge degree this person has? (skills and competence)	Business administration, communication
What are the tools, technologies used?	Internal reports. Website, social media, publications externally.

## NEEDS

Time management assets

### SOLUTIONS

To set up weekly plans detailing what information is needed for sharing and how, then build up an agenda and carry it out

#### SAUM

A. Knowledge Discovery and Detection			
Are there any strategies to track the knowledge within your company?	No KM Strategy, but some points of KM are stipulated in University Chart and different internal regulations and also there is a Strategy regarding the activity of research, innovation and technological transfer		
What person or team has knowledge about a specific subject?	Each involving staff in teaching and training		
Is it the job of specific department? or is it viewed as everyone's job and everybody contributes to it?	All 6 faculties, s International Relations Department, Human Recourses Department, Center for Continuing Education, IT Department, Library.		
Is it possible to know what knowledge degree this person has? (skills and competence)?	Soft skills, innovative, problem- solving, teamwork.		
What are the tools, technologies used?	Internet, Intranet, Moodle System, e-mail, open access networks		

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

It is necessary to elaborate a Strategy of KM, to create a Department of KM with a responsible team or person, to create co- working places for students, teaching and entrepreneurs, to create different knowledge networks.

#### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

Finding finances for buying new technologies and train staff. Establish connection between students-teachers (mentors) and entrepreneurs.

B. Knowledge Acquisition and Creation		
Does top management take active interest in it and supports it continuously?	Yes	
is It a part of organizational strategy & culture?	Yes	
Is it the job of specific department? or is it viewed as everyone's job and everybody contributes to it?	No, specific department. Everybody contributes to it	
Is it possible to know what knowledge degree this person has? (skills and competence)	Soft skills, instructional delivery, classroom management, formative assessments	
What are the tools, technologies used?	Courses, Power point presentations, different publications, e-mail, internet, video conference	

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

To elaborate an internal regulation or strategy, regarding knowledge creation and financial support for staff, who are involve in knowledge creation.

Financial sources for arrangement and equipment (audio - video) co-working places.

#### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

Financial sources and human resources, Elaboration of Data support for teachers.

C. Knowledge Storage and Curation				
Are documented procedures centrally stored for ease of access across the institution?	Yes, on the SAUM web site all internal documents (regulations, different strategies and different activity plans) are storage.			
Are all your informal discussion or meeting recorded?	Not, all of the meetings are recorded.			
Are there any strategies to store the knowledge within your company?	Not a specific strategy, but we have regulation regarding functioning the SAUM scientific library and regulation of organizing the teaching-learning-research- evaluation with utilization of modern IT and communication technologies for effective teaching.			
Is it the job of specific department? or is it viewed as everyone's job and everybody contributes to it?	Everybody contributes to it.			
Is it possible to know what knowledge degree this person has? (skills and competence)	IT skills, good speaking and written skills, good computer skills.			
When a new project begins, is searching some information in previous project knowledge databases? If yes, what kind of information is searched? If not, what kind of information could be searched?	Yes, about background of the University, nr of students and staff, number of scientific works. It is a main indicator of the new project.			
What are the tools, technologies used?	Different publications, methodical indications, brochures, books, SAUM scientific journal "Agricultural sciences", Moodle platform.			

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

Not enough students and staff and it is not efficient to use the storage knowledge.

### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

Establish a Target groups, beneficiary of knowledge storage.

To attract more students, organising different campaigns. Ex. Open days, Studies Fair Exhibits

D. Knowledge Sharing and Transfer

Does your institution have any strategy for sharing/transfer knowledge?	Strategy regarding the activity of research, innovation and technological transfer
Do People at workplace share their experiences and knowledge willingly?	Yes
What are the formal channels for knowledge sharing (like meeting, courses, tours and similar activities)?	Courses, Meetings, Councils, learning roots, study visits.
Are there rewards for knowledge sharing?	Monthly salary, holidays.
Does your organisation actively create and support "Communities of Practice*(CoP's)"	Currently at SAUM are implementing 2 EU projects and around 16 national projects in connection with the CoP's
Is it the job of specific department? or is it viewed as everyone's job and everybody contributes to it?	everybody contributes to it
Is it possible to know what knowledge degree this person has? (skills and competence)	Soft skills, communicative and social skills, IT skills
What are the tools, technologies used?	Moodle, e-mail, writing support, books, publications

## NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

Attract more students and graduating.

#### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

Modern information and technologies are important for our Institutions and also staff training in a coworking space are also vital for SAUM

Organization of different Symposiums, Workshops, Webinars and scientific events.

### **USARB**

A. Knowledge Discovery and Detection			
Are there any strategies to track the	Yes		
knowledge within your company?	http://usarb.md/wp- content/uploads/2019/02/Plan_Dezv_strat_08_noi_2018.pd		
What person or team has knowledge about a specific subject?	Rector, vice-rectors, deans, vice-deans, head of departments / sections		
Is it the job of specific department? or is it viewed as everyone's job and everybody	The activity is directed by the science section http://usarb.md/cercetare-2/,		
contributes to it?	but the execution of the strategic plan is the mission of each subdivision		

Is it possible to know what knowledge degree this person has? (skills and competence)?	All managers have scientific diplomas and scientific-didactic titles, they are chosen according to the competition
What are the tools, technologies used?	Planning the research activity, monitoring the current implementation, discussing and approving the reports of each subdivision, presenting and supporting the general report before the specialized commission of the Ministry of Education, Culture and Research and the Academy of Sciences of Moldova

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

Promote the policies of attracting young people in the research activity by training in carrying out different internationalization projects

#### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

Organizing the optional courses for studying the English language to facilitate the employment of young people in carrying out international projects

B. Knowledge Acquisition and Creation			
Does top management take active interest in it and supports it continuously?	Yes		
is It a part of organizational strategy & culture?	Yes		
Is it the job of specific department? or is it viewed as everyone's job and everybody contributes to it?	Each member of the subdivisions is concerned with carrying out the respective tasks, being evaluated at the department level, the activity of each department is monitored by the faculty council, the university Senate		
Is it possible to know what knowledge degree this person has? (skills and competence)	The activity of each member of the group is evaluated by means of indicators		
What are the tools, technologies used?	Evaluation of portfolios with confirmatory documents		

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

Reassessment and updating of performance indicators used in the evaluation process

### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

Creation of the commission in order to reassess the performance indicators

#### C. Knowledge Storage and Curation

Are documented procedures	Yes
centrally stored for ease of	
access across the institution?	

Are all your informal discussion or meeting recorded?	Yes			
Are there any strategies to store the knowledge within your company?	Yes			
Is it the job of specific department? or is it viewed as everyone's job and everybody contributes to it?	The staff of the University Scientific Library are concerned about this problem			
Is it possible to know what knowledge degree this person has? (skills and competence)	The staff of the Scientific Library of the University has the necessary studies, periodically completes training courses etc.			
When a new project begins, is searching some information in previous project knowledge databases? If yes, what kind of information is searched? If not, what kind of information could be searched?	Yes http://libruniv.usarb.md/index.php/ro/cercetare In repositories, databases http://libruniv.usarb.md/index.php/ro/repozitorii http://libruniv.usarb.md/index.php/ro/baze-de-date http://libruniv.usarb.md/index.php/ro/reviste-universitare			
What are the tools, technologies used?	study of all available sources, analysis, synthesis, etc.			

## NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

extension of the coverage with wi-fi of the study blocks, increase of the places at the electronic library

## SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

Purchase of the necessary equipment

## Needs, Loops and Synergies Exercise

The following is a reproduction of the matrix exercise carried out on a flipchart.

Table 0. Needs; Loops and Synergies exercise of Moldovan partners					
Needs identified through discussion for the four steps of the project model KM workflow.					
A. Knowledge Discovery and Detection	B. Knowledge Acquisition and Creation				
<ul> <li>Lack of indications, steering</li> </ul>	<ul> <li>Financial resources</li> </ul>				
- Incubators	<ul> <li>Human resources</li> </ul>				
- Curriculum update	<ul> <li>Information sources</li> </ul>				
<ul> <li>Entrepreneurship capacity building</li> </ul>					
C. Knowledge Storage and Curation	D. Knowledge Sharing and Transfer				
<ul> <li>Information visualization</li> </ul>	<ul> <li>More tools and solutions for outreach</li> </ul>				
<ul> <li>Information retrieval</li> </ul>					

Table 6. Needs, Loops and Synergies exercise of Moldovan partners

The green group suggests that the organizations could benefit from a **KM specialized figure** capable of informing the organizations' management of better opportunities and cost-effective solutions for identifying and sharing knowledge. The increase in overall performance effectiveness could pay off, mitigating the need for financial resources needed to produce knowledge. An additional mitigation to the need for resources would be achieved if **a member of management itself would assume a more prominent role in KM**.

The yellow group identifies a loop where new capacity is lacking because of outdated curricula offered by the institutions, which in turn translate into lesser actual and future capacity. Meeting the need for **entrepreneurial incubators** could work out as solution to break the loop, innervating the cycle with updated curricula on entrepreneurial skills and opportunities, thus attracting more capacity. The realization of the incubators could be achieved in two ways: a) through **injection from project partners** on how to build the incubator, b) by investing additional resources to acquire knowledge on the incubators, for which resolving the green group is a necessary condition.

The teal group highlights the need for **informatic solutions** on identifying, comparing and stocking knowledge in a cost-effective way. This need can be met in two ways: a) through **injection from project partners** on how to acquire this technology, b) by investing additional resources to acquire knowledge on the technology, for which resolving the green group is a necessary condition.

# Updated Recommendations for Moldovan Partners

STAKEHOLDER	KM BY PROCESS		GAPS BY LEVEL	UPDATED RECOMMENDATIONS
		TECHNOLOGY	No standardized glossary/vocabulary is used.	Introduce standardized glossaries and vocabulary to better facilitate KM and KS.
	0. OVERALL		Monitoring completed through excel sheets, no system software in place.	Implement an online M&E system.
	MANAGEMENT	SKILLS	Staff not aware of evaluation results, hence no institutional learning is derived from projects.	Analyse and interpret evaluation results for a better understanding of processes and to foster institutional learning.
			Lack of training with respect to KM.	Provide specialized training on KM and engage in a KM CoP.
CPIU-IFAD	A. DISCOVERY AND DETECTION	POLICY	No KM strategy in place. Leverage the knowledge a already possessed with organization to elaborate a KM	
	B. ACQUISITION AND CREATION	TECHNOLOGY	Information acquisition speed can be improved.	New technologies can inform of best practices of beneficiaries, also to improve the quality of content creation and dissemination.
	C. STORAGE AND CURATION	TECHNOLOGY	Communication speed with beneficiaries can be improved.	A platform for direct communication with direct beneficiaries could prove effective.
	D. SHARING AND TRANSFER	POLICY	Time management assets can be improved.	To set up a weekly to-do agenda, building up to a KM plan.
	0. OVERALL MANAGEMENT	POLICY	Policy linkage between research, education and innovation is missing.	Innovate policies to bring policy makers, research institutions and academics together to foster innovation.
SELECTIA			KM is done individually by each separate department and lacks coordination.	A centralized KM system might support the efforts of coordination.
			Institutional KM lacks clear processes.	Detail KM processes in a KM plan.
			No standardized vocabulary or glossaries are being used.	Implement standardized vocabulary and glossaries.
			Indicators for monitoring are in place but not observed.	Review indicators and defining processes for monitoring in a KM strategy.

			Partnerships and networks not currently capitalized on.	Detail how to capitalize on partnerships through knowledge in a KM strategy.	
		TECHNOLOGY	No website has been created.	Implementation a website for the organization.	
			Access to information across institutions is limited.	KS within and across institutions needs to be facilitated and enhanced through portals and web-based tools.	
			No platform for monitoring is in place but is desired.	Set-up an M&E platform.	
			No training on KM is in place.	Provide specialized training on KM and engage in a KM CoP.	
			Constraints in human resources due to older staff members retiring without transferring their knowledge.	Provide both research and entrepreneurial training to new staff.	
		SKILLS	Received training has not always the desired outcomes.	Implement measures to capitalize on trainings fostering research competition.	
			Training in the use of KM tools and technology is desired.	Provide training on specific tools and techniques used for KM and KS.	
			Work with extension services needs to be improved.	Provide training on management and communication skills.	
		POLICY	Lack of policies for facilitating KM and KS. SAUM is not part of any networks. Projects are based on individual engagements rather than strategic efforts.	Suggest amendments to the policies. Create a CoP for partnerships to engage in networks and establish strategic partnerships.	
			No database of best practices in place.	Share and learn best practices among project partners through a KM CoP.	
O. OVERALL MANAGEMENT			Academic indicators are not addressed.	Review indicators and data used for monitoring and improve monitoring processes through M&E tools.	
		Use of standardized data and vocabularies not institutionalized.	Implement standardized vocabulary and glossaries.		
	TECHNOLOGY	Lack of strategy and regulation addressing KM.	Implement KM processes and a KM Plan.		
		Monitoring activities are mainly concentrated around teaching and learning.	Set-up proper monitoring systems for research activities and publications.		

			Monitoring in place and regulated by government and external partners.	Establish a monitoring platform and become more proactive rather than reactive.
		SKILLS	Limited human resources.	Engage with further projects to acquire more funds to hire staff.
		SKILLS	No communication officer is in place.	Train staff on communication issues and set-up a KM plan.
	A. DISCOVERY AND DETECTION	POLICY	Lack of a KM strategy, a department of KM with a responsible team or person, co- working places for students, teaching and entrepreneurs.	Elaborate a KM strategy with policy suggestions for optimization of work, saving finances to equip co-working spaces, connecting students and teachers (mentors), attracting entrepreneurs.
	B. ACQUISITION AND CREATION	POLICY	Lack of financial sources to equip co- working smart places.	Elaborate a KM strategy with policy suggestions for optimization of work, saving finances to equip co-working spaces, connecting students and teachers (mentors), attracting entrepreneurs.
	C. STORAGE AND CURATION	POLICY	There are not enough students and staff and it is not efficient to use the storage knowledge.	Define a KM plan targeting the beneficiary of knowledge storage, outlining actions to attract more students (Open Days, Studies Fair Exhibit).
	D. SHARING AND TRANSFER	POLICY	It is necessary to attract more students and have them graduating.	Define a KM strategy and plan targeting the KM processes on the institution, for optimization and innovation.
	A. DISCOVERY AND DETECTION	POLICY	It is necessary to promote policies for attracting young people in the research activity and to implement more internationally related projects.	Organizing the optional courses to facilitate the employment of young people in carrying out international projects.
USARB	B. ACQUISITION AND CREATION	POLICY	It is necessary to reassess and update the performance indicators used in the evaluation process.	Review of the performance indicators at policy level.
	C. STORAGE AND CURATION	TECHNOLOGY	It is necessary to extend the coverage of wi-fi in the study blocks and the electronic library.	Acquire the necessary equipment.

## News Coverage and Communication Products

Photos of the event have been taken by ICARDA capacity and have been processed to output the writeshops video, <u>https://hdl.handle.net/20.500.11766/10832</u>, and the writeshop photo collection, <u>https://hdl.handle.net/20.500.11766/10639</u>.

Additionally, the national newspaper Gazeta Satelor has covered the event on both newspaper, <u>https://hdl.handle.net/20.500.11766/10481</u>, and online press, <u>https://hdl.handle.net/20.500.11766/10638</u>.

# Sudan, 22-23 October 2019, Khartoum

Country	Partner	Preliminary Assessment – PPT	Preliminary Assessment – Written	Primary Assessment	Key Informant Interviews	Needs, Loops and Synergies Exercise
Sudan	AETTGD	Х		Х	Х	Х
Sudan	ARC Sudan	Х		Х	Х	Х
Sudan	ATTS			Х		Х
Sudan	AUW			Х		Х
Sudan	CCU-IFAD			Х		Х
Sudan	MoANR			Х		Х
Sudan	SKS			Х	Х	Х
Sudan	UofK	Х		Х	Х	Х

#### Table 8. Methodologies employed in Sudan and respondent institutions

## **Introductory Presentations**

ICARDA provided a summary overview of the SKIM project to the partners with the presentation "Strengthening knowledge management for greater development effectiveness in the Near East, North Africa, Central Asia and Europe", <u>https://hdl.handle.net/20.500.11766/10915</u>.

ICARDA introduced the subject matter of KM with the presentation "National Writeshop on Capacity Development and Innovation Plan for Knowledge Management", <u>https://hdl.handle.net/20.500.11766/10916</u>.

## Preliminary Assessment on the Current Status of KM

### AETTGD

AETTGD provided a summary overview of the KM status within the institution, plus a summary of the KM assets and activities relevant in 2019 with the presentation "", <u>https://hdl.handle.net/20.500.11766/10914</u>.

### ARC Sudan

ARC Sudan provided a summary overview of the KM status within the institution, plus a summary of the KM assets and activities relevant in 2019 with the presentation "", <u>https://hdl.handle.net/20.500.11766/10912</u>.

#### UofK

UofK provided a summary overview of the KM status within the institution, plus a summary of the KM assets and activities relevant in 2019 with the presentation "", <u>https://hdl.handle.net/20.500.11766/10913</u>.

## Primary Assessment on the Current Status of KM

## AETTGD

A. Knowledge Discovery and Detection	
Are there any strategies to track the knowledge within your company?	Yes, there are e-agricultural strategies and national agricultural investment plans
What person or team has knowledge	AETTG within the MoANR
about a specific subject?	
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Four divisions
ls it possible to know what knowledge degree this person has? (skills and competence)?	BSc and MSc graduated in relevant fields
What are the tools, technologies used?	Mass media, social media, groups, demonstrations, FFS, publications, TV and radio
NEEDS	1
What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.	
Policies	
CoP engagement	
Technologies	

KM platforms

Skills

Training on KM

#### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

#### Policies

A multi-target KM policy

B. Knowledge Acquisition and Creation	
Does top management take active interest in it and supports it continuously?	Yes
Is It a part of organizational strategy & culture?	Yes
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	AETTGD

Is it possible to know what knowledge degree this person has? (skills and competence)	BSc and MSc graduated in relevant fields
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## NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

## Policies

A multi-target KM policy

Optimize the knowledge gathered from projects on KM and extension components

More engagement in partnerships and networks

More capabilities for the national platforms

## SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

## Policies

A multi-target KM policy enhancing extension and KM at different levels, from governance to partnership and institutions

## C. Knowledge Storage and Curation

Yes, but needs enhancement
Not all due to lack of resources
Yes
Everybody, also with the contribution of several institutions

## NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

## Skills

Training on ICT, virtual extension and research rural network for partnership building, involving farmers

## SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

### Skills

Training on ICT, virtual extension and research rural network for partnership building, involving farmers

## D. Knowledge Sharing and Transfer

Does your institution have any strategy for sharing/transfer knowledge?	Yes, e-agriculture and extension strategy
Do People at workplace share their experiences and knowledge willingly?	Yes, according to their capabilities
What are the formal channels for knowledge sharing (like meeting, courses, tours and similar activities)?	Mass media, workshops, campaigns, TV, radio, news, trainings, ToT

Are there rewards for knowledge sharing?	Yes, notable rewards
Does your organization actively create and support "Communities of Practice*(CoP's)"	Yes, there are thematic, practitioners and interest groups at different levels
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Yes
Is it possible to know what knowledge degree this person has? (skills and competence)	PhD, MSc, BSc on suitable subjects

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

Skills

Training on KM enabling of better governance for engagement in national and international networks

#### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

## Policies

Establish an extension and advisory service platform with clear objectives

Technologies

Effectively implement a national integrated plan on KM tools to be installed

Skills

Effectively implement a national integrated plan on KM tools to be used

### ARC Sudan

A. Knowledge Discovery and Detection	
Where is Knowledge in your institution? Investigate if and how the institution tracks its knowledge.	At technology Transfer & Knowledge Management (TT&KM)
Are there any strategies to track the knowledge within your company?	No, it is in development
What person or team has knowledge about a specific subject?	Researchers, coordinators and the director of TT&KM
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	TT&KM plus the director of HR and Information
Is it possible to know what knowledge degree this person has? (skills and competence)?	Adequate
What are the tools, technologies used?	IPS, FFS, pamphlets, videos

## NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

## Policies

Link research with extension and stakeholders through the value chain

## Technologies

Poor dissemination and feedback system

Skills

Facilitation and communication skills are needed

## SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

### Policies

Better policy linking research with extension and stakeholders through the value chain, also gathering more funds

### Technologies

Better tools should be adopted and installed

#### B. Knowledge Acquisition and Creation

Does top management take active interest in it and supports it continuously?	Yes
Is It a part of organizational strategy & culture?	Yes
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Yes
Is it possible to know what knowledge degree this person has? (skills and competence)	Yes
What are the tools, technologies used?	Through national committees

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

### Policies

More engagement in partnerships is needed

### Technologies

Better tools should be adopted and installed

Skills

Training on KM is needed

### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

### Skills

Training on KM

## C. Knowledge Storage and Curation

Are documented procedures centrally stored for ease of access across the institution?	Yes
ease of access across the institution?	

Are all your informal discussion or meeting recorded?	Yes
Are there any strategies to store the knowledge within your company?	Yes
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	ТТ&КМ
Is it possible to know what knowledge degree this person has? (skills and competence)	Yes
When a new project begins, is searching some information in previous project knowledge databases? If yes, what kind of information is searched? If not, what kind of information could be searched?	Yes, mainly evaluation studies
What are the tools, technologies used?	Impact assessment

## NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

### Policies

A think tank could provide support

#### Technologies

Cloud systems are needed

Skills

Better assessment skills are needed

### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

#### Policies

Gather more financial support through a KM comprehensive policy

#### D. Knowledge Sharing and Transfer

Does your institution have any strategy for sharing/transfer knowledge?	Yes
Do People at workplace share their experiences and knowledge willingly?	Yes
What are the formal channels for knowledge sharing (like meeting, courses, tours and similar activities)?	Meetings and IT
Are there rewards for knowledge sharing?	No
Does your organization actively create and support "Communities of Practice*(CoP's)"	Yes
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Several departments
Is it possible to know what knowledge degree this person has? (skills and competence)	Yes

What are the tools, technologies used?	Meetings, IPS, FFS
use of modern technologies to increase awareness, communication and networking for improved research and teaching activities	
NEEDS	

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

## Policies

A clearer policy is needed

### Technologies

Dissemination tools are needed

Skills

Better assessment skills are needed

### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

Policies

Create a clearer policy

#### Technologies

Obtain better tools through partnerships

Skills

Training on KM

## ATTS

A. Knowledge Discovery and Detection		
Where is Knowledge in your institution? Investigate if and how the institution tracks its knowledge.	In Technology Transfer, we track our knowledge to some extent	
Are there any strategies to track the knowledge within your company?	Yes by frequent visits or on the phone	
What person or team has knowledge about a specific subject?	Most are specialists or practitioners	
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Everyone's job	
Is it possible to know what knowledge degree this person has? (skills and competence)?	Members are university professors and postgraduate students	
What are the tools, technologies used?	Participatory approach to exchange	

### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

### Policies

State level permission for intervention is always needed

## Technologies

Lack of awareness

## Skills

Training on KM needed

## SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

### Skills

Training on KM and innovation

B. Knowledge Acquisition and Creation		
Does top management take active interest in it and supports it continuously?	Yes	
Is It a part of organizational strategy & culture?	Yes	
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	To some extent	
What are the tools, technologies used?	Participatory approach to exchange	
	•	

### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

### Policies

Lack of engagement in networks

### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

### Technologies

Better tools are required

### C. Knowledge Storage and Curation

Description: regarding to whom the captured /created knowledge is addressed and where that one could be applied. How knowledge can be accessible/used for the whole institution? Hereby are some questions that could help you as examples in order to complete this session.	The knowledge is accessible through website, blogs and facebook
Are documented procedures centrally stored for ease of access across the institution?	Yes
Are all your informal discussion or meeting recorded?	Yes

It is the job of an executive committee Databases are not regularly updated
Databases are not regularly updated
Websites
Through meetings and emails
To some extent
Yes
Meetings and forums
Not much
Yes
Everyone's job
Prefeasibility studies

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

#### Skills

Training on KM needed

## SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

## Policies

Policies comprehensive of KM are to be developed

## AUW

A. Knowledge Discovery and Detection		
Are there any strategies to track the knowledge within your company?		es
What person or team has knowledge about a specific subject?		here is a team for each subject
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?		ach school contributes
NEEDS	•	
What are the needs you identified? Please spec three levels: policies, technologies, skills.	fy the ne	eeds you encountered in your institution at the
Skills		
Lack of a central KM Officer		
SOLUTIONS		
What are the requested actions to be carried-ou institution at the three levels: policies, technolog		
Skills		
Establish and train a KM Unit		
B. Knowledge Acquisition and Creation		
Does top management take active interest in it and supports it continuously?	Yes	
Is It a part of organizational strategy & culture?	Yes	
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Everyone's job	
Is it possible to know what knowledge degree this person has? (skills and competence)	Knowledge related	
C. Knowledge Storage and Curation		
Are documented procedures centrally stored for ease of access across the institution?	No	
Are all your informal discussion or meeting recorded?	Yes	
Are there any strategies to store the knowledge within your company?	Each school stores knowledge differently	
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Everyo	one's job
Is it possible to know what knowledge degree this person has? (skills and competence)	Storage related skills	
When a new project begins, is searching some information in previous project knowledge databases? If yes, what kind of information is searched? If not, what kind of information could be searched?	A desk projec	review is carried out before the start of each t

### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

### Technologies

Lack of a centralized storage system

### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

## Technologies

Implementing a centralized repository

D. Knowledge Sharing and Transfer	
Does your institution have any strategy for sharing/transfer knowledge?	Yes
Do People at workplace share their experiences and knowledge willingly?	Yes
What are the formal channels for knowledge sharing (like meeting, courses, tours and similar activities)?	Workshops, meetings, tours, field trips, discussions, publications
Are there rewards for knowledge sharing?	Depending on the knowledge
Does your organization actively create and support "Communities of Practice*(CoP's)"	Yes
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Everyone's job
Is it possible to know what knowledge degree this person has? (skills and competence)	Communication skills and knowledge on the subject

## CCU-IFAD

A. Knowledge Discovery and Detection		
Are there any strategies to track the knowledge within your company?	Yes	
What person or team has knowledge about a specific subject?	KM officer	
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Specific department	
Is it possible to know what knowledge degree this person has? (skills and competence)?	Documentation and publishing related	
What are the tools, technologies used?	Website, emails	

## NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

## Policies

To activate the strategy at the top level

## B. Knowledge Acquisition and Creation

Does top management take active interest in it and supports it continuously?	Yes
Is It a part of organizational strategy & culture?	Yes
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Yes
What are the tools, technologies used?	Website, radio community

### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

#### Policies

More collaboration between project teams and the CCU.

Raising awareness of KM issues at management and political level.

#### Skills

Training on knowledge creation

#### C. Knowledge Storage and Curation Are documented procedures centrally stored for Yes ease of access across the institution? Are all your informal discussion or meeting Partially recorded? Are there any strategies to store the knowledge Yes within your company? Is it the job of specific department? Or is it Projects' M&E Officers viewed as everyone's job and everybody contributes to it? Is it possible to know what knowledge degree this Documentation and storage related person has? (skills and competence) When a new project begins, is searching some Impact review on previous projects information in previous project knowledge databases? If yes, what kind of information is searched? If not, what kind of information could be searched?

### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

Skills

Training on documentation and archiving needed

D. Knowledge Sharing and Transfer

Does your institution have any strategy for sharing/transfer knowledge?	Yes
Do People at workplace share their experiences and knowledge willingly?	Yes
What are the formal channels for knowledge sharing (like meeting, courses, tours and similar activities)?	Meetings and tours
Are there rewards for knowledge sharing?	No
Does your organization actively create and support "Communities of Practice*(CoP's)"	No
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Yes
Is it possible to know what knowledge degree this person has? (skills and competence)	Publishing and dissemination related
What are the tools, technologies used?	Website, TV, radio
use of modern technologies to increase awareness, communication and networking for improved research and teaching activities	
NEEDS	
What are the needs you identified? Please specify three levels: policies, technologies, skills.	the needs you encountered in your institution at the
Policies	

More political support and engagement with networks

Skills

Training on website development and publishing

## SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

Policies

To increase the awareness of decision makers on KM

Skills

Train end users on the importance of KM

### MoANR

A. Knowledge Discovery and Detection	
Are there any strategies to track the knowledge within your company?	Yes
What person or team has knowledge about a specific subject?	A person
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	One person

Is it possible to know what knowledge degree this person has? (skills and competence)?	BSc
What are the tools, technologies used?	Website, books, social media

## NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

## Policies

Governance document

### Technologies

New equipment

Skills

Training

### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

Policies

New mandates

Skills

Better sharing of information and skills between the employees

### **B. Knowledge Acquisition and Creation**

Does top management take active interest in it and supports it continuously?	Yes
Is It a part of organizational strategy & culture?	Yes
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Everybody contributes
Is it possible to know what knowledge degree this person has? (skills and competence)	BSc
What are the tools, technologies used?	Website, books

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

### Policies

Define specific tasks for each individual

Skills

Training

## SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

## Policies

One chapter on specific tasks

#### Skills

Trainings to rural women

#### C. Knowledge Storage and Curation

Are documented procedures centrally stored for ease of access across the institution?	Yes
Are all your informal discussion or meeting recorded?	Yes
Are there any strategies to store the knowledge within your company?	Yes
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Everyone
Is it possible to know what knowledge degree this person has? (skills and competence)	BSc
When a new project begins, is searching some information in previous project knowledge databases? If yes, what kind of information is searched? If not, what kind of information could be searched?	Past projects surveys are looked up for useful information
What are the tools, technologies used?	Website, social media

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

#### Policies

Form linkages with information units

#### Technologies

Set up storage system

#### Skills

Better documentation skills needed

## SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

## Policies

Regular meeting and updates

#### Technologies

Need for a cloud

#### Skills

Photographic skills needed

D. Knowledge Sharing and Transfer	
Does your institution have any strategy for sharing/transfer knowledge?	Yes
Do People at workplace share their experiences and knowledge willingly?	Yes
What are the formal channels for knowledge sharing (like meeting, courses, tours and similar activities)?	Field days and field trips
Are there rewards for knowledge sharing?	No
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	One person
Is it possible to know what knowledge degree this person has? (skills and competence)	BSc
What are the tools, technologies used?	Website
use of modern technologies to increase awareness, communication and networking for improved research and teaching activities	

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

### Policies

Governance document

#### Skills

Training courses

### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

#### Policies

Governance document

A. Knowledge Discovery and Detection	
Where is Knowledge in your institution? Investigate if and how the institution tracks its knowledge.	SKS KM Office
Are there any strategies to track the knowledge within your company?	No
What person or team has knowledge about a specific subject?	Collective job
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Everyone's job
Is it possible to know what knowledge degree this person has? (skills and competence)?	Yes
What are the tools, technologies used?	Meetings, seminars, google documents, surveys

## NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

## Policies

Policy shall include KM measures

Skills

E-learning tools needed

## SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

#### Policies

A flexible national plan to discover knowledge should be created

B. Knowledge Acquisition and Creation	
Does top management take active interest in it and supports it continuously?	Yes
Is It a part of organizational strategy & culture?	Yes
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Everyone's job
Is it possible to know what knowledge degree this person has? (skills and competence)	Partially
What are the tools, technologies used?	Assessments, publications

## NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

## Policies

Policy should include IP practices

## Technologies

Smart spaces should be created

## SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

## Technologies

A KM platform to track and credit all knowledge should be implemented

C. Knowledge Storage and Curation	
Are documented procedures centrally stored for ease of access across the institution?	Online, in blogs and facebook pages
Are all your informal discussion or meeting recorded?	Partially
Are there any strategies to store the knowledge within your company?	No
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Everyone's job
When a new project begins, is searching some information in previous project knowledge databases? If yes, what kind of information is searched? If not, what kind of information could be searched?	A search is carried out on information of past projects
What are the tools, technologies used?	Cameras, phones, google documents

### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

### Technologies

A storage tool is needed

### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

### Technologies

Create a storage system

D. Knowledge Sharing and Transfer	
Does your institution have any strategy for sharing/transfer knowledge?	No
Do People at workplace share their experiences and knowledge willingly?	Yes

What are the formal channels for knowledge sharing (like meeting, courses, tours and similar activities)?	Meetings, seminars, workshops	
Are there rewards for knowledge sharing?	No	
Does your organization actively create and support "Communities of Practice*(CoP's)"	Yes	
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Everyone's job	
What are the tools, technologies used?	Discussion groups	
use of modern technologies to increase awareness, communication and networking for improved research and teaching activities		
NEEDS		
What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.		

### Policies

The policy is not designed to control knowledge sharing

## Skills

Training on KM needed

## UofK

A. Knowledge Discovery and Detection	
Where is Knowledge in your institution? Investigate if and how the institution tracks its knowledge.	Library, university website, internet, capacity
Are there any strategies to track the knowledge within your company?	Yes
What person or team has knowledge about a specific subject?	Department capacity with internet expertise
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Everyone's job
What are the tools, technologies used?	Computers, posters

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

### Policies

Interdisciplinary syllabus should be created and integrated

## Technologies

Better internet access and equipment is needed

Skills

Training on KM needed

## SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

### Policies

To set up a KM comprehensive policy

### Technologies

Internet equipment to be acquired through partnerships

#### B. Knowledge Acquisition and Creation

Does top management take active interest in it and supports it continuously?	Yes
Is It a part of organizational strategy & culture?	Yes
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Every section has its own specialists
Is it possible to know what knowledge degree this person has? (skills and competence)	Graduates and post graduates
What are the tools, technologies used?	Labs, computers

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

#### Policies

Research policies should be better linked at country level

### Technologies

Better internet access and equipment is needed

#### Skills

Training on KM needed

## SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

#### Policies

Interfaces with policy makers is should be organized more often.

The policy should encompass more cross-disciplinary teamwork.

#### Technologies

Subscriptions for access to knowledge should be activated

#### Skills

**•** • • •

Training on KM for the capacity should be provided

. .

C. Knowledge Storage and Curation	
Are documented procedures centrally stored for ease of access across the institution?	No
Are all your informal discussion or meeting recorded?	No
Are there any strategies to store the knowledge within your company?	Partially
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Specific departments
Is it possible to know what knowledge degree this person has? (skills and competence)	BSc, MSc, PhD
When a new project begins, is searching some information in previous project knowledge databases? If yes, what kind of information is searched? If not, what kind of information could be searched?	Previous literature and findings are reviewed
What are the tools, technologies used?	Library, internet

### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

Policies

Policy needs updating on knowledge storage aspect

### Technologies

Digital libraries are to be developed

Skills

Capacity needs training on digital archiving

#### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

Policies

The policy should be updated on KM

### Technologies

Computers and digital tools should be obtained

Skills

Training in KM needed

D. Knowledge Sharing and Transfer	
Does your institution have any strategy for sharing/transfer knowledge?	Yes
Do People at workplace share their experiences and knowledge willingly?	Yes
What are the formal channels for knowledge sharing (like meeting, courses, tours and similar activities)?	Lectures, seminars, meetings, workshops
Are there rewards for knowledge sharing?	No
Does your organization actively create and support "Communities of Practice*(CoP's)"	Yes
Is it the job of specific department? Or is it viewed as everyone's job and everybody contributes to it?	Specific department
Is it possible to know what knowledge degree this person has? (skills and competence)	PhD, MSc
What are the tools, technologies used?	Internet, computers
use of modern technologies to increase awareness, communication and networking for improved research and teaching activities	

#### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills.

### Policies

The policies lack in KM regulations

### Technologies

Tools for knowledge sharing lack

#### Skills

Experts in knowledge sharing are in shortage

### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills.

#### Policies

Develop a KM comprehensive policy

#### Technologies

Obtain tools for sharing through partnerships

### Skills

Train staff on sharing practices

## Key Informant Interviews on the Current Status of KM

#### Questions:

- 1) Name, title, organization
- 2) Why is this event an opportunity?
- 3) Which challenges on KM did you address with the other participants?
- 4) How will your institution ensure sustainability of the project results?
- 5) In your opinion, should the project be aimed more nationally or internationally to achieve its results?

## AETTGD

- 1) Elamin Hassan Elamin Mohammad, DG of AETTGD of the MoANR.
- 2) KM and KS are key aspects for AETTGD and this event is a great opportunity for partnerships and learning about the subject matter.
- 3) Institutions, capitals and capacity need to work in synergy to benefit the end users.
- 4) Engagement in networks can sustain the KM development efforts in the long run.
- 5) AETTGD is ready to engage in international sharing and adoption of best practices, to enrich the national experience on KM and gain new perspectives.

#### **ARC Sudan**

- 1) Mahmoud Mekki, Associate Research Professor in ARC Sudan.
- 2) This workshop is an opportunity to join efforts nationally to ensure better coordination between stakeholders and linkages with the end users through KM.
- 3) At institutional level, the challenge is represented by a lack of adequate skill needed to share knowledge effectively, while at end users level the literacy rate is often inadequate to receive the knowledge.
- 4) If we achieve developing staff in KM through this project, we can build on that nationally.
- 5) It is crucial to exchange internationally to acquire and share best practices.

### SKS

- 1) Sahl Yasin, PhD in Chemistry, Sudanese Knowledge Society.
- 2) SKS is able to acquire more expertise on KM through an authoritative platform.
- 3) Research data is not easily available nationally.
- 4) SKS can contribute to a national plan for sustainability of KM enhancements at country level, plus we can support the dissemination of KM best practices through SKS network.
- 5) Sharing internationally is very important to put our challenges in perspective and better learn how to solve them.

### UofK

- 1) El Waseela Mukhtar Mohammad, Department of Agricultural Extension and Rural Development at University of Khartoum.
- 2) It is an opportunity to share knowledge with other national partners, to strengthen our linkages and to better understand how to manage knowledge to achieve agricultural development in Sudan.
- 3) Knowledge sharing and dissemination need integrated efforts, the decision makers should participate effectively in the dissemination of knowledge. Advanced tools are needed too. Dissemination should bridge the gap between the institutions and their beneficiaries (end users).
- 4) UofK will engage in meaningful partnerships and provide experience and support to promote long lasting services to its end users.
- 5) UofK is ready to support any kind of intervention toward meaningful partnerships on a national and international level for the betterment of Sudan agricultural development.

## Needs, Loops and Synergies Exercise

The following is a reproduction of the matrix exercise carried out on a flipchart.

Needs identified through discussion for th	e four steps of the project model KM workflow.
A. Knowledge Discovery and Detection	B. Knowledge Acquisition and Creation
<ul> <li>Review policy X</li> </ul>	- Intellectual property X
<ul> <li>Documentation X</li> </ul>	- Rewards X
- Skills on KM Y	<ul> <li>Process and systems approach Y</li> </ul>
- Inclusion X	<ul> <li>Working environment Y</li> </ul>
- Collection Z	
- <mark>Capacity</mark> Y	
C. Knowledge Storage and Curation	D. Knowledge Sharing and Transfer
- Standards Z	- Output Y
- iCloud X	- Storytelling Y
- Consent Z	- Curation Z
- Database X	- Localization Z
- Accessibility Z	- Tools Z

#### Table 9. Needs, Loops and Synergies exercise of Sudan partners

The blue group highlights the need for a review of the current policies across the organizations for more **inclusion of KM practices within the institutional frameworks**. This group directly expands the X group, which includes a subset of **knowledge assets** needed – documentation practices, intellectual property, technologies for knowledge storage and retrieval.

The grey group suggests the need for a strong **reorganization of the knowledge workflow** across the organizations, making use of a mix approach of policy regulations and IT solutions to ensure the best identification, acknowledgement and storage of knowledge products, thus fostering its production. This group expands in the X group (see above) and taps into the Z group which relates to a subset of assets strongly focused on **knowledge sharing** – IT automation of the knowledge workflow comprising acknowledgement and consent, knowledge accessibility, curation and localization.

The red group underlines the capacity development needs of the organizations, specifically on a) receiving training on knowledge management for **better identification of untapped knowledge** potential within the institutions and b) growing a **common understanding of knowledge management** within the working environments to enhance the knowledge systematization and sharing internally. This group directly expands into the Y group, which extends the capacity development needs in the direction of enhanced knowledge sharing based on the capacity experience with knowledge, through **better managed outputs** and storytelling.

The green group clusters all needs identified in knowledge storage and curation for sharing, basically calling for a **standardization of the knowledge** qualities, such as descriptors and metadata, which expands to keywords, attributes, languages and localization features. These aspects could be set with the support of a **knowledge platform** for knowledge management and a **knowledge portal** for knowledge sharing. This group taps into the X, Z and Y groups mentioned in relation with the other color groups.

# Updated Recommendations for Sudanese Partners

STAKEHOLDER	KM BY PROCESS	GAPS BY LEVEL		UPDATED RECOMMENDATION
	0. OVERALL MANAGEMENT	POLICY	Lack of a comprehensive KM Plan	Create a KM strategy and plan, establishing a KM system, outlining objectives and defining KM processes, including a governance document for clear roles.
		TECHNOLOGY	Lack of an M&E platform	Set up a KM platform that considers the e_Agriculture Strategy and SUDNAIP.
		SKILLS	Lack of competences on KM related to management best practices	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
	A. DISCOVERY AND DETECTION	POLICY	CoP engagement	Develop a multi-target KM policy enhancing extension and KM at different levels, from governance to partnership and institutions.
		TECHNOLOGY	KM platforms	Implement a KM portal and platform
		SKILLS	Training on KM	Receive training on knowledge discovery and detection
AETTGD	B. ACQUISITION AND CREATION	POLICY	Optimize the knowledge gathered from projects on KM and extension components	A multi-target KM policy enhancing extension and KM at different levels, from governance to partnership and institutions.
			More engagement in partnerships and networks	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
		SKILLS	More capabilities for the national platforms	Define clear KM processes for the national platforms.
		SKILLS	Lack of training on ICT, virtual extension and research rural network for partnership building, involving farmers	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.

	D. SHARING AND TRANSFER	POLICY	Lack of prioritization of measures at national level to be acquired	Establish an extension and advisory service platform with clear objectives.
			Need for better governance measures for engagement in national and international networks	Create a KM strategy and plan, establishing a KM system, outlining objectives and defining KM processes.
		TECHNOLOGY	Lack of prioritization of tools at national level to be acquired	Effectively implement a national integrated plan on KM tools to be installed.
		SKILLS	Lack of prioritization of tools at national level to be implemented	Effectively implement a national integrated plan on KM tools to be used.
ARC Sudan	0. OVERALL MANAGEMENT	POLICY	Lack of clear direction and conflicting instruction at national level	Conduct awareness workshops with the different stakeholders involved.
			Policies facilitating adequate KS are not in place and knowledge is thus not shared to the desired and potential extent in the agricultural sector.	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
				Create a KM strategy and plan, establishing a KM system, outlining objectives and defining KM processes.
			Lack of policy awareness and problems with conflicting policies at national level.	Conduct awareness workshops with the different stakeholders involved.

			Project management and M&E skills are not fully utilized.	Enhance and build up these skills and enhance monitoring practices.
			No KM department or M&E department in place.	Set up KM roles in a governance document including KM processes.
			Not sufficiently active in partnerships and networks.	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
		POLICY	Need to link research with extension and stakeholders through the value chain	Better policy linking research with extension and stakeholders through the value chain, also gathering more funds
	SCOVERY AND	TECHNOLOGY	Poor dissemination and feedback system	Set up a KM platform to track dissemination and feedback.
		SKILLS	Facilitation and communication skills are needed	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
	B. ACQUISITION AND CREATION C. STORAGE AND CURATION	POLICY	More engagement in partnerships is needed	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
		TECHNOLOGY	Better tools should be adopted and installed	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
		SKILLS	Training on KM is needed	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
		POLICY	Support for storage practices should be obtained	Gather more support through a KM comprehensive policy to leverage funds and bring together partnerships at national level
		TECHNOLOGY	Cloud systems are needed	Implement a cloud system
		SKILLS	Better assessment skills are needed	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.

	D. SHARING AND TRANSFER	POLICY	A clearer policy is needed	Define KM governance, processes and responsibilities at policy level
		TECHNOLOGY	Dissemination tools are needed	Obtain better tools through partnerships
		SKILLS	Better assessment skills are needed	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
ATTS	A. DISCOVERY AND DETECTION	POLICY	State level permission for intervention is always needed	Develop a better policy including KM priorities to be shared and approved with the national government for operational clearance
		SKILLS	Training on KM needed	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
	B. ACQUISITION	POLICY	Lack of engagement in networks	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
	AND CREATION	TECHNOLOGY	Better tools are required	Obtain better tools through partnerships
	D. SHARING AND TRANSFER	POLICY	Policies comprehensive of KM are to be developed	Develop a better policy including KM priorities to be shared and approved with the national government for operational clearance
		SKILLS	Training on KM needed	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
AUW	A. DISCOVERY AND DETECTION	SKILLS	Lack of a central KM Officer	Create a KM strategy and plan, establishing a KM system, outlining objectives and defining KM processes, including a governance document for clear roles.
	C. STORAGE AND CURATION	TECHNOLOGY	Lack of a centralized storage system	Implementing a centralized repository
CCU-IFAD	A. DISCOVERY AND DETECTION	POLICY	Need for better operational guidance	Develop a better policy including KM priorities to be shared and approved with the national government for operational clearance
	B. ACQUISITION AND CREATION	POLICY	More collaboration between project teams and the CCU.	Create a KM strategy and plan, establishing a KM system, outlining objectives and defining KM processes, including a governance document for clear roles
			Raising awareness of KM issues at management and political level.	Develop a better policy including KM priorities to be shared and approved with the national government for operational clearance

		SKILLS	Training on knowledge creation	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
		SKILLS	Training on documentation and archiving needed	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
	D. SHARING AND	POLICY	More political support and engagement with networks	To increase the awareness of decision makers on KM through clearer organizational documentation on KM
	TRANSFER	SKILLS	Training on website development and publishing	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
		POLICY	Governance document	Develop a better policy including KM priorities
	A. DISCOVERY AND DETECTION	TECHNOLOGY	New equipment	Obtain better tools through mandates
		SKILLS	Training needed	Mandate trainings acquiring best practices from leading international organizations
	B. ACQUISITION AND CREATION	POLICY	Define specific tasks for each individual	Create a KM strategy and plan, establishing a KM system, outlining objectives and defining KM processes, including a governance document for clear roles
		SKILLS	Training needed	Mandate trainings acquiring best practices from leading international organizations
MoANR	C. STORAGE AND CURATION D. SHARING AND TRANSFER	POLICY	Form linkages with information units	Set up regular meeting and updates with peripheric units
		TECHNOLOGY	Need for a cloud	Set up a cloud system
		SKILLS	Better documentation skills needed	Mandate trainings acquiring best practices from leading international organizations
		POLICY	Governance document	
		SKILLS	Training courses	Mandate trainings acquiring best practices from leading international organizations
SKS	0. OVERALL MANAGEMENT	POLICY	Need for clearer guidance on policy implementation	Develop a better policy including KM priorities to be shared internally and approved, then enforced through better linkages with peripheric units

Policies, coordination challenges and cultural reasons Enhance negotiation and partnership skills to moderate and ease these difficulties. prevent SKS from working efficiently. No portal for KS. Implement a KM portal for knowledge sharing Volunteer status Engage in a CoP including partnerships to learn from other sometimes restrictive. international institutions to acquire the best practices. Support is missing. Monitoring does not Create a KM strategy and plan, establishing a KM system, outlining objectives and defining KM processes, including a follow formal governance document for clear roles processes. There are no KM TECHNOLOGY Implement a KM portal for better operational efficacy. platforms in place. Develop a better policy including KM priorities to be Policy shall include shared internally and approved, then enforced through POLICY KM measures A. DISCOVERY AND better linkages with peripheric units DETECTION Engage in a CoP including partnerships to learn from other E-learning tools **SKILLS** international institutions to acquire the best practices. needed Develop a better policy including KM priorities to be Policy should include shared internally and approved, then enforced through POLICY IP practices better linkages with peripheric units **B. ACQUISITION** Engage in a CoP including partnerships to learn from other Smart spaces should AND CREATION TECHNOLOGY be created international institutions to acquire the best practices. A storage tool is **TECHNOLOGY** Implement a storage system needed The policy is not Develop a better policy including KM priorities to be designed to control shared internally and approved, then enforced through POLICY D. SHARING AND knowledge sharing better linkages with peripheric units TRANSFER Training on KM Engage in a CoP including partnerships to learn from other SKILLS international institutions to acquire the best practices. needed Interdisciplinary A. DISCOVERY AND Introduce standardized glossaries and vocabulary to better syllabus should be UofK POLICY facilitate KM and KS. DETECTION created and integrated

		TECHNOLOGY	Better internet access and equipment is needed	Internet equipment to be acquired through partnerships
		SKILLS	Training on KM needed	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
	B. ACQUISITION AND CREATION	POLICY	Research policies should be better linked at country level	Develop a better policy including KM priorities to be shared internally and approved, then enforced through better linkages with peripheric units
			The policy should encompass more cross-disciplinary teamwork.	Develop a better policy including KM priorities to be shared internally and approved, then enforced through better linkages with peripheric units
		TECHNOLOGY	Better internet access and equipment is needed	Internet equipment to be acquired through partnerships
		SKILLS	Training on KM needed	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
	C. STORAGE AND CURATION	POLICY	Policy needs updating on knowledge storage aspect	Develop a better policy including KM priorities to be shared internally and approved, then enforced through better linkages with peripheric units
		TECHNOLOGY	Digital libraries are to be developed	Implement a KM platform for storage and reuse of knowledge
		SKILLS	Capacity needs training on digital archiving	Engage in a CoP including partnerships to learn from other international institutions to acquire the best practices.
	D. SHARING AND TRANSFER	POLICY	The policies lack in KM regulations	Develop a better policy including KM priorities to be shared internally and approved, then enforced through better linkages with peripheric units
		TECHNOLOGY	Tools for knowledge sharing lack	Obtain tools for sharing through partnerships

### News Coverage and Communication Products

Photos and videos of the event have been taken by ICARDA-ARC capacity and have been processed to output the writeshops video, <u>https://hdl.handle.net/20.500.11766/10832</u>, and the writeshop photo collection, <u>https://hdl.handle.net/20.500.11766/10858</u>.

# **Annex 1. Template: Preliminary Assessment on KM**

Strengthening knowledge management for greater development effectiveness in the Near East, North Africa, Central Asia and Europe

### Writeshop to develop capacity building and innovation plans

### Presentation by institution's representatives

A presentation regarding the Overall assessment of KM practices in your institution

will be prepared by each institution representative answering the following questions. The duration is of 15-20 minutes. This presentation will describe in a simple way the current status of KM in your institution (policies, strategy), roles and technologies.

### Existing status of KM

1. What is the current status of knowledge management system in your institution?

□Not in existence at all □introduction base □intermediate base; □growth stage Specify please if possible, the status of each KM process: identification, creation, storage and sharing /transfer)

- 2. Is there a written knowledge management policy or strategy in your institution?
- **3.** Is there an informal one?
- **4.** Is it carried out by certain divisions, departments units and not at the institution level)? a) yes; b) no *Specify please...*
- 5. Who exercises overall authority on KM processes in your organization? Job title
- 6. Who or where is your institutional knowledge point of contact: to whom do people go, or to whom they are referred if there is a need for historical materials or documents about prior programs or projects?

□Is there a central functional unit at institutional level? (such a s library, archives, records management, IT department, KM department?) please specify

□Is there a division level work units or individuals who has KM responsibilities to only that division? We go to different units, depending on the info we are looking for?

- 7. What staffing is dedicated to responsibility in KM processes?
- 8. Have you received any knowledge –management training for new technologies? if yes in which ones, if not which want do you need to follow-up

# Which technologies are presently being used by employees in your organization for Managing Knowledge? Please answer with yes or no and if no whether it could be a recommended action

Technology	yes	no	recommended
internet			
Intranet			
Management Information System			
Expert Networks			
E-mail			
Video conferencing			
Data warehousing			
browsers			
Content Management			
Knowledge Portals			
Data support system			
Information Technology			
E- Learning			
Groupware			
Data management system			
Community of Practices			
Story Telling			

If any other, please specify

# **Annex 2. Template: Primary Assessment on KM**

A. Knowledge discovery and detection				
Where is Knowledge in your institution? Investigate	Response			
if and how the institution tracks its knowledge.				
Assessing an organization's knowledge position requires cataloging its existing intellectual resources by				
	. Knowledge can be characterized in many ways. tacit			
	ext-specific knowledge, and individual and collective			
	pe, including declarative (knowledge about), procedural			
	when), and relational (know-with). Hereby are some			
questions that could help you as examples in order to	complete this session.			
Are there any strategies to track the knowledge				
within your company?				
What person or team has knowledge about a				
specific subject?				
Is it the job of specific department? or is it viewed				
as everyone's job and everybody contributes to it?				
Is it possible to know what knowledge degree this				
person has? (skills and competence)?				
What are the tools, technologies used?				
NEEDS				
What are the needs you identified? Please specif	by the needs you encountered in your institution at			
the three levels: policies, technologies, skills				
SOLUTIONS				
What are the requested actions to be carried-out	t? Please specify the solutions you suggest for your			
institution at the three levels: policies, technolog				
B. Knowledge creation				
<b>Description:</b> How to do you identify <b>the</b>	Response			
organizational knowledge and create new one.	Response			
Hereby are some questions that could help you as				
examples in order to complete this session.				
Does top management take active interest in it and				
supports it continuously?				
is It a part of organizational strategy & culture?				
Is it the job of specific department? or is it viewed				
as everyone's job and everybody contributes to it?				
Is it possible to know what knowledge degree this				
person has? (skills and competence)				
What are the tools, technologies used?				
NEEDS				
What are the needs you identified? Please specif	fy the needs you encountered in your institution at			
the three levels: policies, technologies, skills	,,			
SOLUTIONS				
What are the requested actions to be carried-out? Please specify the solutions you suggest for your				
institution at the three levels: policies, technologies, skills				
C. Knowledge Storage				
	Dochanco			
<b>Description</b> : regarding to whom the captured /created knowledge is addressed and where that	Response			
one could be applied. How knowledge can be				
accessible/used for the whole institution? Hereby				
are some questions that could help you as				
examples in order to complete this session.				
Are documented procedures centrally stored for				
ease of access across the institution?				

Are all your informal discussion or meeting recorded?	
Are there any strategies to store the knowledge	
within your company?	
Is it the job of specific department? or is it viewed	
as everyone's job and everybody contributes to it?	
Is it possible to know what knowledge degree this	
person has? (skills and competence)	
When a new project begins, is searching some	
information in previous project knowledge	
databases? If yes, what kind of information is	
searched? If not, what kind of information could be	
searched?	
What are the tools, technologies used?	

### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

D. Knowledge Sharing/transfer	
<b>Description</b> : regarding the knowledge flow	Response
(captured or created) within organization making	
knowledge available to people how does your	
institution disseminate and share knowledge?	
Hereby are some questions that could help you as	
examples in order to complete this session.	
Does your institution have any strategy for	
sharing/transfer knowledge?	
Do People at workplace share their experiences	
and knowledge willingly?	
What are the formal channels for knowledge	
sharing (like meeting, courses, tours and similar	
activities)?	
Are there rewards for knowledge sharing?	
Does your organisation actively create and support	
"Communities of Practice*(CoP's)"	
Is it the job of specific department? or is it viewed	
as everyone's job and everybody contributes to it?	
Is it possible to know what knowledge degree this	
person has? (skills and competence)	
What are the tools, technologies used?	

### NEEDS

What are the needs you identified? Please specify the needs you encountered in your institution at the three levels: policies, technologies, skills

### SOLUTIONS

What are the requested actions to be carried-out? Please specify the solutions you suggest for your institution at the three levels: policies, technologies, skills

## Annex 3. Agenda and List of Participants, Moldova

Strengthening knowledge management for greater development effectiveness in the Near East, North Africa, Central Asia and Europe

### Writeshop to develop capacity building and innovation plans

#### 15-16 October 2019, venue: Summit Events and Conference Center, Chisinau, Moldova With the support of CPIU-IFAD

The IFAD-supported project "**Strengthening knowledge management for greater development effectiveness in the Near East, North Africa, Central Asia and Europe**" is led by the International Center for Agricultural Research in the Dry Areas (ICARDA) together with its international partners CIHEAM-Bari, PROCASUR, Virginia Tech and national partners in Moldova, Morocco, Sudan.

The overall objective of the project is to ensure that the knowledge being developed by the participating institutions can be **effectively managed**, for long-term growth and maximized impact of the Research for Development activities carried out on national and regional scale. The complementary objective of the project is to establish a network of common-best-practices in KM, inscribing the participating institutions in the general framework of global development advocated by the International Fund for Agricultural Development (IFAD), optimally giving life to engagement in KM Community of Practice (CoP).

"Knowledge Management" is the process of selecting, creating, packaging, sharing and using information within and throughout an institution. It is the establishment, maintenance and updating of a liquid workflow for information management that facilitates the achievement of organizational objectives, while also providing insights for institutional awareness on performance and reach, flexible enough to maximize the use of knowledge and the institutional impact of its R&D activities. Optimal KM and requires a multidisciplinary system-approach. Innovation plans for enhanced KM will be developed jointly with each participating institution, considering their specific needs and priorities, in order to maximize the knowledge effectiveness.

### **Objectives of the meeting:**

- To share, integrate and validate the innovation plan model;
- To analyse the ways and constraints of the current technology transfer and knowledge system models;
- To share the subsequent steps for each institution to develop the innovation plan;

#### Methodology

The workshop will be based on a participatory approach: participants will interact in mixed working groups, sharing competences and experiences to identify common-ground solutions.

· · · · · · · · · · · · · · · · · · ·	, 15 October, 2017	1
TIME	AGENDA ITEM	NAME
09.30-10.00	Registration	
	Session 1	
10.00-10.15	Agenda – Objectives and organization of the workshop	
10.15-10.30	Project introduction	
10.30-11.00	Coffee break	
11.00-11.30	Presentation of the Innovation plan for Knowledge Management (KM)	
11.30-12.30	<ul> <li>Partners' presentations: KM processes in the institution (creation, storage, dissemination)</li> <li>Selectia</li> <li>SAUM</li> <li>Farmer Federation</li> <li>Ministry of Agriculture</li> </ul>	A. Akramkhanov, ICARDA
12.30-13.30	Survey-interview: KM value	

### Day 1: Tuesday, 15 October, 2019

13.30-14.30	Lunch break				
	Session 2: Moderator A. Akramkhanov (ICARDA)				
	Working group session:	Selectia;			
	<ul> <li>Knowledge discovery and detection</li> </ul>	SAUM;			
14.30-15.30	Knowledge creation	Farmer			
	Knowledge storage	Federation;			
	<ul> <li>Knowledge sharing and transfer</li> </ul>	Ministry of			
15.30-16.00	Presentation of the prioritization list of needs by each group Agriculture				
16.00-16.30	Knowledge portal introduction (demonstration) V. Graziano				
16.30-17.00	Summary and wrap up A. Akramkhanov				

### List of Participants

Nominative	Institution	Position	Email
Boris Boincean	Research Institute of Field Crops "Selectia"	Head of the Department of Sustainable Farming System	bboincean@gmail.com
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Tatiana Nistorica	Ministry of Agriculture, Regional Development and Environment of the Republic of Moldova	Head of direction of production, processing and quality control policies for products of animal origin	tatiana.nistorica@madrm.gov.md
Nicolae Titu	National Farmers Federation of Moldova	Sef Department Proiecte	nicsson82@gmail.com
Mihaela Cojocaru	IFAD Consolidated Program Implementation Unit (CPIU-IFAD)	Communication & Knowledge Management Specialist	mihaela.cojocaru1@gmail.com
Stanislav Stadnic	State University Alecu Russo	Associate Professor	stadnics@gmail.com

## Annex 4. Agenda and List of Participants, Morocco

Strengthening knowledge management for greater development effectiveness in the Near East, North Africa, Central Asia and Europe

Writeshop to develop capacity building and innovation plans

### 17-18 June 2019, venue: Salle doctorale IAV Hassan II - Rabat, Morocco

The IFAD-supported project "Strengthening knowledge management for greater development effectiveness in the Near East, North Africa, Central Asia and Europe" is led by the International Center for Agricultural Research in the Dry Areas (ICARDA) together with its international partners CIHEAM-Bari, PROCASUR, Virginia Tech and national partners in Moldova, Morocco, Sudan.

This project facilitates and supports the Knowledge Management (KM) efforts of the participating institutions from the three countries (with possibility of extending them to two additional countries) through developing KM-proficient capacities for each institution, by providing the necessary training, information and digital assets at a country and regional level. The overall objective of the project is to ensure that the knowledge being developed by the participating institutions can be effectively managed, for long-term growth and maximized impact of the Research for Development activities carried out on national and regional scale. The complementary objective of the project is to establish a network of common-best-practices in KM, inscribing the participating institutions in the general framework of global development advocated by the International Fund for Agricultural Development (IFAD), optimally giving life to a KM Community of Practice (CoP).

"Knowledge Management" is the process of selecting, creating, packaging, sharing and using information within and throughout an institution. It is the establishment, maintenance and updating of a liquid workflow for information management that facilitates the achievement of organizational objectives, while also providing insights for institutional awareness on performance and reach, flexible enough to maximize the use of knowledge and the institutional impact of its R&D activities. Optimal KM and requires a multidisciplinary system-approach.

Innovation plans for enhanced KM will be developed jointly with each participating institution, considering their specific needs and priorities, in order to maximize the knowledge effectiveness.

### Objectives of the meeting:

- To share, integrate and validate the innovation plan model;
- To analyze the ways and constraints of the current technology transfer and knowledge system models, making use of the "Capacity Needs Assessment (CAN)" CapDev tool, pinpointing solutions;
- To share the subsequent steps for each institution to develop the innovation plan;
- To share the training course programme to be organized in Morocco in September 2019.

### Methodology

The workshop will be based on a participatory approach: participants will interact in mixed working groups, sharing competences and experiences to identify common-ground solutions.

#### Day 1: Monday, 17 June, 2019 **AGENDA ITEM** PRESENTER TIME 09.30 Registration Session 1 Opening session 09.30-Prof Ali Hammani 10.00 Director Agricultural and Veterinary Institute Hassan II (IAV) Prof. Mohammed Sadiki, Secretary General of the Ministry of Agriculture, Maritime Fisheries, Rural Development and Forest, Morocco and President of CIHEAM Governing Board 10.00-Agenda of the day D. Petruzzella 10.30 Objectives and organization of the workshop **CIHEAM Bari** Presentation of MIP Network Strengthening knowledge management for greater development 10.30-A. Akramkhanov 10.45 effectiveness in the Near East, North Africa, Central Asia and ICARDA Europe": Project overview, achievements, future activities 10.45-Presentation of the capacity needs assessment document with focus **ICARDA** 11.00 on Moroccan institutions (ICARDA) 11.00-Coffee break 11.15 11.15-Presentation of the Innovation plan for knowledge management J. Jawhar 11.45 CIHEAM Bari 11.45.13.30 Partners' presentations: Knowledge management processes in the institution (creation, storage, dissemination) (15 -20 minutes/presentation) IAV • ONCA ENA INRA Ministry of Agriculture 13.30 Lunch break Moderator Akmal Akramkhanov ICARDA) Identifying practices, needs, gaps and solutions in knowledge management processes Session 2 Presentation of the Living lab approach/methodology (J. Jawhar and D. Petruzzella- CIHEAM-Bari) IAV 14.30 1<sup>st</sup> Working group session: Analyzing the problems of the current • technology transfer and knowledge system. Discussion of the arising ONCA problems, identifying new ones, prioritization list of ENA problems/needs/gaps INRA 15.30 Presentation of the prioritization list of needs by each group Ministry of Agriculture Coffee break 16.00 2<sup>nd</sup> Working group session: Discussion of the identified solutions, identifying new ones, prioritization list of solutions based on their feasibility 17.00 Presentation of the prioritization list of solutions by each group 18.00 Discussion

### Day 2: Tuesday, 18 June 2019

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TIME	AGENDA ITEM	PRESENTER
Session 2		
09:30	<b>3</b> <sup>rd</sup> working group session: categorizing the identified needs/solut knowledge management processes (creation, storage and dissemine)	
11.00	Coffee break	

	<b>Next steps:</b> Presentation of the training programme to be held in Morocco on 3-5 September 2019
Session 4	Conclusions
12.30	Lunch break

### List of participants

		Country (Affiliation	Contract
##		Country/Affiliation	Contact
_		IAV Hassan II	
_		Director IAV Hassan II	ali.hammani@gmail.com
2	Mr Jaouad Bahaji	Director ONCA	
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		development, Agronomic and Veterinary Institute (IAV	
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3	Mr Mohamed	Deputy Director in charge of the Scientific Research	bouslikhanemed@yahoo.fr
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4	Mr Soufiane EL	The Head of the Agricultural Documentation Center	<u>esisoufiane@gmail.com</u>
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5	Mr Salaheddine	Director of Engineering of the Agricultural Council	bakkali.yse2@gmail.com
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	ONLY ON 17TH	raitieisiip	
10		Ductors at the Department of Asymptotic and Diant	a a h-a su a h-dilla h-Q a na ma a lun a a a ma
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1 7		ICARDA Rabat + office assistant	Inchamilicarua@gillall.com
		ICANDA Nabal 7 UIIILE assistatil	

## Annex 5. Agenda and List of Participants, Sudan

Strengthening knowledge management for greater development effectiveness in the Near East, North Africa, Central Asia and Europe

Writeshop to develop capacity building and innovation plans

22-23 October 2019 Khartoum, Sudan Venue: Directorate of Extension and Technology Transfer, Courthouse Complex, Al-Amlak, Khartoum North

The IFAD-supported project "**Strengthening knowledge management for greater development effectiveness in the Near East, North Africa, Central Asia and Europe**" is led by the International Center for Agricultural Research in the Dry Areas (ICARDA) together with its international partners CIHEAM-Bari, PROCASUR, Virginia Tech and national partners in Moldova, Morocco, Sudan.

The overall objective of the project is to ensure that the knowledge being developed by the participating institutions can be **effectively managed**, for long-term growth and maximized impact of the Research for Development activities carried out on national and regional scale. The complementary objective of the project is to establish a network of common-best-practices in KM, inscribing the participating institutions in the general framework of global development advocated by the International Fund for Agricultural Development (IFAD), optimally giving life to engagement in KM Community of Practice (CoP).

"Knowledge Management" is the process of selecting, creating, packaging, sharing and using information within and throughout an institution. It is the establishment, maintenance and updating of a liquid workflow for information management that facilitates the achievement of organizational objectives, while also providing insights for institutional awareness on performance and reach, flexible enough to maximize the use of knowledge and the institutional impact of its R&D activities. Optimal KM and requires a multidisciplinary system-approach. Innovation plans for enhanced KM will be developed jointly with each participating institution, considering their specific needs and priorities, in order to maximize the knowledge effectiveness.

### Objectives of the meeting:

- To share, integrate and validate the innovation plan model;
- To analyse the ways and constraints of the current technology transfer and knowledge system models;
- To share the subsequent steps for each institution to develop the innovation plan;

### Methodology

The workshop will be based on a participatory approach: participants will interact in mixed working groups, sharing competences and experiences to identify common-ground solutions.

TIME	AGENDA ITEM	MODERATOR			
09.30-	Desistration				
10.00	Registration				
Session 1					
10.00- 10.30	Greeting Remarks – Dr. Hassan Osman Ahmed Al-Awad (ICARDA) Dr. Abdulgadir Tirkawi (Undersecretary, Ministry of Agriculture and Natural Resources of Sudan) ARC Director General Agenda – Objectives and organization of the workshop Project Introduction – Presentation	E. Bonaiuti (ICARDA)			
10.30- 11.00	Breakfast, group photo				

Day 1: Tuesday, 22 October, 2019

11.00- 11.30	Presentation of the Innovation plan for Knowledge Management (KM)	V. Graziano (ICARDA)	
	<ul> <li>Partners' presentations: KM processes in the institution (discovery, creation, storage, dissemination)</li> <li>ARC role on Knowledge Management: Mr. Mahmoud Awad Mekki (ARC-Sudan)</li> </ul>		
11.30- 13.00	<ul> <li>Extension Experience on Knowledge Management: Mr. El Amin H. El Amin (KariaNet)</li> </ul>	E. Bonaiuti (ICARDA)	
	<ul> <li>Scientist Teamwork on Capacity Building (Lessons Learned): Dr. Wasila Mukhtar Mohamed (University of Khartoum)</li> </ul>		
	Innovation Platforms: Dr. Amir Abdullahi Malik (ARC-Sudan)		
13.00- 14.00	Lunch break		
	Session 2		
14.00- 15.00	<ul> <li>1<sup>st</sup> Working group session:</li> <li>Knowledge discovery and detection</li> <li>Knowledge creation</li> </ul>	Participant	
15.00- 15.30	Presentation of the prioritization list of needs by each group	Institutions	
15.30- 16.00	Coffee break		
16.00- 16.30	Discussion and wrap up of Day 1	E. Bonaiuti (ICARDA)	

### Day 2: Wednesday, 23 October 2019

TIME	AGENDA ITEM	NAME	
9.30-10.30	<ul> <li>2<sup>nd</sup> Working group session:</li> <li>Knowledge storage</li> <li>Knowledge sharing and transfer</li> </ul>	Participant – Institutions	
10.30- 11.00	Presentation of the prioritization list of solutions by each group		
11.00- 11.30	Coffee break		
11.30- 12.00	Knowledge portal introduction (demonstration)	V. Graziano (ICARDA)	
12:00- 12:30	Open discussion and wrap up of Day 2	E. Bonaiuti (ICARDA)	
12.30- 13.00	Next steps	E. Bonaiuti (ICARDA)	
13.00- 14:00	Lunch		

### List of participants

Nominative	Institution	Position	Email
Amna Abdalla		Ministry of Agriculture	amnaagri122@gmail.com
		and Natural Resources	
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Malik	Knowledge Management		
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Strengthening Knowledge Management for Greater Development Effectiveness in the Near East, North Africa, Central Asia and Europe (SKiM) is a grant project led by ICARDA and funded by IFAD. The project also works with international partners CIHEAM-Bari, PROCASUR, Virginia Tech as well as NARS, governments, and agricultural extension services in Moldova, Morocco and Sudan.

Initiated in June 2018, the project facilitates and supports KM and capacity development activities in the three selected countries and will provide practical examples of KM best practices that will be analysed and adopted by participating institutions. Increasing the capacities of participating public institutions, by providing necessary structures and systems at the country and regional levels, will ensure that knowledge can be effectively managed for long-term growth and development.

The project website (https://mel.cgiar.org/projects/SKIM) provides background information and describes the project team, partners and stakeholders engaged. The website also shares key documents including the project proposal, and outlines the goals, objectives and impact pathway of the project, as well as additional resources and information on news and events.







