

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

## Capacity Development and Innovation Plans



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## KM Developing Activities for Moldova, Morocco and Sudan

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## Abbreviations

|               |  |
|---------------|--|
| AETTGD        | Agricultural Extension and Technology Transfer General Directorate of Sudan  |
| ARC Sudan     | Agricultural Research Corporation - Sudan  |
| ASNS          | Academic Social Networking Site  |
| ATTS          | Agricultural Technology Transfer Society   |
| AUW           | Ahfad University for Women   |
| CNA           | Capacity needs assessment  |
| 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   |
| FAIR          | Findable, Accessible, Interoperable, Reusable  |
| FAO           | Food and Agriculture Organization of the United Nations  |
| 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   |
| IP            | Intellectual Property  |
| ISO           | International Organization for Standardization   |
| KM            | Knowledge Management   |
| KMO           | Knowledge Organization System  |
| KP            | Knowledge Portal   |
| KS            | Knowledge Sharing  |
| M&E           | Monitoring & Evaluation  |
| MoANR         | Ministry of Agriculture and Natural Resources of Sudan   |
| MOOC          | Massive Open Online Course   |
| ONCA          | National Office for Agricultural Extension   |
| R4D           | Research for Development   |
| 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 |
| SKS           | Sudan Knowledge Society  |
| UofK          | University of Khartoum   |
| USARB         | Alecu Russo State University of Bălți  |

## Summary

The **Capacity Development and Innovation Plans** come as final step of the KM need assessment and recommendation development process started at “Strengthening Knowledge Management for Greater Development Effectiveness in the Near East, North Africa, Central Asia and Europe” (SKiM) project inception meeting of October 2018 with the **Capacity Needs Assessment (CNA)**, followed by the **National Writeshops on Capacity Development and Innovation Plans**.

After probing the KM assets of the project stakeholders, through face-to-face meetings with representatives, online and live surveys, and a variety of other assessment tools, it was possible to disaggregate the needs for KM improvements into specific sub-sets falling into one four categories each: **policy, technology, skills, standards**.

By categorizing the sub-sets, it was possible to identify **common ground** among the needs of the institutions by country. The participatory approach has also led to the organizations to realize they possess complementary capabilities for potential synergies – in other words – opportunities to tackle their own needs through communal efforts and engagement in shared learning networking systems.

The present document lays out realistic settings from **multi-stakeholder KM strengthening activities** to take place, at institutional, national and international level during the course of SKiM implementation phase I and sets a solid starting point for potential phase II developments.

## Development Approach and Innovation Logic

The Capacity Development and Innovation Plans development approach has been participatory of the institutions involved. It synthesizes the inputs gathered from the Capacity Need Assessment and the Writeshops for Capacity Development and Innovation Plans through the variety of **methods and tools** summarized here:

- Stakeholder analysis and power interest matrix in a focus group
- Organizational scoring with key partner representatives
- Problem tree analysis
- Processes analysis
- Questionnaires
- Online surveys
- Individual scoring
- Awareness exercise
- Needs, Loops and Synergy exercise
- Flashtalks
- Interviews

The implementing institutions have thus forth being probed with specific focus on four **improvable areas**:

- Policy
- Technology
- Skills
- Standards

The entirety of the needs and gaps collected through the tools has then been categorized by improvable area and institution. Now, with a **digestible sub-set of themed information** on the needs and gaps by institution and country, coherent multi-stakeholder **KM strengthening activities** are laid out for each organization to benefit the most with optimized efforts. The activities and related background information are presented in the following format and sorted by country in chapters:

| Area   | Institutions         | Gaps and Needs  |
|--|----------------------|---|
| Policy/<br>Technology/<br>Skills/<br>Standards | Institution 1        | <ul style="list-style-type: none"> <li>● Gap</li> <li>● Need</li> </ul> |
|  | Institution 2        | <ul style="list-style-type: none"> <li>● Gap</li> <li>● Need</li> </ul> |
|  | Institution 2        | <ul style="list-style-type: none"> <li>● Gap</li> <li>● Need</li> </ul> |
| <b>CapDev and Innovation Activities</b>        | Suggested Activities |   |

The activities are themed by **multi-stakeholder interests** and framed to achieve the following:

- Develop a common, practical **understanding of KM** among the institutions.
- **Raise awareness** among the institutions on the value of investing in KM, a department with high potential in **risk-prevention**, ensuring optimal setting for operativity across scenarios and with less constraints.
- Prompt the evaluation of future budgetary and capacity **commitment to KM**, by institution and in synergy.

The evaluation of the activities proposed shall **inform the project M&E**, assessing related impact and feasibility of replication, as a preliminary review of conditions and potential for a phase II of implementation.

Additionally, the data gathered from the activities could stimulate the generation of knowledge regarding the **scalability of SKiM** in target countries and other institutional, national and international realities.

## A. Moldova CapDev and Innovation Plan

### Policy

| Area                             | Institutions  | Gaps and Needs   |
|----------------------------------|---|--|
| Policy                           | CPIU IFAD   | <ul style="list-style-type: none"> <li>● Staff not aware of evaluation results, hence no institutional learning is derived from projects.</li> <li>● No KM strategy in place.</li> <li>● Time management assets can be improved.</li> </ul>  |
|                                  | SAUM  | <ul style="list-style-type: none"> <li>● Lack of policies for facilitating KM and KS.</li> <li>● Academic indicators are not addressed.</li> <li>● Lack of strategy and regulation addressing KM.</li> <li>● Monitoring activities are mainly concentrated around teaching and learning.</li> <li>● No communication officer is in place.</li> <li>● Lack of a KM strategy, a department of KM with a responsible team or person, co-working places for students, teaching and entrepreneurs.</li> <li>● Lack of financial sources to equip co-working smart places.</li> <li>● There are not enough students and staff and it is not efficient to use the storage knowledge.</li> <li>● It is necessary to attract more students and have them graduating.</li> </ul> |
|                                  | SELECTIA  | <ul style="list-style-type: none"> <li>● Policy linkage between research, education and innovation is missing.</li> <li>● Institutional KM lacks clear processes.</li> <li>● Indicators for monitoring are in place but not observed.</li> <li>● Partnerships and networks not currently capitalized on.</li> <li>● Received training has not always the desired outcomes.</li> </ul>  |
|                                  | USARB   | <ul style="list-style-type: none"> <li>● It is necessary to reassess and update the performance indicators used in the evaluation process.</li> </ul>  |
| CapDev and Innovation Activities | <p><b>Workshop on developing KM Strategies:</b><br/> The aim of the KM Strategy is to establish an institutional/national KM system, outlining objectives and defining processes. The strategy shall direct the institutions on:</p> <ol style="list-style-type: none"> <li>A. optimal partnerships and networks engagement practices,</li> <li>B. how-to strengthen linkages with multiple project units and peripheric units,</li> <li>C. setup/enhance an accurate Monitoring &amp; Evaluation (M&amp;E) framework to assess the institutional efforts,</li> <li>D. capture meaningful knowledge, such as lessons learned, informing on policy and processes amendments for better institutional performance.</li> </ol> <p>The sustainability of the KM Strategy shall be further ensured by the ratification of institutional KM governance documents, identifying clear KM roles of capacity and units and setting up:</p> <ol style="list-style-type: none"> <li>a) a Knowledge Management Officer (KMO), with appropriate power and means to carry out the roles and responsibilities,</li> <li>b) a Knowledge Management Unit (KMU), to coordinate multiple officers and synergize KM with M&amp;E.</li> </ol> <p><b>Workshop on developing KM &amp; Comm Plans:</b><br/> The aim of the plan is to upgrade current KM processes to new efficiency levels and detail new processes, through a target-oriented approach identifying the related areas of impact for Monitoring &amp; Evaluation, prioritizing activities, tools and methodologies to acquire and implement.<br/> An Intellectual Property (IP) document identifying measures for knowledge publication, storage, rewarding and anti-plagiarism, shall be annexed to the plan.</p> |  |

## Technology

| Area                             | Institutions   | Gaps and Needs   |
|----------------------------------|--|--|
| Technology                       | CPIU   | <ul style="list-style-type: none"> <li>Monitoring completed through excel sheets, no system software in place.</li> <li>Information acquisition speed can be improved.</li> <li>Communication speed with beneficiaries can be improved.</li> </ul>   |
|                                  | SAUM   | <ul style="list-style-type: none"> <li>Monitoring in place and regulated by government and external partners.</li> </ul>   |
|                                  | SELECTIA   | <ul style="list-style-type: none"> <li>KM is done individually by each separate department and lacks coordination.</li> <li>No website has been created.</li> <li>Access to information across institutions is limited.</li> <li>No platform for monitoring is in place but is desired.</li> </ul> |
|                                  | USARB  | <ul style="list-style-type: none"> <li>It is necessary to extend the coverage of wi-fi in the study blocks and the electronic library.</li> </ul>  |
| CapDev and Innovation Activities | <p><b>MOOC on KM Platforms and Academic Social Networking Sites (ASNS):</b><br/> Informing on the features of an optimal online KM platform for supporting institutional activities and M&amp;E, manage and store knowledge, boost outreach through knowledge sharing, monitoring and support the staff with resources, complying with ISO/AGROVOC/publication standards and F.A.I.R.ness.<br/> Informing on the features of the main ASNS in use, their potential for outreach and their value toward muscling impact indexes of journal articles through citation and referencing, with additional notes and how-to Altmetric.</p> |  |
|                                  | <p><b>Online Courses on and DSpace repository Implementation:</b><br/> Teaching the use and pros of DSpace repositories for knowledge storage, retrieval, standards and how-to implement them, with focus on implications for a subscription investment and value for a supporting community over time. The experience and measures employed by ICARDA with DSpace based MELSpace and the potential of data pools to feed advanced visuals for better institutional and knowledge awareness.</p>   |  |
|                                  | <p><b>Online Courses on SKiM Knowledge Portal (KP) Implementation:</b><br/> Teaching the use and pros of the desktop and mobile accessible SKiM Knowledge Portal (<a href="https://knowledgemanagementportal.org">https://knowledgemanagementportal.org</a>), the online, multi-stakeholder KM platform developed by SKiM.<br/> The KP comes with an integrated portal for knowledge showcase and sharing at both institutional level – with an institution-specific URL hosted on the KP – and SKiM level, highlighting the value for partnerships and networking.</p>  |  |



## Skills

| Area                             | Institutions  | Gaps and Needs   |
|----------------------------------|---|--|
| Skills                           | CPIU  | <ul style="list-style-type: none"> <li>● Lack of training with respect to KM.</li> </ul>   |
|                                  | SAUM  | <ul style="list-style-type: none"> <li>● SAUM is not part of any networks. Projects are based on individual engagements rather than strategic efforts.</li> <li>● No database of best practices in place.</li> <li>● Limited human resources.</li> </ul>   |
|                                  | SELECTIA  | <ul style="list-style-type: none"> <li>● No training on KM is in place.</li> <li>● Constraints in human resources due to older staff members retiring without transferring their knowledge.</li> <li>● Training in the use of KM tools and technology is desired.</li> <li>● Work with extension services needs to be improved.</li> </ul> |
|                                  | USARB   | <ul style="list-style-type: none"> <li>● It is necessary to promote policies for attracting young people in the research activity and to implement more internationally related projects.</li> </ul>   |
| CapDev and Innovation Activities | <p><b>E-Learning Class on Scaling Readiness for Knowledge Management Community of Practice:</b><br/>The participants key capacity from the SKiM partners, with additional room for external invited guests, shall learn how-to engage meaningfully in networks and partnerships, to learn mutually, acquire best practices, join forces and leverage funds for R4D activities implementing them in synergy, enhance SSTC, develop and employ advanced tools for institutional awareness and capacity development, share knowledge and grow interoperable.</p> <p><b>Workshop on Knowledge Management Core Best Practices:</b><br/>The participants key capacity from the SKiM partners, with additional room for external invited guests, shall learn how-to manage the knowledge according to ICARDA and implementing partners current practices. Evidence and measure of success of practices in use shall be disclosed to the participant institutions, explaining the actions taken to achieve those goals. The practices will include:<br/>Identification and capitalization of students and staff knowledge potential; management of multidisciplinary knowledge; acquisition and capitalization of traditional knowledge; development of entrepreneurial skills useful to research; evolution of policy measures; management of linkages with extension services; development of training programs; regulations on digitalization; intellectual property and data management; making and using success stories; video-making for outreach; optimization of dissemination channels; adoption and scaling of new tools for management.</p> |  |

## Standards

| Area                             | Institutions  | Gaps and Needs   |
|----------------------------------|---|--|
| Standards                        | CPIU  | ● No standardized glossary/vocabulary is used.                     |
|                                  | SAUM  | ● Use of standardized data and vocabularies not institutionalized. |
|                                  | SELECTIA  | ● No standardized vocabulary or glossaries are being used.         |
| CapDev and Innovation Activities | <p><b>Masterclass on Knowledge Organization Systems (KOS):</b><br/> The participants key capacity from the SKiM partners, with additional room for external invited guests, shall learn about Knowledge Organization Systems and related differences for implementation and use, for training capacity and building – and enhancing – a digital library. The KOS will include digital and conceptual systems:<br/> Vocabularies and thesauruses; metadata schemes; agri-semantic; FAO AGROVOC; keywords and their role in knowledge portals such as AGRIS; digital libraries development, maintenance and access.</p> |  |

## B. Morocco CapDev and Innovation Plan

### Policy

| Area                             | Institutions  | Gaps and Needs  |
|----------------------------------|---|---|
| Policy                           | IAV   | <ul style="list-style-type: none"> <li>● Previous implementation of KM systems failed.</li> <li>● There is a need for institutional KM systemization to prevent knowledge loss and enhance accessibility caused by staff turnover.</li> <li>● Institutional processes for KS are not existing or exhaustive and training opportunities are insufficient.</li> <li>● Need to implement new policies and procedures to track knowledge.</li> <li>● Need of implementation of a KM strategy.</li> <li>● Lack of an organizational strategy &amp; culture.</li> <li>● Need to improve our infrastructure in terms of ICTs.</li> <li>● Need to organize all procedures related to cataloguing, indexing, classifying and store data in a KM strategy.</li> <li>● Need review of communication and publication policy for sharing.</li> </ul> |
|                                  | INRA  | <ul style="list-style-type: none"> <li>● Implementation of a previous KM system failed.</li> <li>● Weather data is only available upon payment.</li> <li>● Efforts for setting up a regional agricultural system in order to facilitate KS failed.</li> <li>● There is no formal knowledge management strategy.</li> <li>● There is no formal knowledge management plan.</li> <li>● There is no authority at INRA for KM processes.</li> </ul>  |
|                                  | ONCA  | <ul style="list-style-type: none"> <li>● Need to gather information on other successful KM institutional systems and policies.</li> <li>● Needs development of an integrated knowledge management scheme.</li> <li>● Need to reinforce communication strategy, in terms of knowledge pooling.</li> </ul>  |
| CapDev and Innovation Activities | <p><b>Workshop on developing KM Strategies:</b><br/> The aim of the KM Strategy is to establish an institutional/national KM system, outlining objectives and defining processes. The strategy shall direct the institutions on:</p> <ul style="list-style-type: none"> <li>E. optimal partnerships and networks engagement practices,</li> <li>F. how-to strengthen linkages with multiple project units and peripheric units,</li> <li>G. setup/enhance an accurate Monitoring &amp; Evaluation (M&amp;E) framework to assess the institutional efforts,</li> <li>H. capture meaningful knowledge, such as lessons learned, informing on policy and processes amendments for better institutional performance.</li> </ul> <p>The sustainability of the KM Strategy shall be further ensured by the ratification of institutional KM governance documents, identifying clear KM roles of capacity and units and setting up:</p> <ul style="list-style-type: none"> <li>c) a Knowledge Management Officer (KMO), with appropriate power and means to carry out the roles and responsibilities,</li> <li>d) a Knowledge Management Unit (KMU), to coordinate multiple officers and synergize KM with M&amp;E.</li> </ul> <p><b>Workshop on developing KM &amp; Comm Plans:</b><br/> The aim of the plan is to upgrade current KM processes to new efficiency levels and detail new processes, through a target-oriented approach identifying the related areas of impact for Monitoring &amp; Evaluation, prioritizing activities, tools and methodologies to acquire and implement.</p> <p>An Intellectual Property (IP) document identifying measures for knowledge publication, storage, rewarding and anti-plagiarism, shall be annexed to the plan.</p> |   |

## Technology

| Area                             | Institutions  | Gaps and Needs  |
|----------------------------------|---|---|
| Technology                       | IAV   | <ul style="list-style-type: none"> <li>● Loss of knowledge due to unsatisfying storage solutions.</li> <li>● Need IT tools to locate our experts and researchers, identify and detect the existing knowledge and to create new knowledge.</li> <li>● Need of ICTs to create suitable environment for users to share and create knowledge.</li> <li>● Need to create one knowledge base with digitalized knowledge.</li> <li>● Need for a platform to share document management, good practices, project management, group calendars, business emails, and notes.</li> <li>● Need to improve IT infrastructure.</li> </ul> |
|                                  | INRA  | <ul style="list-style-type: none"> <li>● Efforts are often duplicated, and synergies are lacking between NARS and actors in Morocco.</li> <li>● No centralized, national system for producing publications is in place.</li> <li>● Lack of a KM Portal and E-Learning tools</li> <li>● Loss of knowledge due to unsatisfying storage solutions.</li> <li>● Monitoring is mainly external and comes through feedback from stakeholders.</li> </ul>   |
|                                  | ONCA  | <ul style="list-style-type: none"> <li>● Loss of knowledge due to unsatisfying storage solutions.</li> <li>● Need for enhancement and upgrade of the storage space, an update system for the Information that will be retained.</li> </ul>  |
| CapDev and Innovation Activities | <p><b>MOOC on KM Platforms and Academic Social Networking Sites (ASNS):</b><br/> Informing on the features of an optimal online KM platform for supporting institutional activities and M&amp;E, manage and store knowledge, boost outreach through knowledge sharing, monitoring and support the staff with resources, complying with ISO/AGROVOC/publication standards and F.A.I.R.ness.<br/> Informing on the features of the main ASNS in use, their potential for outreach and their value toward muscling impact indexes of journal articles through citation and referencing, with additional notes and how-to Altmetric.</p> <p><b>Online Courses on and DSpace repository Implementation:</b><br/> Teaching the use and pros of DSpace repositories for knowledge storage, retrieval, standards and how-to implement them, with focus on implications for a subscription investment and value for a supporting community over time. The experience and measures employed by ICARDA with DSpace based MELSpace and the potential of data pools to feed advanced visuals for better institutional and knowledge awareness.</p> <p><b>Online Courses on SKiM Knowledge Portal (KP) Implementation:</b><br/> Teaching the use and pros of the desktop and mobile accessible SKiM Knowledge Portal (<a href="https://knowledgemanagementportal.org">https://knowledgemanagementportal.org</a>), the online, multi-stakeholder KM platform developed by SKiM.<br/> The KP comes with an integrated portal for knowledge showcase and sharing at both institutional level – with an institution-specific URL hosted on the KP – and SKiM level, highlighting the value for partnerships and networking.</p> |   |

## Skills

| Area                             | Institutions  | Gaps and Needs  |
|----------------------------------|---|---|
| Skills                           | IAV   | <ul style="list-style-type: none"> <li>● Information system needs to be upgraded.</li> <li>● Old documents need to be digitalized.</li> <li>● Lack of human resources.</li> <li>● Lack of KS and exchange in the sector.</li> <li>● No training targeted at KM and KS has been provided.</li> <li>● Skills in project management, M&amp;E and outreach are insufficient.</li> <li>● Funding is rare for projects targeting KM.</li> <li>● Lack of expertise on KM.</li> <li>● Lack of engagement in a network.</li> <li>● Need to locate, track and make use of skills of our staff.</li> <li>● Need to broaden our knowledge and improve our skills.</li> <li>● Improvement of the level of students and researchers to create new knowledge.</li> <li>● Need to improve data and documents management skills of the capacity.</li> <li>● Need to raise awareness about ICTs in sharing knowledge.</li> <li>● Lack of adequate training in knowledge sharing.</li> </ul> |
|                                  | INRA  | <ul style="list-style-type: none"> <li>● Learning opportunities with regards to KM are limited and networks are missing.</li> <li>● There are gaps in knowledge generation and management.</li> <li>● Shortage in human resources due to older staff retiring.</li> <li>● Training for the new tools has not been carried out.</li> <li>● Internal communication can be improved.</li> <li>● Lack of training in KM.</li> <li>● Lack of engagement in a network</li> </ul>  |
|                                  | ONCA  | <ul style="list-style-type: none"> <li>● Extensive training for extension agents is needed.</li> <li>● Lack of skills in KM.</li> <li>● Lack of engagement in a network.</li> <li>● Needs better access to the information produced by other partner institutions.</li> <li>● Need to strengthen staff abilities in terms of knowledge management.</li> <li>● Need for a better way to acquire and capitalise tacit knowledge of farmers.</li> <li>● Need for adhesion and involvement of partners in the operationalization process of the communication and advisory-support virtual platform «ARDNA»</li> <li>● Need for design and development of an integrated KM scheme.</li> <li>● Need to enhance knowledge accessibility via the agri-advisory digital platforms.</li> <li>● Need to reinforce of agricultural advisors' abilities needed.</li> </ul>  |
| CapDev and Innovation Activities | <p><b>E-Learning Class on Scaling Readiness for Knowledge Management Community of Practice:</b><br/>The participants key capacity from the SKiM partners, with additional room for external invited guests, shall learn how-to engage meaningfully in networks and partnerships, to learn mutually, acquire best practices, join forces and leverage funds for R4D activities implementing them in synergy, enhance SSTC, develop and employ advanced tools for institutional awareness and capacity development, share knowledge and grow interoperable.</p> <p><b>Workshop on Knowledge Management Core Best Practices:</b><br/>The participants key capacity from the SKiM partners, with additional room for external invited guests, shall learn how-to manage the knowledge according to ICARDA and implementing partners current practices. Evidence and measure of success of practices in use shall be disclosed to the participant institutions, explaining the actions taken to achieve those goals. The practices will include:<br/>Identification and capitalization of students and staff knowledge potential; management of multidisciplinary knowledge; acquisition and capitalization of traditional knowledge; development of entrepreneurial skills useful to research; evolution of policy measures; management of linkages with extension services; development of training programs; regulations on digitalization; intellectual property and data management; making and using success stories; video-making for outreach; optimization of dissemination channels; adoption and scaling of new tools for management.</p> |   |

## C. Sudan CapDev and Innovation Plan

### Policy

| Area                             | Institutions  | Gaps and Needs   |
|----------------------------------|---|--|
| Policy                           | AETTGD  | <ul style="list-style-type: none"> <li>● Lack of a comprehensive KM Plan</li> <li>● CoP engagement</li> <li>● Optimize the knowledge gathered from projects on KM and extension components</li> <li>● More capabilities for the national platforms</li> <li>● Lack of prioritization of measures at national level to be acquired</li> <li>● Need for better governance measures for engagement in national and international networks</li> <li>● Lack of prioritization of tools at national level to be acquired</li> <li>● Lack of prioritization of tools at national level to be implemented</li> </ul> |
|                                  | ARC Sudan   | <ul style="list-style-type: none"> <li>● Lack of clear KM or KS institutional processes.</li> <li>● No KM department or M&amp;E department in place.</li> <li>● Need to link research with extension and stakeholders through the value chain</li> <li>● Support for storage practices should be obtained</li> <li>● A clearer policy is needed</li> </ul>   |
|                                  | ATTS  | <ul style="list-style-type: none"> <li>● State level permission for intervention is always needed</li> <li>● Policies comprehensive of KM are to be developed</li> </ul>   |
|                                  | AUW   | <ul style="list-style-type: none"> <li>● Lack of a central KM Officer</li> </ul>   |
|                                  | CCU IFAD  | <ul style="list-style-type: none"> <li>● Need for better operational guidance</li> <li>● More collaboration between project teams and the CCU.</li> <li>● Raising awareness of KM issues at management and political level.</li> <li>● More political support and engagement with networks</li> </ul>  |
|                                  | MoANR   | <ul style="list-style-type: none"> <li>● Governance document</li> <li>● Define specific tasks for each individual</li> </ul>   |
|                                  | SKS   | <ul style="list-style-type: none"> <li>● Need for clearer guidance on policy implementation</li> <li>● Monitoring does not follow formal processes.</li> <li>● Policy shall include KM measures</li> <li>● Policy should include IP practices</li> <li>● The policy is not designed to control knowledge sharing</li> </ul>  |
|                                  | UofK  | <ul style="list-style-type: none"> <li>● Research policies should be better linked at country level</li> <li>● The policy should encompass more cross-disciplinary teamwork.</li> <li>● Policy needs updating on knowledge storage aspect</li> <li>● The policies lack in KM regulations</li> </ul>  |
| CapDev and Innovation Activities | <p><b>Workshop on developing KM Strategies:</b><br/> The aim of the KM Strategy is to establish an institutional/national KM system, outlining objectives and defining processes. The strategy shall direct the institutions on:</p> <ol style="list-style-type: none"> <li>optimal partnerships and networks engagement practices,</li> <li>how-to strengthen linkages with multiple project units and peripheric units,</li> <li>setup/enhance an accurate Monitoring &amp; Evaluation (M&amp;E) framework to assess the institutional efforts,</li> <li>capture meaningful knowledge, such as lessons learned, informing on policy and processes amendments for better institutional performance.</li> </ol> <p>The sustainability of the KM Strategy shall be further ensured by the ratification of institutional KM governance documents, identifying clear KM roles of capacity and units and setting up:</p> <ol style="list-style-type: none"> <li>a Knowledge Management Officer (KMO), with appropriate power and means to carry out the roles and responsibilities,</li> <li>a Knowledge Management Unit (KMU), to coordinate multiple officers and synergize KM with M&amp;E.</li> </ol> <p><b>Workshop on developing KM &amp; Comm Plans:</b><br/> The aim of the plan is to upgrade current KM processes to new efficiency levels and detail new processes, through a target-oriented approach identifying the related areas of impact for Monitoring &amp; Evaluation, prioritizing activities, tools and methodologies to acquire and implement.<br/> An Intellectual Property (IP) document identifying measures for knowledge publication, storage, rewarding and anti-plagiarism, shall be annexed to the plan.</p> |  |

## Technology

| Area                             | Institutions   | Gaps and Needs  |
|----------------------------------|--|---|
| Technology                       | AETTGD   | <ul style="list-style-type: none"> <li>● Lack of an M&amp;E platform</li> <li>● KM platforms</li> </ul>   |
|                                  | ARC Sudan  | <ul style="list-style-type: none"> <li>● Poor dissemination and feedback system</li> <li>● Cloud systems are needed</li> <li>● Dissemination tools are needed</li> </ul>                        |
|                                  | ATTS   | <ul style="list-style-type: none"> <li>● Better tools are required</li> </ul>   |
|                                  | AUW  | <ul style="list-style-type: none"> <li>● Lack of a centralized storage system</li> </ul>  |
|                                  | MoANR  | <ul style="list-style-type: none"> <li>● New equipment</li> <li>● Need for a cloud</li> </ul>   |
|                                  | SKS  | <ul style="list-style-type: none"> <li>● No portal for KS.</li> <li>● There are no KM platforms in place.</li> <li>● A storage tool is needed</li> </ul>  |
|                                  | UofK   | <ul style="list-style-type: none"> <li>● Better internet access and equipment is needed</li> <li>● Digital libraries are to be developed</li> <li>● Tools for knowledge sharing lack</li> </ul> |
| CapDev and Innovation Activities | <p><b>MOOC on KM Platforms and Academic Social Networking Sites (ASNS):</b><br/>Informing on the features of an optimal online KM platform for supporting institutional activities and M&amp;E, manage and store knowledge, boost outreach through knowledge sharing, monitoring and support the staff with resources, complying with ISO/AGROVOC/publication standards and F.A.I.R.ness.<br/>Informing on the features of the main ASNS in use, their potential for outreach and their value toward muscling impact indexes of journal articles through citation and referencing, with additional notes and how-to Altmetric.</p> <p><b>Online Courses on and DSpace repository Implementation:</b><br/>Teaching the use and pros of DSpace repositories for knowledge storage, retrieval, standards and how-to implement them, with focus on implications for a subscription investment and value for a supporting community over time. The experience and measures employed by ICARDA with DSpace based MELSpace and the potential of data pools to feed advanced visuals for better institutional and knowledge awareness.</p> <p><b>Online Courses on SKiM Knowledge Portal (KP) Implementation:</b><br/>Teaching the use and pros of the desktop and mobile accessible SKiM Knowledge Portal (<a href="https://knowledgemanagementportal.org">https://knowledgemanagementportal.org</a>), the online, multi-stakeholder KM platform developed by SKiM.<br/>The KP comes with an integrated portal for knowledge showcase and sharing at both institutional level – with an institution-specific URL hosted on the KP – and SKiM level, highlighting the value for partnerships and networking.</p> |   |

## Skills

| Area                             | Institutions  | Gaps and Needs   |
|----------------------------------|---|--|
| Skills                           | AETTGD  | <ul style="list-style-type: none"> <li>● Lack of competences on KM related to management best practices</li> <li>● Training on KM</li> <li>● More engagement in partnerships and networks</li> <li>● Lack of training on ICT, virtual extension and research rural network for partnership building, involving farmers</li> </ul>  |
|                                  | ARC Sudan   | <ul style="list-style-type: none"> <li>● Lack of clear direction and conflicting instruction at national level</li> <li>● Policies facilitating adequate KS are not in place and knowledge is thus not shared to the desired and potential extent in the agricultural sector.</li> <li>● Lack of policy awareness and problems with conflicting policies at national level.</li> <li>● Project management and M&amp;E skills are not fully utilized.</li> <li>● Not sufficiently active in partnerships and networks.</li> <li>● Facilitation and communication skills are needed</li> <li>● More engagement in partnerships is needed</li> <li>● Better tools should be adopted and installed</li> <li>● Training on KM is needed</li> <li>● Better assessment skills are needed</li> </ul> |
|                                  | ATTS  | <ul style="list-style-type: none"> <li>● Lack of engagement in networks</li> <li>● Training on KM needed</li> </ul>  |
|                                  | CCU IFAD  | <ul style="list-style-type: none"> <li>● Training on knowledge creation</li> <li>● Training on documentation and archiving needed</li> <li>● Training on website development and publishing</li> </ul>   |
|                                  | MoANR   | <ul style="list-style-type: none"> <li>● Training needed</li> <li>● Form linkages with information units</li> <li>● Better documentation skills needed</li> </ul>  |
|                                  | SKS   | <ul style="list-style-type: none"> <li>● Policies, coordination challenges and cultural reasons prevent SKS from working efficiently.</li> <li>● Volunteer status sometimes restrictive.</li> <li>● E-learning tools needed</li> <li>● Smart spaces should be created</li> <li>● Training on KM needed</li> </ul>  |
|                                  | UofK  | <ul style="list-style-type: none"> <li>● Training on KM needed</li> <li>● Capacity needs training on digital archiving</li> </ul>  |
| CapDev and Innovation Activities | <p><b>E-Learning Class on Scaling Readiness for Knowledge Management Community of Practice:</b><br/>The participants key capacity from the SKiM partners, with additional room for external invited guests, shall learn how-to engage meaningfully in networks and partnerships, to learn mutually, acquire best practices, join forces and leverage funds for R4D activities implementing them in synergy, enhance SSTC, develop and employ advanced tools for institutional awareness and capacity development, share knowledge and grow interoperable.</p> <p><b>Workshop on Knowledge Management Core Best Practices:</b><br/>The participants key capacity from the SKiM partners, with additional room for external invited guests, shall learn how-to manage the knowledge according to ICARDA and implementing partners current practices. Evidence and measure of success of practices in use shall be disclosed to the participant institutions, explaining the actions taken to achieve those goals. The practices will include:<br/>Identification and capitalization of students and staff knowledge potential; management of multidisciplinary knowledge; acquisition and capitalization of traditional knowledge; development of entrepreneurial skills useful to research; evolution of policy measures; management of linkages with extension services; development of training programs; regulations on digitalization; intellectual property and data management; making and using success stories; video-making for outreach; optimization of dissemination channels; adoption and scaling of new tools for management.</p> |  |



## Standards

| Area   | Institutions | Gaps and Needs  |
|--|--------------|---|
| Standards  | SKS          | <ul style="list-style-type: none"> <li>● Interdisciplinary syllabus should be created and integrated</li> </ul>   |
| <p style="text-align: center;"><b>CapDev<br/>and<br/>Innovation<br/>Activities</b></p> |              | <p><b>Masterclass on Knowledge Organization Systems (KOS):</b><br/> The participants key capacity from the SKiM partners, with additional room for external invited guests, shall learn about Knowledge Organization Systems and related differences for implementation and use, for training capacity and building – and enhancing – a digital library. The KOS will include digital and conceptual systems:<br/> Vocabularies and thesauruses; metadata schemes; agri-semantic; FAO AGROVOC; keywords and their role in knowledge portals such as AGRIS; digital libraries development, maintenance and access.</p> |

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.

