APAARI Knowledge Management and Communication Strategy 2017-2022

Making agri-food systems more knowledge intensive

Prepared by
MARTINA SPISIAKOVA

Asia-Pacific Association of Agricultural Research Institutions (APAARI)

APAARI
Knowledge Management and Communication Strategy 2017-2022

Making Agri-food Systems More Knowledge Intensive

Prepared by
MARTINA SPISIAKOVA

Asia-Pacific Association of Agricultural Research Institutions (APAARI)
4th Floor, FAO Annex Building, 202/1 Larn Luang Road
Pomprab Sattrupai District, Bangkok 10100, Thailand

Cover page photos

Photo left: Knowledge Management Workshop, Lao-PDR, October 2018; center: APAARI Innovation Workshop, Thailand, June 2019; top-right: TAP-CDAIS Global Consultation Meeting, Lao-PDR, September 2017; right-bottom: Knowledge Management Workshop, Lao-PDR, October 2018 (Source: APAARI).

For copies, please contact:

Contents

Acknowledgements

Abbreviations and Acronyms

ACIAR	Australian Centre for International Agricultural Research
AFRIS	Agri-Food Research and Innovation Systems
AFS	Agri-Food Systems
AIRCA	Association of International Research and Development Centers for Agriculture
AIS	Agricultural Innovation Systems
ANH	APAARI Network Highlights
APAARI	Asia-Pacific Association of Agricultural Research Institutions
APARIS	Asia-Pacific Agricultural Research Information System
AR4D	Agricultural Research for Development
ASTI	Agricultural Science and Technology Indicators
CD	Capacity Development
CD for AIS	Capacity Development for Agricultural Innovation System
CGIAR	Consultative Group on International Agricultural Research
COA	Council of Agriculture
FAO	Food and Agriculture Organization of the United Nations
FO	Farmers' Organization
ICT	Information and Communication Technologies
IFPRI	International Food Policy Research Institute
KM	Knowledge Management
MERL	Monitoring, Evaluation, Reporting and Learning
NARIs	National Agricultural Research Institutes
NAROs	National Agricultural Research Organizations
NARS	National Agricultural Research System
NGO	Non-Governmental Organization
SWOT	Strengths, Weaknesses, Opportunities and Threats
TAP	Tropical Agricultural Platform
UN	United Nations
WTO	World Trade Organization

Executive Summary

Knowledge management (KM) is at the centre of APAARI's operations–both at the regional level with the APAARI community, as well as the APAARI Secretariat. Effective KM enables the Association to fulfill its role as an intermediary and innovation platform that is bridging and bringing together a range of different stakeholders and knowledge needed to create successful agricultural innovations. As a regional forum for knowledge sharing, learning and collaboration, APAARI's KM programme is embedded in the Agricultural Innovation System (AIS) perspective, which recognizes that agricultural innovation is a process involving many different actors and factors and that it can only take off if it meets the demands of its principal users.

In the face of the changing needs of the region and the Sustainable Development Goals (SDGs), the APAARI Strategic Framework (2017-2022) was developed in 2016 with KM as one of APAARI's key programme areas that is overarching other programme areas, including partnership and networking, capacity development, advocacy, and women and youth. These key APAARI functions are addressing APAARI's thematic areas that were defined in consultation with members, partners and other stakeholders.

The two strategic objectives of the APAARI KM Programme, as stated in the Strategic Plan 2017-2022, are to: (i) make agri-food systems (AFS) more knowledge intensive to effectively contribute to sustainable agricultural development; and (ii) strengthen AFRIS through more effective knowledge management. Communication is an integral part of the strategy. Under this umbrella, this KM and Communication Strategy aims to better define APAARI's KM approach to efficiently and effectively guide and improve the performance of APAARI's operations and functions.

This KM and Communication Strategy: (i) defines the term 'knowledge management'; (ii) puts KM in the context of agri-food systems; (iii) explains the rationale for APAARI's KM and Communication Strategy; (iv) outlines APAARI's key and specific strategies as per the Strategic Plan (SP) 2017-2022; (v) explains the methodology used to design this Strategy; (vi) presents 'Strengths, Weaknesses, Opportunities and Threats (SWOT)' analysis, based on which; (vii) recommends a KM and communication approach and processes to support in line with the SP 2017-2022; (viii) assesses target audience; (ix) specifies communication and outreach activities; and (x) suggests the way to measure KM and communication progress.

Guided by this Strategy, APAARI is committed to continue its mission of 'Strengthening agri-food research and innovation systems in Asia-Pacific' by creating an environment to share and discuss ideas, reflect and learn, think and talk, and bring out the voices of women and youth, and other disadvantaged groups. Integrating the right KM processes and tools in all its operations is envisioned to lead to enhanced collaboration, better use of resources, improved innovation, and stronger policy influence to share agri-food development in the region.

Introduction

The overarching goal of the Asia-Pacific Association of Agricultural Research Institutions (APAARI), as stated in its Vision 2030 is "The Asia-Pacific region that benefits from and values APAARI's leadership and contribution to developing agriculture and agri-food research and innovation systems". Knowledge management (KM) that integrates communication and outreach is at the heart of APAARI's operations. Effective KM is crucial to enable APAARI to fulfill its role as an **intermediary and innovation platform** that is bridging and bringing together a range of different stakeholders and knowledge needed to create successful agricultural innovations. As a regional forum for knowledge sharing, learning and collaboration, APAARI's KM programme follows a holistic operational approach that enables APAARI to work across all its business processes. In this approach, APAARI has fully embraced working from the Agricultural Innovation System perspective, which recognizes that agricultural innovation is a process involving many different actors and factors and that it can only take off if it meets the demands of its principal users.

> **Agricultural Innovation System (AIS)**
>
> A network of individuals, organizations and enterprises, together with supporting institutions and policies in the agricultural and related sectors that bring existing or new products, processes and forms of organization into social and economic use. Policies and institutions (formal and informal) shape the way that these actors interact, generate, share and use knowledge as well as jointly learn. It is comprised of four main components: research and education, business and enterprises, bridging institutions, and the enabling environment.
>
> FAO, 2018. FAO's work on agricultural innovation, http://www.fao.org/3/CA2460EN/ca2460en.pdf

As such, the APAARI KM programme is a combination of knowledge sharing, partnership and networking, technical and functional (soft) capacity development, advocacy, and inclusive development of women and youth. The programme is driving APAARI's contribution to the strengthening of agri-food research and innovation systems (AFRIS), to ultimately benefit agri-food systems (AFS) and contribute to sustainable development.

Recognizing the role of communication for APAARI's effective operations, in 2010 the Association published a Communication Strategy (2010-2015) to raise the profile of APAARI as the lead organization in agricultural research for development (AR4D) in the Asia-Pacific region. This was to be accomplished through communicating research results and outputs to influence stakeholders and thereby improve efficiency of ARD in the region. The Strategy was implemented under APAARI's programme titled 'Asia-Pacific Agricultural Research Information System (APARIS)'. Up to 2017, APARIS was APAARI's main KM programme that involved a series of knowledge-sharing, learning and advocacy activities to strengthen regional information systems and promote the use of information and communication technologies (ICTs). In November 2017, the

APAARI Executive Committee (EC) decided that APARIS becomes integrated within APAARI's main KM programme. From 2010 to 2015, the Communication Strategy guided APAARI and its APARIS programme in increasing access to ARD information and activities; promoting participation, contribution and collaboration of stakeholders in APAARI programmes; and harnessing communication channels and ICTs.

In 2016, APAARI assessed the changing development needs of the region. The assessment found that due to significant socio-economic transformation that increased the region's importance in the world economy, Asia and the Pacific now faces new challenges of ensuring efficient use of natural resources, reducing and eliminating hunger and extreme poverty, improving rural livelihoods and socio-economic wellbeing, enhancing resilience of people and ecosystems to climate change and market volatility, as well as ensuring good governance, policies and financing framework.

The contribution of knowledge and innovation to addressing these challenges, whether technical or process-oriented, has played a central role in the progress achieved to date. However, the changing context calls for even greater efforts to advance knowledge and improve the efficiency of its use to be beneficial for agri-food systems. This includes knowledge for researchers and scientists to find solutions in the field, policy and decision makers to design and implement improved policies, small farmers and small entrepreneurs in rural areas to improve their know-how that raises productivity, and consumers to make healthy choices about the food they consume.

Looking to adapt its strategy in the face of these changing needs of the region, the APAARI Strategic Framework (2017-2022) was developed in 2016 with KM as one of APAARI's key programme areas that is overarching other programme areas, including partnership and networking, capacity development, advocacy, and women and youth. These programmes with KM in the centre, are all addressing APAARI's thematic areas, including: mobilization, management and use of natural resources for sustainability of agri-food systems; management of risks and uncertainties in agri-food systems; inclusive development and integration of value chains targeted at benefiting smallholders; and analysis, strengthening and formulation of public policy to support the transformation and development of agri-food systems. While these are the focus areas to be addressed by the whole APAARI, KM is also a significant contributor to effective governance and development of the APAARI Secretariat. As such, KM is integrated in all APAARI business activities, including project management; monitoring, evaluation, reporting and learning (MERL); human resources; as well as the overall management and administration of the Secretariat.

The two strategic objectives of the APAARI KM Programme, as stated in the Strategic Plan 2017-2022, are to: (i) make agri-food systems (AFS) more knowledge intensive to effectively contribute to sustainable agricultural development; and (ii) strengthen AFRIS through more effective knowledge management. Communication that APAARI considers an integral part of KM, plays a vital role in sharing information with key stakeholders. This KM and Communication Strategy: (i) defines the term 'knowledge management'; (ii) puts KM in the context of agri-food systems; (iii) explains the rationale for APAARI's KM and Communication Strategy; (iv) outlines APAARI's key and specific strategies as per the Strategic Plan (SP) 2017-2022; (v) explains the methodology used to design this Strategy; (vi) presents 'Strengths, Weaknesses, Opportunities and Threats (SWOT)' analysis, based on which; (vii) recommends a KM and communication approach and processes to support in line with the SP 2017-2022; (viii) assesses target audience; (ix) specifies communication and outreach activities; and (x) suggests the way to measure KM and communication progress.

What is Knowledge Management?

The term knowledge management (KM) refers to the process of capturing, distributing, and effectively using knowledge[1]. KM in its broadest sense also encompasses 'tacit knowledge', the undocumented knowledge that is part of experience. Some practitioners prefer to speak of 'knowledge sharing', thereby stressing the connections among people over collecting information[2]. The overarching definition of KM commonly used by international institutions is: "an integrated systematic approach which, when applied to an organization, enables the optimal use of timely, accurate and relevant information; it also facilitates knowledge discovery and innovation, fosters the development of a learning organization and enhances understanding by integrating all sources of information, as well as individual and collective knowledge and experience".[3] The UN Development Programme defines KM in the development context as "the creation, organisation, sharing and use of knowledge for development results."[4] Communication underpins knowledge management. It is the "process through which relationships are instituted, sustained, alterned, or ended by increases or reduction in meaning; purposeful activity of conveying data, information and knowledge across time and space.[5]"

Knowledge Management and Agri-food Systems

Agriculture and agri-food systems rely heavily on access to large quantum of scientific and technological knowledge to support various processes, such as technology generation, adaptation and knowledge transfer, needed for strengthening of these systems. Effective communication plays an important role in facilitating these processes as it helps disseminate the information and knowledge needed to achieve greater impact. The dynamic and changing context of the Asia-Pacific region therefore calls for a stronger knowledge base and more effective communication to better support decision making processes and efficiency in the transformation and development of agri-food systems, and ultimately socio-economic progress towards sustainable agricultural development.

Knowledge sharing and learning processes and tools, data and information management, effective communication, supportive infrastructure, as well as capacity development, advocacy, stakeholder engagement, partnerships and networking that is focused on knowledge sharing, learning and collaboration, are critical KM pillars to achieve more knowledge intensive agri-food research and innovation systems to help solve complex problems. These pillars help ensure that:

i) Scaling up and out of successful agricultural practices and innovations accelerates and reaches small producers and their agricultural businesses.

ii) Strong knowledge based on evidence and effective sharing of this knowledge attracts investments in key areas of agri-food research and innovation systems faster.

1 Davenport, Thomas H. (1994), *Saving IT's Soul: Human Centered Information Management*. Harvard Business Review, March-April, 72 (2)pp. 119-131. Duhon, Bryant (1998), It's All in our Heads. Inform, September, 12 (8).

2 United Nations Children's Fund Regional Office for South Asia (2008). *Report of Information and Knowledge Management UNICEF ROSA April 2008: Learning from KM Experiences*. http://gsevenier.free.fr/PDF/Learning%20from%20KM%20Experiences.pdf (last accessed on 10 June 2020)

3 Blodgett, C., Crowell, M., & Lahaise, K. (2005). *Mobilizing Knowledge: Status of KM in Defence*. bravo Defence, 5, 5-7.

4 KM Discussion Note for UN Regional Co-ordination Meeting, Bangkok, 7 Dec 2006

5 Asian Development Bank (2013). *Communication Tools for Knowledge Management and Learning*. https://www.slideshare.net/Celcius233/communication-tools-for-knowledge-management-and-learning. (last accessed on 18 May 2020)

iii. Effective communication helps build trust that empowers policy/decision makers to design improved policies, and other stakeholders to take collective action.

iv. Avoiding duplication of efforts speeds up learning and knowledge transfer to benefit the society.

Why does APAARI need a Knowledge Management Strategy?

For APAARI being a regional platform and broker of knowledge sharing, learning and collaboration within its network of members, partners and stakeholders working in the agri-food research and innovation system in the Asia-Pacific region, KM is its overarching strategy supporting the effectiveness of all its strategic thematic areas, programmes and activities. These thematic areas are:

• Mobilization, management and use of natural resources for sustainability of agri-food systems

• Management of risks and uncertainties in agri-food systems

• Inclusive development and integration of value chains targeted at benefiting smallholders

• Analysis, strengthening and formulation of public policy to support the transformation and development of agri-food systems

• APAARI governance

The programme areas that define APAARI's core operations and value added are:

• Knowledge management

• Partnership and networking

• Capacity development

• Advocacy

In addition to these components, the Strategy considers inclusion of women and youth as a cross-cutting area, together with foresight and visioning, as well as improving APAARI governance and development. Communication, as an important part of KM, is embedded in the strategies. This is to support continuous dialogue and knowledge/information exchange with APAARI stakeholders, and raise the profile of agri-food research and innovation activities conducted within the APAARI community and beyond.

APAARI's Knowledge Management Strategies

\In line with its Strategic Plan 2017-2022, APAARI intends to contribute to the strengthening of agri-food research and innovation systems and the overall agri-food system through the key and specific strategies for KM indicated in Table 1 below. A more detailed table with indicative activities is provided in Annex 1.

Table 1. Key and specific strategies for APAARI KM

Key Strategy 1.1 AFS made more knowledge intensive to effectively contribute to sustainable agricultural development
Specific strategies
1.1.1 Promote processes for knowledge sharing, learning and collaboration between primary stakeholders
1.1.2 Promote tools for enhanced knowledge sharing, learning and collaboration
1.1.3 Promote innovative ways to use Information & Communication Technology (ICT) in AFS
Key Strategy 1.2 AFRIS strengthened through more effective knowledge management
Specific strategies
1.2.1 Enhance knowledge sharing and engagement to enable faster technology, innovation and policy development
1.2.2 Develop skills and capacity of stakeholders in knowledge management
1.2.3 Improve scientific data management to make it available for analysis and knowledge creation

Methodology for Strategy Development and Operationalization

This strategy was developed using a combination of approaches. Firstly, a desk review was conducted along with a stakeholder mapping exercise that identified primary stakeholders of APAARI – the target beneficiaries of APAARI's KM activities – and assessed their interest in the Association, as well as their influence over AFRIS. As such, a survey collecting information on these stakeholders' expectations from the Associations and their contribution to agri-food system was conducted. Consequently, APAARI undertook situation analysis to assess strengths, weaknesses, opportunities and threats (SWOT) with respect to its KM, which is presented in detail in Annex 2. Finally, after the first draft of this strategy was developed, APAARI conducted a KM workshop with key national and regional focal points for KM and communication, who validated and helped finalize this strategy. To operationalize the strategy, APAARI will use a number of specific approaches listed in the section below. As a cross-cutting programme, APAARI will integrate KM into all its internal business processes and staff functions, as well as operations and activities with members, partners and other stakeholders.

Knowledge Management Approach

APAARI strives to use improved KM as a process through which its members, partners and other key stakeholders generate value from their intellectual and knowledge assets, and use it to strengthen agri-food research and innovation in Asia and the Pacific. To get most benefit from these assets, knowledge must be shared and provide the foundation for agri-food innovation, improvement of organizational and institutional processes, strategic decision/policy making, effective stakeholder relationships, and results on the ground. Through collective actions, APAARI has a critical role in integrating this knowledge from various sources and sharing it with those who need it in their contribution to strengthened agri-food systems. Through knowledge and information sharing, APAARI promotes good agricultural practices and success stories, supports scaling up and out of agricultural innovation, and informs strategic investments and policies for sustainable transformation of agriculture and AFS. Further, it has fully integrated the development of functional capacities in its KM approach to help better facilitate the application and use of technical skills needed by AFS.

The Knowledge Management and Communication Strategy will guide APAARI in enhancing the effectiveness and efficiencies of knowledge, technology and innovation to help address and solve complex problems in the process of transformation of agri-food systems, in the context of its thematic areas of focus. The KM and Communication strategy aims to guide APAARI processes, including:

1. **Creating knowledge:** Strengthening knowledge, technology and innovation creation through collection and processing of improved data, information management, and analysis.

2. **Knowledge sharing**: Strengthening knowledge sharing among APAARI stakeholders by facilitating engagement, collaboration, learning and knowledge exchange.

3. **Developing capacity:** Developing skills and capacities of APAARI stakeholders in the area of KM and communication, and using improved KM processes to facilitate the development of technical and functional capacities.

4. **Communicating results:** Using communication strategically and systematically to reach and engage current and potential stakeholders at the national, regional and global levels, optimize the use of research results and innovations, and advocate for greater investments and contributions in agri-food research, as well as technology and innovation.

5. **Policy advocacy:** Disseminating knowledge and policy advice to share science-based evidence to influence policy/decision makers.

6. **Mobilizing resources:** Managing the development, maintenance and sharing of knowledge, technology and innovation to ensure APAARI is informed and positioned to effectively generate and harness opportunities to meet its resource mobilization goals.

7. **Publishing:** Capturing and disseminating research results, technologies/products and outputs of APAARI members and partners, and sharing their and joint publications.

8. **Development and harmonization of KM processes for members**: On a demand basis, APAARI helps member institutions develop tailor-made KM models to improve efficiency and effectiveness of their existing and future business processes.

9. **Monitoring, evaluation, reporting and learning (MERL):** Monitoring its knowledge activities and partnerships to ensure learning and improved performance.

The Strategy suggests making use of various KM processes to support APAARI's operations and especially address the weaknesses to improve APAARI's performance. These processes are as follows:

Knowledge-sharing and Learning

Knowledge-sharing and learning processes need to be strengthened to make agri-food research and innovation systems more knowledge intensive. This will be done through more interactive, participatory and engaging face-to-face meetings, such as policy dialogue, expert consultations and capacity development workshops. Various engaging KM processes will be built into meeting designs to encourage learning, thinking out of the box, fruitful knowledge exchange, and thereby making these meetings more productive and outcome-oriented. Social reporting will be an integral part of APAARI-supported meetings to feed into meeting documentation. Systematic meeting evaluations (to include pre- and post-meeting evaluation) will be introduced to monitor the meeting quality, effectiveness, and knowledge acquired by participants. This information will be used to improve future meetings and assess participants' learning from the meeting. MERL will also be implemented as part of its annual operational planning, in order to enable a timely identification of KM issues, recommendations, and adjustment of processes to deliver results.

Knowledge-sharing and Communication Tools

Using printed and online knowledge-sharing and communication tools to disseminate research and innovations in a way that engage different audiences will be encouraged. The six-monthly APAARI Newsletter is the main communication tool of the Association, which will be improved by shortening and editing of its content to better highlight key messages and results of activities. The number of printed copies and shipping will be reduced to save cost. The bi-monthly APAARI Network Highlights (ANH), which is solely an online product sharing links to latest Network news, upcoming events, latest publications, opportunities and success stories, will be developed more systematically with its content also being shared through the APAARI Social Media. Social Media tools, such as Facebook, Twitter and Linked In, will be used as a two-way communication channel with primary stakeholders to: (i) promote their research products and stories; (ii) attract new members and other stakeholders; (iii) enable APAARI stakeholders to comment on the content and enable discussions, hence build relationship with these stakeholders; and (iv) communicate with APAARI stakeholders quickly and on topical issues related to agri-food research and innovations. PowerPoint and other modes of presentation from meetings will be shared through Slideshare. Multimedia, including videos, audio recordings and images, will be used on the Social Media and will be integrated into the new website to better support the dissemination of research outputs, innovations, good practices and lessons learned. The blog will be used to report on APAARI-supported events in the "real time", complemented by Facebook and Twitter that will share the links to these Blog posts for a wider outreach. APAARI will facilitate the development of new KM products – op-eds on thematic issues–written by experts from among member and partner organizations, to be disseminated through the APAARI Blog, and policy briefs to provide evidence that would inform policy dialogue.

Knowledge-sharing and Learning Infrastructure

Developing a more supportive knowledge-sharing and learning infrastructure to speed up the dissemination of information and knowledge is another area of needed focus. The management of the new APAARI website in terms of its content, organization and user-friendliness, as well as the introduction of interactive features to encourage two-way communication, will turn the APAARI website into a KM tool for online engagement, outreach and public communication. To generate interest and to ensure up-to-date information on the website, it will also incorporate APAARI social media channel widgets. A new contact management system will be developed to enable APAARI to easily store and find contact information, and use targeted contact lists to disseminate various communication products.

Innovative Knowledge Partnerships

Fostering innovative partnerships for broader knowledge sharing, learning and collaboration will speed up adoption and scaling up of agricultural innovations through collective actions. This will be done through facilitating knowledge partnerships with partner organizations such as FAO, ACIAR and the International Food Policy Research Institute (IFPRI), and others. With FAO, APAARI will continue co-organizing E-Agriculture Solutions Forum and documenting case studies on the topic. It will also be promoting the Common Framework on Capacity Development (CD) for Agricultural Innovation Systems (AIS) developed through the Tropical Agricultural Platform (TAP) and focused on the development of soft skills ("functional capacities"). In particular, APAARI will be promoting the Framework among NARS and the higher education sector

for its integration in the university curricula, and organize webinars to promote the use of the TAPipedia information sharing system. Through collaboration with ACIAR and IFPRI, it will help coordinate agricultural data collection on the levels of investment in agri-food research and innovations systems, as well as data compilation and dissemination. With COA Taiwan, the knowledge partnership will focus on emerging issues in biotechnology and bioresources, as well as documenting lessons learned and success stories on these areas. APAARI will also work with the World Trade Center (WTO) to develop its knowledge hubs in the Asia-Pacific region. Working with partners, who are monitoring the implementation of the Paris commitment to mitigate the effects of climate change will be another area for working in partnership to disseminate knowledge.

Capacity Development

Developing institutional, organizational and individual knowledge and skills to fill capacity gaps in management and delivery of knowledge on agri-food research and innovations will be another area where APAARI will direct its KM efforts. Capacity development activities will focus on building competencies and skills particularly in: (i) the use of social media for development advocacy; (ii) collection, processing and dissemination of data; (iii) processing research findings into information usable by development practitioners; (iv) development of policy briefs and technology factsheets; (v) CD for AIS and transformational learning in the higher education sector; as well as (v) other substantive technical and functional areas targeting agricultural researchers/ scientists, policy-decision makers, university staff, NGOs, FOs, and women and youth organizations. APAARI will also need to build its own capacity in optimizing the use of social media to better perform its advocacy role, and learn from other KM platforms how to make stories of agricultural research more attractive and improve its KM processes, thereby making its KM products and system more effective.

Management of Knowledge-sharing and Communication Products

APAARI will prepare an online open access publication repository to keep track of its publications and enhance their accessibility. It will also develop publications guidelines that will: (i) guide the printing and dissemination of these communication products; (ii) establish coherent branding of APAARI communication material, including the Website, presentations, social media tools, and publications, to promote APAARI's recognition through improved consistency and identity, and help attract new members and other stakeholders to contribute to collective actions, and to add value to the Association through reinforced messages; and (iii) integrate knowledge repositories of members and partners with the APAARI tools. APAARI will also design a communication toolkit using its branding, which will contain APAARI key communication products to support its interactions with (new) stakeholders and improve its visibility. APAARI's operational plans will include plans for every new publication, providing clear objectives and funding arrangements.

Resource Mobilization

Effective KM will help strengthen APAARI's reputation amongst members, partners and other key stakeholders, such as donors, to enhance its resource mobilization efforts and shape future partnership. Strengthening APAARI's reputation will particularly be done through its website and other communication products, key knowledge-sharing and capacity development events, and re-engagement with local and regional media. Focusing on results, APAARI will ensure the evidence and learning from its activities are documented to be used in donor engagement and funding proposals to demonstrate its

institutional capacity. Improved funding as a result of effective KM, will contribute to enhancement and sustainability of APAARI's knowledge and learning activities.

Knowledge-sharing and Learning Culture

By integrating the above-mentioned processes into its operations, APAARI will be systematically promoting and contributing to a supportive knowledge-sharing and learning culture in AFRIS that will ultimately benefit the AFS. To create a knowledge-sharing culture APAARI will be encouraging its members, partners and stakeholders to work together more effectively, to collaborate and to share information and knowledge– ultimately to make their organizational/institutional knowledge more productive. The Community of Practice of KM and Communication Officers from member and partner organizations will be enforced through regular online discussions, and will help facilitate the transformation to a learning culture in theirs and partner organizations in the region. Improved KM will be the means to meeting stakeholders' objectives and APAARI's strategic objectives, and to realize the APAARI Vision of strengthening research and innovation systems in the Asia-Pacific region through collective actions.

National KM Facilitators

KM and communication focal points representing every member organization will be identified to smooth out KM activities across the region. APAARI will play an important role in developing a strong network of these KM focal persons, who can regularly meet and work together to ensure that messages about sustainable agricultural development are being conveyed as effectively as possible. APAARI will also create opportunities to enhance their capacities and engage them in training and key regional events.

Inclusion of Women and Youth

APAARI will also promote engagement of women and youth in productive activities. It will involve more women and youth in its key events and analytical work, facilitate their participation and engagement in other regional and global events of partners, document and share success stories on value adding activities that are attracting women and youth, promote their engagement particularly through Social Media, and include them in APAARI's governance processes. The Association will also identify gender champions in key areas of AFRIS in the Asia-Pacific region, and facilitate their capacity development in these areas. APAARI's inclusiveness is envisioned to potentially attract more funding from donors.

A performance framework will measure progress in meeting the objectives of the Strategy and the use of these key KM and communication processes. APAARI's KM team based in the APAARI Secretariat, Bangkok, Thailand, will lead the implementation of the Strategy, in collaboration with members, partners and other stakeholders.

Information Security

The management of information security of APAARI will be based on the reasonable selection and effective implementation of appropriate controls to protect the Association's information assets. Controls and management processes, coupled with the subsequent monitoring of their appropriateness and effectiveness, will aim at (i) confidentiality; (ii) integrity; and (iii) availability. APAARI staff will be required to exercise the utmost discretion with regard to all matters of official business. They shall not communicate to any Government, entity, person or any other source any information known to them by reason of their official position that they know or ought to have known has not been made public, except as appropriate in the normal course

of their duties or by authorization of the Executive Secretary. The broad management principles guiding information security will include the following:

1. APAARI recognizes that data and information (whether its own, or that entrusted by the members) are core to its ability to fulfill its mission.

2. APAARI is fully committed to protecting information and the environments in which information is processed, transmitted and stored, consistent with the best practices in information security, level of sensitivity, and all applicable regulations and contractual requirements.

3. All APAARI staff and other authorized individuals or entities are responsible for maintaining appropriate control over information in their care and for bringing any potential threats to the confidentiality, integrity, or availability of that information to the attention of the appropriate management.

Target Audiences

Using the combined approach of an online survey, website research and interviews, APAARI conducted a stakeholders' mapping exercise to identify and monitor APAARI's members, partners and other stakeholders, recommend ways to engage with them, and better target APAARI's communication to specific audiences based on their information needs. They were mapped according to their relationship with APAARI, unique facts, potential contribution to the collective actions of strengthening AFRIS, and matched with the value-adding potential of APAARI. These stakeholders – target audiences – include:

- national agricultural research institutes (NARIs)
- national agricultural research organizations (NAROs)
- policy bodies
- global fora
- regional and sub-regional organizations
- higher education institutions
- international agricultural research centres – those under the Consultative Group on International Agricultural Research (CGIAR) and the Association of International Research and Development Centers for Agriculture (AIRCA)
- international development organizations, including the UN
- civil society – NGOs and FOs
- women and youth organizations, and
- the private sector.

APAARI recognizes three types of stakeholders that include the above-mentioned organizational categories:

- **Primary stakeholders** are those that are directly affected by APAARI's activities. These are APAARI members and key partners: (i) both 'providers' and 'recipients' of knowledge, (ii) beneficiaries of learning, knowledge sharing, capacity development, and (iii) 'multipliers' in knowledge transfer.

- **Secondary stakeholders** are other intermediary organizations that are indirectly affected by APAARI's activities. These include organizations that access APAARI-promoted information through the APAARI website and other communication tools, and participate in activities of APAARI members and partners.

- **Key stakeholders** include those who have significant influence or importance within APAARI's projects or entities and who can also belong to the first two groups. These include current members and partners, as well as potential partners, such as donors.

Each stakeholder group requires a separate communication strategy to mobilize their contribution to the collective action of APAARI, which will be defined in the context of the regular stakeholder mapping exercise specified in Annex 3.

Communication and Outreach

Communication and outreach play a vital role in supporting the implementation of APAARI's KM activities in the Asia-Pacific region to effectively communicate the activities and services of its members, partners and other stakeholders in ways that enhance the Association's role, strengthen its partnerships, provide access to reliable and cohesive information and knowledge, increase its resources, and enhance its impact in strengthening research and innovation systems in the region. APAARI recognizes that communication is a two-way process rooted in the principles of ownership, participation and voice. APAARI's communication efforts will therefore go into targeting right information for right users, at right time and through right channels. Efforts will also be made to encourage communication and networking among APAARI members, partners and other stakeholders. To this end, APAARI will need to produce regular information and communication materials targeting its members, partners and other stakeholders, to keep them informed about activities and knowledge outputs generated by the APAARI Community. The ICTs offer new opportunities and will facilitate this process.

In line with its Strategic Plan, APAARI's communication efforts will focus on: enhancing the APAARI website as a KM tool; preparing materials that use scientific/research evidence, such as policy briefs, fact sheets, success stories on CD for AIS, e-agriculture and women and youth in agriculture, and thematic publications; using social media for advocacy, knowledge sharing, and dissemination of op-eds; as well as disseminating regular APAARI newsletter and ANH.

The targeted communication efforts by APAARI will be based on the stakeholder mapping and analysis, which will determine what communication channels and/or tools will be used for which group of stakeholders. This includes NARIs, NAROs, policy bodies, global fora, regional and sub-regional organizations, higher education, CGIAR and AIRCA, international development organizations, civil society – NGOs and FOs, women and youth organizations, and the private sector. For example, key policy/decision makers and influential stakeholders will receive communication to encourage them to develop improved policies to benefit the agri-food system. Such communication materials will empower them to promote the development of agri-food research and innovation systems and contribute to a more sustainable region. Information and communication materials will also be produced to strengthen the capacity of APAARI members and partners to influence policy makers.

To support these processes, APAARI will use its key communication channels, including the APAARI website, newsletter, APAARI Network Highlights (ANH), success stories, status reports, progress reports, technology factsheets, policy briefs, thematic guidelines, meeting procedures, Social Media, and other tools. These are listed and detailed in Annex 4 and will be constantly evolving to respond to KM trends and the needs of the members.

Monitoring and Evaluation

To improve its performance and remain relevant to its members and partners, APAARI has adopted a Monitoring, Evaluation, Reporting and Learning (MERL) framework to deliver high quality services and assistance in a timely and appropriate manner and ensure its accountability for results. The Framework is based on: the 'Impact Pathway Analysis' for investments and interventions; identification of users of monitored and evaluated information and its likely use in learning and reporting actions; identification of what needs to be measured; and application of quantitative and qualitative methods needed to measure indicators on progress towards thematic outcomes. Indicators of progress in meeting the objectives of the KM Strategy will be quantitative and qualitative. They will be fully integrated within APAARI's MERL, indicating how the inputs (activities) meet the outputs per different objectives and defined activities. The progress of the strategy outputs will be assessed against indicators on yearly basis with assistance of APAARI KM staff. Furthermore, APAARI will conduct Knowledge, Attitude, Practice (KAP) surveys to assess the uptake and use of new knowledge and skills following APAARI-supported capacity development programmes.

Conclusion

Through various KM and communication tools, processes and systems oriented towards learning, sharing, collaboration and inclusiveness, APAARI seeks to enhance the effectiveness and outcomes of its key programmes, activities and thematic areas for strengthening AFRIS in the context of sustainable agricultural development. Through its KM programme, APAARI seeks to bring closer together its national, regional and global stakeholders who are working towards the common goal of sustainable agricultural development and mobilize them into a collection action. This is by: (i) connecting actors in agri-food research and innovation systems to create synergies and complementarities between them; (ii) promoting partnership and collaboration; (iii) encouraging the use of improved KM and communication processes and tools; (iv) promoting the sharing of knowledge, information and experiences; (v) developing capacities of stakeholders to enable them to use KM and communication to strengthen AFRIS; (vi) advocating for improved enabling environment to support policy development and investment in agricultural research and innovation; (vii) enriching and influencing policy debate on agri-food research and innovation at the regional and international level, thereby connecting national stakeholders to global dialogue; and (viii) building on external evidence base of members and partners on policies and solutions for small farmers and producers. These needs should be considered as generic needs of APAARI stakeholders based on which various KM and communication strategies have been designed. APAARI will be monitoring the KM and communication progress and ensure that it stays on the right track in strengthening agri-food research and innovation systems and thereby contributing to the realization of its Vision 2030.

APAARI's renewed strategic focus sets its new ambitions to fulfill its goal and realize its vision 2030. Hence, the Association aims to become: a leading think tank with high quality expertise, regional voice and a hub of high quality capacity development, research collaboration with high priority for smallholder farmers, women and youth in the region; the most sought after repository of up-to-date knowledge, information, data and quality publications related to agricultural development and innovations in the Asia-Pacific region; a well-recognized centre of excellence to influence agri-business policy making and institutional development; a leader able to continuously inspire by vigorous commitment to add value to the functions and actions of its partners and programmes; an influential policy advocate for higher investment, capacity development, management of ARI4D institutions, knowledge, skills and technology

sharing; and an open, transparent, and financially-secured system with best governance and efficient work culture.

Within the scope of these ambitions and APAARI's unique mandate to strengthen agri-food research and innovation systems, APAARI is striving to become a knowledge and learning organization, one that learns and shares knowledge systematically and collectively from the initiatives it supports and from the experience of its members, partners and other stakeholders, as well as facilitates knowledge sharing, learning, collaboration and inclusiveness within AFRIS in the region. The aim is to deliver high-quality services and to enable its members, partners and other stakeholders to find innovative ways to improve food security and nutrition, reduce poverty, conserve the environment, and use the knowledge acquired to foster appropriate policy reforms to benefit the AFS. As this Strategy demonstrates, APAARI is fully committed to deliver on this ambition.

Annexures

Annex 1: APAARI's KM Strategies with Indicative Activities

The Strategic Plan 2017-2022 outlines the following key and specific strategies for APAARI's KM, with indicative activities:

Key Strategy 1.1 AFS made more knowledge intensive to effectively contribute to sustainable agricultural development	
Specific Strategies	**Indicative Activities**
1.1.1 **Promote** processes for knowledge sharing, learning and collaboration between primary stakeholders	• Coordinate face-to-face interactions • Facilitate participation of primary stakeholders in regional and global events • Share timely information on learning opportunities among primary stakeholders
1.1.2 Promote tools for enhanced knowledge sharing, learning and collaboration	• Revamp the APAARI website and social media tools by updating and organizing content • Create new tools for knowledge sharing, learning and communication e.g. online discussions • Link with knowledge tools of members and partners to enable increased outreach
1.1.3 Promote innovative ways to use Information & Communication Technology (ICT) in AFS	• Share solutions and experiences in using ICT in agri-food systems for faster scaling up e.g. through workshops, meetings, policy dialogue and online tools • Facilitate participation of primary stakeholders in ICT-related activities (including e-agriculture)
Key Strategy 1.2 AFRIS strengthened through more effective knowledge management	
Specific strategies	**Indicative activities**
1.2.1 Enhance knowledge sharing and engagement to enable faster technology, innovation and policy development	• Facilitate face-to-face and on-line meetings for knowledge sharing and engagement • Make knowledge-sharing and learning processes more interactive and learning oriented • Facilitate engagement between farmers, scientists and policymakers to enrich policy debate • Host multi-stakeholder consultations on technology and innovation
1.2.2 Develop skills and capacity of stakeholders in knowledge management	• Train and mentor primary stakeholders on the use of social media
1.2.3 Improve scientific data management to make it available for analysis and knowledge creation	• Support projects that improve data collection for research, compilation, management, analysis, evaluation and application e.g. Agricultural Science and Technology Indicators (ASTI) Project • Improve APAARI publication quality, relevance, packaging and outreach

Annex 2: SWOT Analysis

A SWOT analysis was conducted to recommend KM and communication processes that address APAARI weaknesses and threats, and capitalize on the strengths and opportunities.

Strengths

- APAARI is a well-established and known regional organization promoting knowledge sharing, learning and collaboration to strengthen agri-food research and innovation in the Asia and the Pacific region.
- APAARI possesses strong links and partnerships with national agricultural research systems (NARS), and with other national, regional and global stakeholders.
- APAARI's importance in the region allows to mobilize policy/decision makers and other stakeholders, and facilitate opportunities for discussion, knowledge exchange and policy dialogue on critical thematic issues impacting agri-food systems.
- APAARI's established connections with primary stakeholders enable the Association to maximize synergies and facilitate partnerships for collective actions.
- APAARI brings national issues facing agri-food systems to the regional and global agenda.
- APAARI supports networking to provide technical assistance on good practices and harmonization of policies at the regional and global level.
- APAARI gives voice to non-governmental organizations (NGOs), farmer organizations (FOs), and women and youth in policy dialogue and expert consultations.
- APAARI links with other regional agricultural research networks to optimize knowledge sharing among its members, partners and other stakeholders.
- APAARI maintains good relations with and support of its key donors, including the Australian Centre for International Agricultural Research (ACIAR), Council of Agriculture (COA) in Taiwan, and the Food and Agriculture Organization of the United Nations (FAO).
- APAARI is FAO's ambassador for promoting capacity development for agricultural innovation system (CD for AIS), and has fully internalized the development of functional capacities (soft skills) under the respective Common Framework.
- APAARI's KM Programme is the key to the Association's operations.
- APAARI's six-monthly Newsletter and bi-monthly APAARI Network Highlights (ANH) enjoys rich content received by members, partners, potential members and partners, as well as other stakeholders. Its outreach is based on global access through the APAARI website, and distribution of a limited number of hard copies.
- APAARI recruited two staff working on KM, which includes competency in providing technical ICT support, communications, and capacity building.
- APAARI designed a new website that provides organized and enriched content, ensures user-friendliness, and integrates resources of members and partners.
- APAARI's active presence on Social Media enjoys increasing number of followers and references.

Weaknesses

- The format of face-to-face events is still limited to PowerPoint presentations without active engagement through various KM methodologies.
- Lack of systematic evaluations following APAARI-supported events means there is an absence of an objective base for future event improvement.
- Lack of publication guidance and management prevents APAARI from keeping track of stored publications and their dissemination, and from determining the number of printed copies for new publications.
- The branding of communication materials has been established but is yet to be reinforced through publication guidelines.
- Ad-hoc communication lacks appropriate targeting of specific audiences and systematic information packaging, which means that it is not responding to the information needs of members, partners and other stakeholders.
- Lack of monitoring and evaluation of APAARI's KM and communication activities makes it difficult for APAARI to demonstrate results.
- The APAARI Newsletter is very lengthy, outdated in format, and requires revamping in terms of length, content, frequency, and means of distribution (online rather than print).
- Absence of APAARI information/advocacy toolkit to improve the visibility of the Association means that only the APAARI flyer is used for this purpose.
- An appropriate contact management system to keep contacts updated and better target the dissemination of APAARI's communication products is missing.

Opportunities

- In the context of the growing need for increased investment in agri-food research and innovation, APAARI's KM and advocacy role in the region will be more important than ever.
- The rigidity and conservativeness of NARS present an opportunity for APAARI to lead the KM reform in the region.
- Increased interconnections between member countries combatting challenges that require collective actions, e.g. cross-border trade or climate change, present an opportunity for APAARI to facilitate knowledge partnerships and encourage South-South Cooperation.
- Social Media tools provide a fast access to timely information and communication, and their use needs to be optimized.
- Given the diversity of its stakeholders, APAARI has an opportunity to share knowledge and information in a variety of forms and content with appropriately targeted audience.
- Building on experience with the Tropical Agriculture Platforms (TAP) hosted by FAO, APAARI is in a good position to promote CD for AIS approaches and Common Framework within the Asia-Pacific region.

Threats

- KM efforts especially conducted within more conservative systems/countries might be seen as a burden by some stakeholders, which might affect their engagement in the collective action.
- The good relationship and collaboration with partners might be affected as a result of ineffective KM and communication of APAARI.

- Absence of a well-maintained contact database could lead to the loss of important contacts and outdated information.
- Knowledge and information needs and preferences of stakeholders are continuously changing and there is a risk that in the absence of targeted information their interest in APAARI will diminish.
- Frequent staff turnover in APAARI might affect the implementation of KM and communication activities.

Annex 3: Stakeholder Mapping

Each APAARI stakeholder group – primary, secondary and key – requires a separate strategy to mobilize their contribution to the collective action of APAARI. The key tool of the stakeholder mapping exercise that APAARI uses to identify and prioritize stakeholders as a basis for the development of communication strategies, is a power/interest grid. The grid is used to classify primary stakeholders according to their influence over AFRIS (power) and by their interest in the collective action of APAARI. The stakeholders' position on the grid suggests what actions must be undertaken towards each of them:

- High influence, high interest: These are the stakeholders APAARI must fully engage with, and make the greatest efforts to satisfy. They need to be informed and consulted about all APAARI activities. In addition to sending them regular newsletters and ANH, they need to receive specific information by e-mail and be invited to APAARI-supported events.

- High influence, low interest: These are the stakeholders APAARI must put enough work in to keep them satisfied, but not so much that they become bored or annoyed. APAARI newsletters and ANH should be the targeted communication for this group. Efforts must be made to include this group as followers on APAARI Social Media and invite them to APAARI-supported events to raise their interest in the Association.

- Low influence, high interest: These are the stakeholders that APAARI needs to keep adequately informed, and talk to them regularly. These can often be very helpful with activities and/or projects. By including them in APAARI capacity development activities, the Association will contribute to raising their influence within AFRIS.

- Low influence, low interest: These stakeholders need to be monitored with minimum effort, but APAARI needs to avoid boring them with excessive communication. APAARI newsletters and ANH should be targeted communication for this group.

The stakeholder mapping will be APAARI's key tool that will be updated in a shared document system to allow all APAARI staff to add and assess new stakeholders that have potential to become APAARI's members or partners. It will also serve to categorize these stakeholders to determine the level of communication and engagement based on their interest in APAARI and influence over AFRIS.

Annex 4: Main Communication Channels

APAARI website

The APAARI website has been the Association's key public information platform since its establishment in 1990. To keep abreast with technology trends, it is important to ensure that the website's infrastructure is up-to-date and user-friendly to enable easy and immediate access to information and knowledge on agri-food research and innovations. The assessment of the APAARI website conducted in January 2016 identified key issues and made recommendations that led to the development of a new APAARI website in 2017. The new website is based on a WordPress mobile-friendly content management system, with a new design and re-organized content. APAARI's social media channels will be promoted through integration within the website.

APAARI Newsletter

In addition to the APAARI website**, APAARI newsletter** has been used as the main communication tool sharing activities, events and news of APAARI's members and partners, reaching out to stakeholders through global access (e-mail and website), as well as a limited number of printed copies. The content is based on a regular call for inputs that are received from APAARI members and partners. The newsletter will continue to be published in June and December every year. Due to its length, the focus will be on electronic dissemination using the Constant Contact software linked to the APAARI website, with limited printed copies to be disseminated in meetings.

APAARI Network Highlights (ANH)

An online communication tool published bi-monthly aims to highlight, promote and share the latest news from among the APAARI network. It is based on a short editorial and links under headlines such as news and announcements, upcoming events and opportunities, latest publications and stories. The content is researched by APAARI KM staff and consulted with KM focal points. The ANH is sent directly to a list of recipients by e-mail every two months.

Success stories

APAARI will continue publishing success stories to showcase the diverse efforts in agricultural research and innovations, and demonstrate the variety of good practices, technologies and lessons learned to help speed up their replication. These stories will be thematic and will be prepared in collaboration with members and partners. They will include, for example, stories on CD for AIS, e-agriculture, and women and youth in agriculture.

Status reports

APAARI Country Status Reports will be produced on various issues faced by the agri-food research and innovations systems to keep track of the development and progress in the respective areas. These reports will be related to, for example, the level and scope of investment in agri-food research and innovations, the use of and trends in ICT, and other thematic areas of concern. They will be linked to thematic events supported by APAARI.

Progress reports

Progress reports will be prepared every six months to monitor the progress of APAARI-supported activities. While the six-monthly report will be an informal document served

mostly to keep track of projects and activities of the Association, annual (progress) reports will become more comprehensive and serve as a formal document (publication) to be shared with key stakeholders to be available online and in hard copy.

Technology factsheets

Technology factsheets will be developed in collaboration with interested APAARI members and partners to document existing agricultural technologies that are sustainable and suitable to small-farmers in Asia and the Pacific region.

Policy briefs

Evidence-based policy briefs that APAARI will develop jointly with partners, will bring together local, regional and global evidence to inform policy dialogue on matters of strategic importance. These policy briefs will describe a policy problem, then summarize the best available evidence to clarify the size and nature of the problem faced by agri-food research and innovation systems, describe the likely impacts of key options for addressing the problem, and inform considerations about potential barriers to implementing the options and strategies for addressing these barriers. An example of such a policy brief will be one on increasing and improving investments in agri-food research and innovation systems that will be developed through the Agricultural Science and Technology Indicators (ASTI) project.

Thematic guidelines

Thematic guidelines that will be developed jointly with partners will provide technical and policy guidance to key priority thematic areas of APAARI: (i) Mobilization, management and use of natural resources for sustainability of AFS; (ii) Management of risks and uncertainties in the AFS; (iii) Inclusive development and integration of value chains targeted at benefiting smallholders; and (iv) Analysis, strengthening and formulation of public policies and overarching regulatory frameworks to support the transformation and development of AFS.

Proceedings of meetings

The diverse meetings that APAARI supports, such as expert consultations, policy dialogue, capacity development workshops and seminars, will be documented in meeting proceedings, with printed copies to be sent to each participant. In addition to the highlights of the proceedings, they will also offer reflections on the discussed topics, substantive synthesis of the outcomes, and a standard meeting evaluation in an agreed format that will serve as a basis for improving future events.
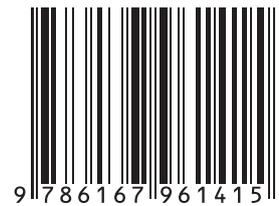
Social media

APAARI has presence through a number of social media channels including Facebook, Twitter, Blog, Flickr, LinkedIn and Slideshare, to channel its advocacy and outreach efforts. Facebook and Twitter have been particularly effective in advocating for the important role that AFRIS is playing in socio-economic development and promoting agricultural research and innovations of APAARI members and partners. APAARI will continue using and enriching these tools by sharing knowledge generated by its members and partners, promoting existing stories, connecting with new stakeholders and sharing highlights of APAARI-supported activities. LinkedIn will also be used to share knowledge and information generated by members, partners and other stakeholders, reaching out to those stakeholders who are not using the other social media tools. LinkedIn will also be used to disseminate vacancy announcements to reach out to and attract a wider professional community, as well as to facilitate online

discussions. Slideshare will be used to share presentations from APAARI-supported policy dialogues, expert consultations and capacity development programmes, to enable its stakeholders to access these materials in an easy and timely manner. The APAARI Blog will be promoted among APAARI members and partners who will be invited to share articles, op-eds and comments. Flickr will be reorganized and updated with new photos to enhance its content.

Other communication tools

To support its communication and advocacy efforts, APAARI will also use two types of flyers to inform its stakeholders: (i) generally about what APAARI is; and (ii) provide information on membership and how to become a member. A USB bracelet with APAARI's resources will be distributed to meeting participants, and various posters – About APAARI, and activity posters – will be demonstrated at these events. Finally, APAARI will also use its folder developed in 2017 that has been designed as a communication toolkit reflecting APAARI's new branding. It will contain the key communication products of the Association to support its interactions with new and potential stakeholders (especially donors), and improve its visibility.

Asia-Pacific Association of Agricultural Research Institutions (APAARI)