

STRENGTHENING EVIDENCE-BASED DECISION-MAKING IN AFRICAN AGRICULTURAL TECHNOLOGY

AATF KNOWLEDGE HUB ON AGRICULTURAL TECHNOLOGY

CONCEPT NOTE AND TERMS OF REFERENCE

INTRODUCTION

AATF is driven by the vision of a prosperous, resilient, food and nutrition-secure Africa, where smallholder farmers' livelihoods are transformed through agricultural innovations. Created in 2003 in response to the need for an effective mechanism to support access to technology for smallholder farmers in Sub-Saharan Africa (SSA), AATF has, in the last two decades, dedicated itself to promoting access, adaptation, and adoption of innovative agricultural technologies that effectively address farmer productivity constraints highlighted above. Any meaningful effort to secure Africa's future must address the persistent low agricultural productivity. Improved access to agricultural technologies will enable farmers in Africa to sustainably boost productivity and reduce hunger and poverty without significantly expanding land under cultivation.

AATF launched a new strategy for 2023-2027 with the theme "Transforming farmer's livelihoods in Africa through innovative agricultural technologies". The strategy has three strategic objectives namely:

Diversify agricultural technologies and expand frontiers for next-gen products in Africa: That guides continued and expanded work on existing and new biotech as well as conventional technologies that address farmers' needs in Africa.

Accelerate commercialization and scaling of agricultural technologies in Africa: That will ensure the benefits of agricultural technologies are realized by target beneficiaries through efficient market systems that respond to the demand and supply of agricultural technologies, placing emphasis on commercialization and scaling.

Promote the creation of a functional enabling environment for increased uptake of agricultural technologies and efficient markets in Africa: That aims to support and promote access and delivery of technologies through functional policy and regulatory enabling environments.

The new strategy affirms AATF's commitment to innovative and sustainable delivery of agricultural technologies as a contributor to food and nutrition security and economic growth in Africa.

KNOWLEDGE MANAGEMENT AT AATF

Knowledge Management forms a core part of the new AATF strategy 2023-2027. In particular, Cross-Cutting Priority 4 (CCP4) in the strategy, envisions improved understanding and evidence-based decision-making on science, technology, and innovations. This will be, driven by a robust AATF Knowledge Management approach that will prioritize AATF's key domain knowledge¹ in agricultural technology transfer including models, processes, policy insights, and best practices. It encompasses mission-critical, data, knowledge assets, and information to achieve the dual goals of i) timely, and relevant external dissemination, and ii) strengthened internal sharing, learning, and leveraging of shared expertise within the organization. Ultimately, AATF KM processes will increase access and utilization of knowledge products on agricultural technologies by diverse users including technical and project teams, individuals, institutions, and governments.

CCP4 aspires to 'Build knowledge and foster evidence-based decision-making by providing technology-based education that will be critical for transformative growth; supporting data-driven processes and analytics to strengthen our information sharing and influencing capabilities, while encouraging farmers to adopt new inputs and good agricultural practices (GAPs).'

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¹ https://en.wikipedia.org/wiki/Domain knowledge

In pursuit of this goal, AATF aims to become the 'go-to' organization for information on trends, lessons, models, and insights on agricultural technology and innovation in Africa. AATF will use its knowledge activities, both tacit and explicit² to raise the profile of the role of science, technology, and innovation in African agriculture.

AATF recognizes that the agricultural technology field is changing rapidly. To remain competitive as a valued source of information, knowledge systems must stay in sync with a sector that places a premium on speed, efficiency, effectiveness, and user-centred knowledge transfer in a digital world.

AATF adopts the definition of Knowledge Management as the process of creating, organizing, using, and sharing collective knowledge³. An effective KM approach will incorporate flexibility, scalability, and efficiency as core attributes, to better capture tacit and explicit knowledge embedded in the organization, its processes and activities. AATF Knowledge Management approach covers Processes, Technology, Structures, People, and Culture⁴ that underly effective use of information. To this end, AATF aims to set up of a Knowledge Hub on Agricultural Technology as one of the key steps to support education and effective decision-making in technology access and commercialization.

WHY A KNOWLEDGE HUB?

The new AATF strategy 2023-2027, envisions AATF as a thought leader and strategic information dissemination agent on agricultural technology and innovation policy, uptake, and utilization in Africa, deriving from work across the three strategic objectives, the supporting cross-cutting priorities, as well as various learning opportunities that arise from work with diverse partners.

A robust knowledge hub will allow AATF leadership and project teams to strengthen the provision of in-depth, and timely information on agricultural technology policy, data, trends, insights, and models from a central repository that can be easily accessed and used by individuals or organizations beyond AATF.

The knowledge hub will play a crucial role in capturing, curating, and repackaging critical information on agricultural technologies and innovation that currently resides in multiple locations within the organization and its partnerships, but without the benefit of a centralized external and internal-facing repository for ease of access, and reuse by various audiences.

The knowledge hub will strengthen AATF's external dissemination of tacit knowledge on agricultural technologies and innovation, providing value to key audiences but also encouraging and supporting increased collaboration and internal sharing of tacit knowledge among teams to harness the organization's power of collective expertise.

Effective mapping of AATF's knowledge assets will highlight several useful knowledge domains⁵, where AATF experience, expertise, and insights in the agricultural technology sector is evident. While an exhaustive mapping exercise will help illuminate core knowledge domains that drive value for AATF, the strategic planning process for the 2023-2027 period has provided an early opportunity to narrow down the initial scope, especially as it relates to knowledge domains covered under the three strategic objectives of the organization.

For purposes of this concept note, the scope for change in the knowledge processes will focus on the establishment of a contemporary knowledge hub for technical information and knowledge

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³ https://en.wikipedia.org/wiki/Knowledge_management

⁴ https://edge.siriuscom.com/strategy/8-steps-to-implementing-a-knowledge-management-program-at-your-organization

⁵ https://en.wikipedia.org/wiki/Domain_knowledge

gathering, curating, and sharing for the three strategic objective areas of AATF, the supporting intermediate result areas, as well as the identified cross-cutting priorities.

Recognizing that it is impractical to try to capture every piece of information within such a system – a common weakness with traditional KM approaches - the AATF Knowledge Hub will initially limit itself to the external and internal dissemination objectives that help harness AATF Mission-critical information in its core domain knowledge areas, to showcase AATF's expertise and leadership in Agricultural technology transfer processes, sharing sector insights, building a strong brand reputation, and cultivating a vibrant internal information-sharing culture.

THE SCOPE AND ASPIRATION

The greater vision for a vibrant AATF KM approach is captured in the propositions below, which form the bedrock of discussions on KM at AATF:

- a. A fully-fledged Knowledge Management Hub that will coordinate the development and implementation of facilitative operational processes, lead the acquisition of appropriate technology and manage agricultural technology media and resource centre.
- b. A database and library of African Agricultural technology information and statistics covering topics such as demand patterns, adoption rates, product releases, yield impacts including cost-benefit information, laws and statutes, IPR, biotech scientists, facilities, biosafety issues etc.
- c. A data repository and analytical systems including capacity for collection, collation, curation and utilisation to discover patterns and underlying short and long-term trends in the African agriculture technology space.
- d. Information synthesis into compelling well packaged high quality knowledge products in formats that will inform decision making including biannual thematic research reports covering specific topics of interest such as risk and safety analyses and information on relevant biotechnologies, and trends analysis.
- e. Networks and systems for dissemination and deployment of information including utilisation of county and state government systems; digital information platforms for mass communication, promotion of products, and sending alerts.
- f. Information command centre for dissemination and collection of feedback on agricultural technologies.
- g. Capacity strengthening of the Knowledge Hub operators and user trainers (ToT) for better management of the hub.

SCOPE OF CURRENT KNOWLEDGE GENERATION AT AATF

AATF utilizes a variety of information-gathering and sharing processes aligned with the delivery of corporate and project-level results.

What we gather

Understanding the full scope of current information and knowledge generation activities, opportunities and products at AATF is critical to ensure the full use of these assets. These products include field activity reports, donor reports, annual reports, financial reports, corporate briefs, project summaries, case studies, field photographs, videos, brochures, pamphlets, FAQs, opinion pieces, speeches, presentations, journal papers, policy briefs, media interviews, and many other ad hoc documents arising from partner interactions and other forums.

Like most organizations working in a rapidly evolving information landscape, AATF is alive to the real risk that a significant proportion of potentially useful information could fall through the cracks, remaining only as tacit and implicit knowledge⁶, or as incomplete documentation.

How we store

The level of synergy between knowledge-gathering and storage systems can determine efficiency and effectiveness in learning and sharing. The systems (IT) and processes (archiving and retrieval) need to align.

Information and knowledge storage systems at AATF include digital platforms that cover a range of functions.

Notably, AATF has recently completed a review of some of these systems and platforms with the aim of streamlining their management, collaborative initiatives, maintenance, and review of all central repositories.

Ongoing processes have sought to answer key questions including how these systems compare with the latest in the market, whether the storage systems are well suited to incentivize information gathering and timely processing, if the systems make work intuitive and rewarding and the kinds of opportunities availed to strengthen synergy in the information storage systems.

How we share

Dissemination of knowledge at AATF deploys different tools and approaches. The website is the primary external face of the organization, used to share news, updates, and general information with external audiences.

In addition, project outputs, outcomes, and research findings are shared through, publications, seminars, workshops, meetings, and conferences.

AATF has also developed several high-profile interpersonal knowledge-sharing platforms such as the STI Conference, ACAT, ISTRC, and KIKAO. These platforms offer AATF the opportunity to demonstrate thought leadership in agricultural technologies regionally and in the international arena.

Social media is another avenue for sharing AATF information. Social media introduces the additional benefits of overcoming geographic limitations, infusing immediacy, and strengthening audience engagement which are all positive attributes for AATF information dissemination. Social media engagement statistics and media coverage monitoring have helped gauge the level of awareness by audiences about what AATF does.

OBJECTIVES OF THE KNOWLEDGE HUB

AATF aims to set up of a Knowledge Hub on Agricultural Technology to support education and effective decision-making in technology access and commercialisation. The Hub will provide credible and evidence-based information and knowledge in ways that can be accessed and understood by different audiences and for different needs. The Hub will provide opportunity for aggregating information drawing from its multiple partner countries and regions to meta-analyze, synthesize, juxtapose and compare information in order to unearth patterns and trends, information and knowledge that will form a knowledge base to be deployed for different purposes such as advocacy for better policy and regulation; demonstration of benefits of technology for productivity, industrialization, income, jobs, investment and nutrition etc.

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⁶ https://bloomfire.com/blog/implicit-tacit-explicit-knowledge/

The Hub will utilise modern ICT to enhance access to and processing of real-time, online information. It will also utilise digital tools and social media for efficient and effective information sharing.

The knowledge hub will contribute to:

- Improve external dissemination of AATF domain knowledge on agricultural technologies.
- Encourage codification, curating, archiving, findability, and sharing of tacit knowledge on agricultural technology transfer among AATF staff.

The attached Terms of Reference set out the tasks required to establish the hub.