



AFRICAN FOOD REGULATORY AUTHORITIES FORUM (AFRAF)

Towards an African Consortium of Food Science and Technology Institutes

Building the Scientific and Technological Foundation for Food Production, Innovation, Safety and Regulation in Africa

DISCUSSION CONCEPT | October 2026

Prepared for the **Third Meeting of the African Food Regulatory Authorities Forum (AFRAF)**, Cairo, Egypt.

1 Background and Rationale

Africa's transformation of its food systems will depend not only on improved agricultural production, but also on the continent's ability to transform agricultural commodities into safe, nutritious, stable, innovative and competitive food products. Food science and technology (FST) lies at the centre of this transformation.

Food scientists and technologists provide the knowledge and expertise needed to improve food processing and preservation; reduce post-harvest losses; develop new products and processes; support food manufacturers, particularly SMEs; improve food quality and safety; and facilitate the commercialization of research and innovation. Equally important, these disciplines provide much of the scientific foundation upon which modern food regulatory systems depend.

Risk assessment, establishment of food standards, validation of analytical methods, evaluation of new ingredients and technologies, assessment of food processing interventions, exposure assessment and many other regulatory decisions require access to multidisciplinary scientific expertise and reliable data. Strengthening food regulatory systems in Africa must therefore be accompanied by strengthening the scientific ecosystem that supports those systems.

This creates an opportunity to establish an **African Consortium of Food Science and Technology Institutes**: a network connecting national professional institutes, associations and related scientific organizations, while supporting countries wishing to establish or strengthen their own national structures.

The Consortium would not replace existing scientific organizations, academic institutions, regional associations or regulatory networks. Rather, it would provide a mechanism for connecting these capacities, expanding them where gaps exist, and mobilizing them in support of African food-system priorities.

2 Learning from 50 Years of the Nigerian Experience

The experience of the **Nigerian Institute of Food Science and Technology (NIFST)** provides an important African model.

Established in 1976, NIFST reaches its 50-year milestone in 2026. It was conceived as a professional platform capable of bringing together food professionals from academia, research institutions, government and industry. Over five decades, this model has enabled the Institute to contribute simultaneously to professional development, education, research, industrial development and public policy.¹

NIFST's experience illustrates the value of creating a permanent interface between sectors that can otherwise operate independently. The Institute has contributed to the development of food science and technology curricula, participated in accreditation activities, organized scientific conferences and professional training, supported SMEs and food processors, and disseminated research through the *Nigerian Food Journal*. It has also interacted with regulatory and standards organizations and contributed scientific and technical perspectives relevant to food policy and regulation.²

Importantly, the Nigerian experience has extended beyond national boundaries. NIFST describes itself as having been a driving force in the establishment and development of the West African Association of Food Science and Technology (WAAFoST). WAAFoST is recognized by the International Union of Food Science and Technology (IUFoST) as one of its regional groupings, providing a mechanism for mobilizing food science and technology expertise regionally.³

NIFST's 50th Annual Conference in October 2026 is appropriately focused on transforming food research into enterprise through innovation and commercialization for sustainable development—illustrating the continuing evolution of the profession from knowledge generation toward application, innovation and economic development.⁴

This experience suggests a model that could be adapted—not simply replicated—across Africa.

3 A Proposed African Consortium

The proposed African Consortium of Food Science and Technology Institutes would bring together existing national institutes and associations of food science and technology and provide support for the creation of comparable structures in countries where they do not yet exist.

Its overarching objective would be to **strengthen and connect Africa's food science and technology capacity** in support of food-system transformation, industrial development, innovation, food safety and science-based regulation.

The Consortium could pursue five mutually reinforcing functions:

1 Developing Africa's food science and technology talent

Strengthen education, continuing professional development, mentoring and professional recognition in food science and technology, while creating stronger connections between universities and the competencies required by industry and regulatory authorities.

¹Nigerian Institute of Food Science and Technology (NIFST).

²Ibid.

³Ibid.

⁴NIFST, 50th Annual Conference event information (events.nifst.org).

2 Supporting food production, processing and innovation

Mobilize expertise to support food manufacturers, entrepreneurs and SMEs in product development, process optimization, preservation, packaging, quality management, reduction of food losses and commercialization of innovation.

3 Providing scientific capacity for food safety and regulation

Create mechanisms through which regulators can access expertise in food chemistry, microbiology, toxicology, processing, analytical sciences, nutrition, exposure assessment and other disciplines needed for risk analysis and regulatory decision-making.

4 Generating and mobilizing African data

Encourage coordinated research and data generation on African foods, processing practices, contaminants, composition, occurrence, consumption and emerging technologies. Such information can progressively strengthen the African evidence base supporting risk assessment, standards development and regulatory decisions. Regional experience already demonstrates the value of networks connecting laboratories, research institutions and policy platforms to translate scientific knowledge into stronger food-safety capacity.⁵

5 Creating an African community of food science and technology practice

Facilitate mobility of expertise, South–South cooperation, joint research, scientific conferences, professional exchanges and collaboration between national institutes, while connecting African professionals with established international networks.

4 Developing an African Guidance Model for National Institutes

An important early deliverable of the Consortium could be the preparation of a **Guide for Establishing and Strengthening National Institutes of Food Science and Technology in Africa**.

The purpose would not be to impose a single institutional model. Countries have different legal systems, regulatory architectures, academic environments and levels of food-industry development. Rather, the Guide would identify the essential functions and alternative institutional models that countries could adapt to their circumstances.

Drawing upon the NIFST experience and models from other African and international professional organizations, the Guide could address:

- legal and institutional options for establishing a national institute or professional association;
- governance, membership and sustainable financing models;
- relationships with universities and research institutions;
- engagement with food manufacturers, SMEs and industry associations;
- interfaces with food regulatory authorities, standards bodies and Codex structures;
- competency frameworks and professional development;
- academic curriculum development and possible benchmarking of training programmes;
- mechanisms for mobilizing scientific experts in support of regulatory needs;
- research, innovation and technology-transfer functions;
- scientific publications, conferences and knowledge dissemination;
- support for young scientists and emerging professionals; and

⁵Food and Agriculture Organization of the United Nations (FAO).

- regional and international cooperation.

Countries would therefore be able to develop organizations reflecting their own environments while participating in a common African network.

5 A Symbiotic Relationship with Food Regulatory Authorities

The Consortium would offer a particularly important opportunity for collaboration with AFRAF.

Food regulatory authorities identify scientific questions requiring answers. Universities and research institutions generate knowledge and train scientists. Industry translates science into products and processes. Professional food science and technology organizations can provide the connecting infrastructure between these communities.

The relationship should therefore be **deliberately symbiotic**.

AFRAF could help articulate continental and national regulatory science needs, while the Consortium could mobilize scientific expertise, research partnerships, training capacity and data-generation initiatives to respond to those needs. The Consortium could also interact with the AFRAF Academy, the AFRAF work on Risk-Based Oversight, and initiatives concerned with modernizing food regulation and enabling responsible food innovation.

Such cooperation could progressively create a pipeline through which African scientific talent and African-generated evidence become increasingly available to support African regulatory decisions.

6 Proposed Next Steps

The Third AFRAF Meeting could initiate a consultation among interested food science and technology institutes, food regulatory authorities, universities, research organizations, industry representatives and development partners.

As a first step, NIFST, drawing upon its 50 years of institutional experience, could be invited to help convene this discussion, together with interested counterparts from other parts of Africa.

An initial task group could subsequently:

1. map existing national and regional food science and technology organizations across Africa;
2. document successful institutional models and identify countries where institutional gaps remain;
3. develop the proposed guidance for establishing or strengthening national institutes;
4. identify priority areas for scientific cooperation, talent development and data generation; and
5. propose a governance and cooperation model for an African Consortium.

The objective should be pragmatic: to connect what already exists, strengthen what needs support, and help create what is missing.

Africa possesses substantial scientific talent. The opportunity is to organize that talent into durable national and continental communities capable of supporting food production, innovation, food safety and modern regulatory systems.

The 50-year experience of NIFST demonstrates what can be achieved when academia, industry, government, research and the food science profession are brought together around a common purpose. The next opportunity is to explore how that experience—and those of other successful African organizations—can help build a connected food science and technology infrastructure serving the entire continent.