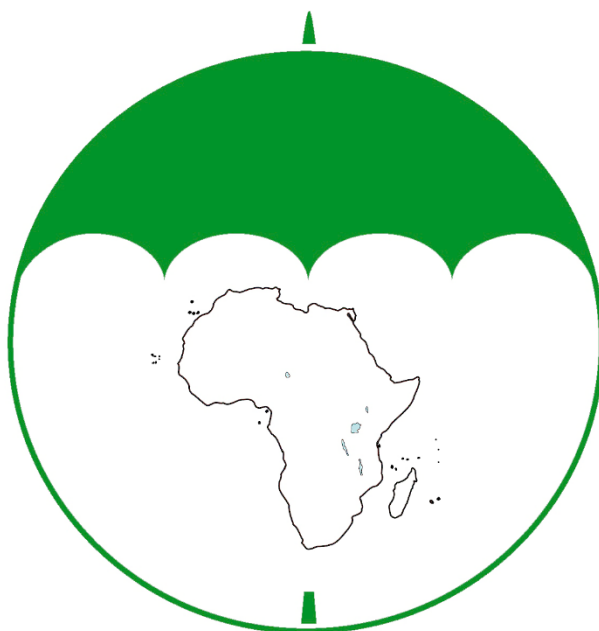


# Terms of Reference



<b>CONTRACTING ORGANIZATION</b>	<b>AFRICAN ORGANISATION FOR STANDARDISATION</b> P. O. Box 57363 - 00200, NAROB, KENYA 3rd Floor, International House, Mama Ngina Street Tel: +254 20 2224561/311608 E-mail: arso@arso-organ.org
<b>CONSULTANCY TERMS OF REFERENCE</b>	<b>DEVELOPMENT OF TRAINING MODULES</b>
<b>CONSULTANT</b>	
	<b>P. O. Box</b>
	<b>Tel:</b>
	<b>Email:</b>
	<b>Duration:</b>
	<b>Total Pay: To be Part of Financial Proposal</b>

ARSO Central Secretariat  
Nairobi, Kenya  
September 2022

## Terms of Reference for Development of Training Modules

### 1. Background

The implementation of standards for the agriculture sector in Africa remains a challenge due to unavailability of suitably developed training modules and training delivery. Trade in agriculture and food products is highly dependent on food safety, quality and limiting food losses and waste for overall economic impact. Increasingly, preventive approaches are being utilized to achieve these objectives. These preventive approaches include good agricultural practices (GAP), good manufacturing practices (GMP), hazard analysis critical control point (HACCP) and good husbandry practices (GHP) among other systems. The application of the HACCP management system ensures that food safety is addressed through the analysis and control of biological, chemical, and physical hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product. Implementing GAP during on-farm and post production processes lead to safe agri-produce while taking into account economic, social and environmental sustainability.

### 2. Objectives of Developing Training Modules for African Agricultural Products

This assignment is aimed at developing training materials based on the approved standards for use in training a wide range of identified stakeholders as well as trainers, inspectors and certification bodies. The training modules are aimed at (1) facilitating the understanding of the requirements of the standards among stakeholders, (2) streamlining operations of producers and processors, (3) better understanding among regulators on the best means of regulatory intervention, (4) formalizing the documentation of GAPs, GMPs and other good practices to create confidence among consumers and export markets, (5) paving the way for certification of facilities, personnel and products and capacities of government officials to implement a common certification mechanism.

### 3. Development of Training Modules: Outputs

(1) Develop detailed training modules cover the following scopes:

- (i) ARS TM 01:2023, *Code of hygienic practice for milk and milk products*
- (ii) ARS TM 02:2023, *Dairy animals feeds selection, composition and feeding regimes*
- (iii) ARS TM 03:2023, *Milk value addition for farmers (yoghurt, cheese, ghee, butter, fermented milks etc)*
- (iv) ARS TM 04:2023, *Industrial dairy products processes, packaging and shelf-life extension*
- (v) ARS TM 05:2023, *Organic dairy production — Farm production processes*
- (vi) ARS TM 06:2023, *Common livestock diseases, how to identify them and remedies*
- (vii) ARS TM 07:2023, *Livestock breeding methods (husbandry, free-range pasture-fed, extensive, semi-intensive, intensive/zero-grazing, etc)*
- (viii) ARS TM 08:2023, *Hay, silage and feedstuff production — Good practices for selection, sustainable growing, harvesting and preparation of forage, fodder and feed crops*
- (ix) ARS TM 09:2023, *Fresh vegetables, fresh-cut vegetables and vegetable products packaging*
- (x) ARS TM 10:2023, *Good practices for housing and inhouse feeding of livestock (mammals, birds)*

- (xi) ARS TM 11:2023, *Fruits and vegetables market layout, construction, operation and maintenance*
- (xii) ARS TM 12:2023, *Good agricultural practices (GAP) for fruits and vegetables — Greenhouse and open-field production*
- (xiii) ARS TM 13:2023, *Dehydration and drying of fruits and vegetables — Products, procedures, processes, good practices and selection of dryer design technologies*
- (xiv) ARS TM 14:2023, *Canning fruits and vegetables — Principles and code of practice*
- (xv) ARS TM 15:2023, *Vegetable fermentation and pickling*
- (xvi) ARS TM 16:2023, *Processing of fruit and vegetable juices, pulps, jams, blends and other value-added products*
- (xvii) ARS TM 17:2023, *Code of practice for fish and fishery products*
- (xviii) ARS TM 18:2023, *Fish market layout, construction, operation and maintenance*
- (xix) ARS TM 19:2023, *Fish breeding and hatchery management*
- (xx) ARS TM 20:2023, *Fish feed formulation, production and feeding management*
- (xxi) ARS TM 21:2023, *Selection and construction of fish rearing devices, equipment, structures and systems*
- (xxii) ARS TM 22:2023, *Fish farm practices and human resources management (including occupational health and safety)*
- (xxiii) ARS TM 23:2023, *Aquaculture practices in management of fish diseases/health and biosecurity (including water quality, pollution control, environmental management, etc)*
- (xxiv) ARS TM 24:2023, *Fish processing, packaging, value addition and branding and marketing (including dried fish, surimi, fish fingers, snacks, smoked fish, fish sausages)*
- (xxv) ARS TM 25:2023, *Good manufacturing practices (GMP) for small and medium-sized traditional fish products processing establishments*
- (xxvi) ARS TM 26:2023, *Starting a fish farm enterprise*
- (xxvii) ARS TM 27:2023, *Code of hygienic practice for meat*
- (xxviii) ARS TM 28:2023, *Beef, goat, sheep and small mammal meat processing, packaging, value addition and branding and marketing (including smoked beef, dried beef and sausages of all types)*
- (xxix) ARS TM 29:2023, *Poultry meat processing, packaging, value addition and branding and marketing (including smoked chicken, dried chicken and sausages of all types)*
- (xxx) ARS TM 30:2023, *Pig meat processing, packaging, value addition and branding and marketing (including smoked pork, dried pork and sausages of all types)*
- (xxxii) ARS TM 31:2023, *Good practices in operation of animal slaughter facilities*
- (xxxiii) ARS TM 32:2023, *Organic food crops products — Products, crop fertilization and protection and postharvest handling*
- (xxxiv) ARS TM 33:2023, *Organic and grass-finished beef cattle production — Requirements*
- (xxxv) ARS TM 34:2023, *Organic aquaculture production — Requirements*
- (xxxvi) ARS TM 35:2023, *Organic poultry production — Requirements*
- (xxxvii) ARS TM 36:2023, *Seaweed production value chain*
- (xxxviii) ARS TM 37:2023, *Organic honey certification — Requirements and guidelines*
- (xxxix) ARS TM 38:2023, *Organic coffee production — Requirements*
- (xl) ARS TM 39:2023, *Organic fruits and vegetables production and post-harvest handling and storage — Requirements*
- (xli) ARS TM 40:2023, *Organic vegetable farming in greenhouse — Requirements*

- (2) For each training module, teaching notes with suggested exercises/activities and corresponding session plans. These training materials should be adaptable and flexible for use in the conduct of both face-to-face and virtual trainings.
- (3) The training materials shall be well illustrated indicating acceptable good practices and common mistakes which are not acceptable. Where the training module involves value addition processes, the consultant shall combine process charts for product development as visual aids to understanding the process and product pictorials as a means of enhancing comprehension. A non-binding example is provided in Figure 1.

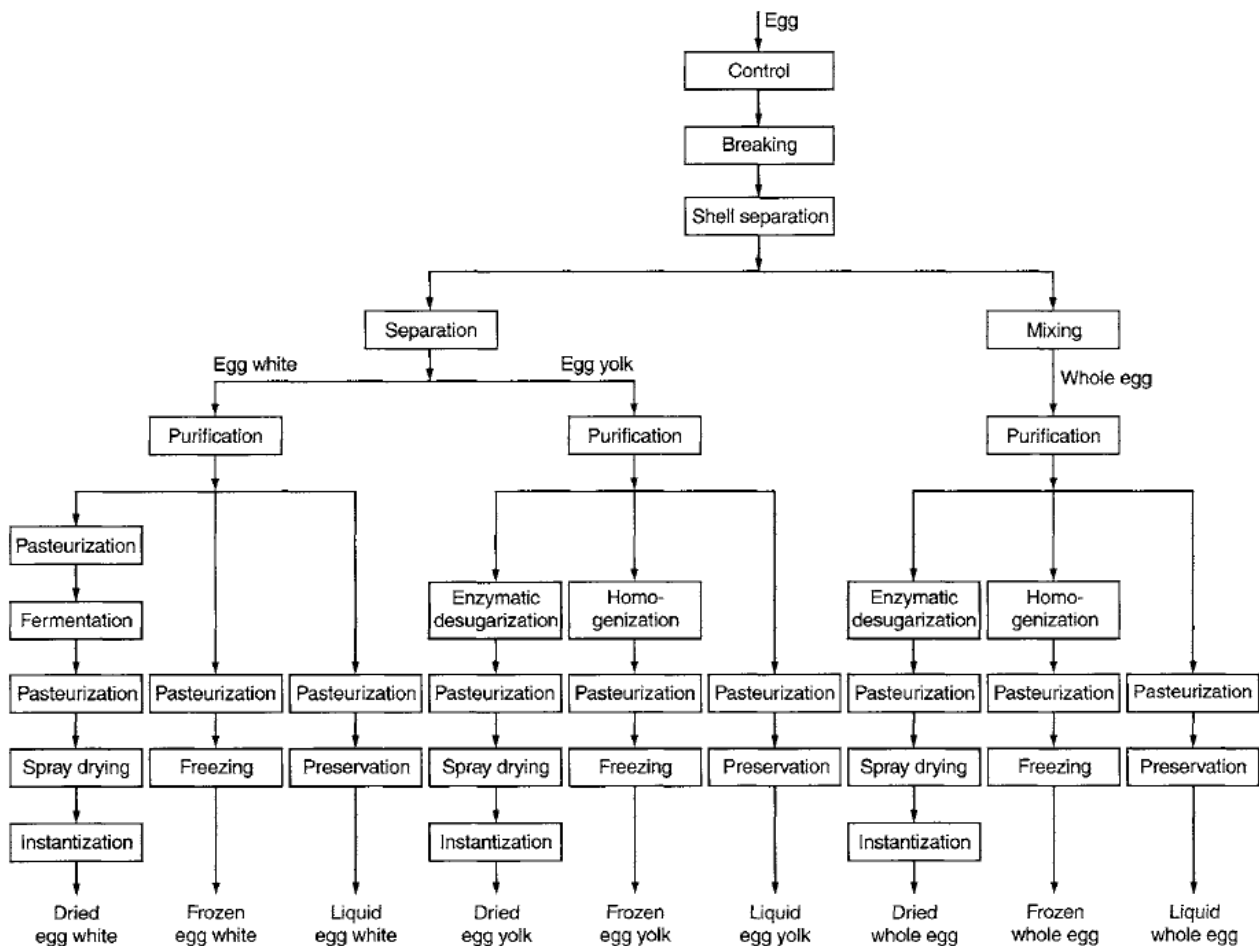


Figure 1: Schematic presentation of the production of egg products (Belitz *et al.*, 2008)

- (4) From a selection of the most significant value-added products, the consultant shall establish the criteria for the products to have standards and conformity assessment procedures established to facilitate certification and trade facilitation.

## 5. Nature of the training modules

The consultant shall prepare the training modules in the form of dedicated chapters with sufficient details and illustrations of high clarity/resolution. The modules shall have sufficient teaching notes with suggested exercises/activities and corresponding session plans. These training materials should be adaptable and flexible for use in the conduct of both face-to-face and virtual training. An outline

for determining the qualification of trainees shall be included either as a score-based exercise, group-work, homework, research exercise or a written examination.

## **6. Training Procedures**

The anticipated training methodology shall be a key consideration of the consultancy. Preparation of a training structure and content taking into account the goals and objectives as well as the intended participants. The course content will be delivered through short lectures, video presentations, group discussions, group presentations, case studies, role-play, simulation and skill practices during the training.

## **7. Implementation Methodology and Assignment Duration**

The total duration for the development of the training modules shall be six (6) months.

- The content of the training materials shall ensure there is consistency and smooth flow of the materials as well as better readability;
- Separation of the contents into logical components or training lesson plans and design of a series of instructional materials;
- Preparation of training session plans with indicative time that needs to be allocated for each concept/sections of the modules; and
- Development of evaluation forms including questions regarding relevance and effectiveness of training materials, whether the material covered the professional needs of the participant.

The teaching/learning tools should include creating teaching/learning materials with examples, list of activities, exercises and guide questions that can be used by trainers. To the extent possible, these should be drawn from Member States experiences or cases that Member States can easily relate to. The consultant must design and format the materials in a manner that is visually appealing, clear and consistent (e.g., with illustrations and graphical representations). These should be easy to read and understand as English is not the primary language of all the participants.

Taking into account the travel restrictions associated with the COVID-19 pandemic, online delivery of the training program will have to be taken into consideration in the preparation of the training materials as well as the training schedule, particularly the duration of each session. Thus, the accompanying exercises should be diverse enough for use under several circumstances. That is, those usually provided for face-to-face interaction maybe varied and substituted with ones more suitable for virtual learning.

Bidders are expected to design their own work plans ensuring delivery of the desired outputs. The bidder should provide details on its approach, specific activities, corresponding number of working days, expected completion dates and person(s) responsible.

The consultancy shall be for a period of 6 months and the key deliverables are outlined below:

- Output 1: Inception report outlining the understanding of the task, issues to be addressed, methodology and sources of information; an annotated outline of the study (within 3 weeks after signing the contract)
- Output 2: Draft Training Module (by the end of month 3)
- Output 3: Final Training Module incorporating feedback from the validation workshop (by the end of month 6)
- Output 4: PowerPoint Presentation and other visual aids

## 8. Consultant Qualifications

- At least a Master's degree or equivalent in Agriculture, Horticulture, Biology, Natural Sciences, Zoological Sciences, Entomology, Food Sciences, or related areas.
- Track record of research and publication in the area of scope of this assignment.
- Proven track record on the application of the requirements of ISO/IEC 17065:2012, which provides conformity assessment (i.e., requirements for bodies certifying products, processes and service);
- Minimum of 5 years of professional experience working in Agriculture, Horticulture, Biology, Natural Sciences, Zoological Sciences, Entomology, Food Sciences, or related areas.
- Experience in developing guidelines and protocols for certification.
- Proven track record in activity design and delivering technical assistance, including needs assessment, and effective capacity-building, related to fisheries, livestock, poultry, crops and agriculture, preferably in African Union Member States.
- Knowledgeable on the different GAP programmes being implemented worldwide, including the those implemented in African Union Member States.
- Extensive experience in curriculum development, instructional systems design and knowledge management.
- Skills and involvement in the development of practical and user-friendly training materials and tools for different target groups.
- Thorough understanding and good knowledge of information, education and communication (IEC) approaches, and training methods/tools suitable for non-native English speakers.
- Proven good track record in relevant consultancy work in African Union Member States, particularly in the areas of agriculture, horticulture, biology, natural sciences, zoological sciences, entomology, food sciences and trade.
- Understanding of the African Continental Free Trade Area (AfCFTA) Agreement and its work on economic community building will be an added advantage.
- Good computer skills with adequate knowledge of multi-media presentation and dissemination of outputs and documentation
- For this specific assignment fluency in English and/or French is required. Knowledge of the other is an asset.

## 9. Application process

Interested and qualified consultants should submit their applications for a maximum of Five (5) training modules, the application should include the following:

1. A CV and demonstration of accomplishment of similar assignments
2. A technical proposal for implementing the assignment highlighting the consultant understanding of the scope of the work, methodology of exclusivity and Availability for the duration of the assignment.
3. An outline of each selected training modules.
4. Financial proposal for completing the assignment highlighting the cost and its breakdowns.

## 10. Payment Schedules

The total payment shall be in two instalments as follows:

40% upon delivery of Draft Compilation (by the end of month 3).

60% upon delivering the Final Compilation and PowerPoint Presentations at the end of six months.

Formal application shall be done latest by **18th November 2022 before 5:00 p.m.**

Applications should be addressed to:

**Secretary General**

**African Organisation for Standardisation (ARSO) Central Secretariat**

**International House 3rd Floor**

**P.O. Box 57363-00200 Nairobi-Kenya**

**Tel. +254-20-2224561, +254-20-311608**

Preferably by e-mail to: [info@arso-oran.org](mailto:info@arso-oran.org), [arso@arso-oran.org](mailto:arso@arso-oran.org) and [arsopit@arso-oran.org](mailto:arsopit@arso-oran.org)

## REFERENCES

Belitz, H.-D., Grosch, W., & Schieberle, P. (2008). Eggs. In *Food Chemistry* (4th Ed, pp. 546–562). Springer-Verlag Berlin Heidelberg. [https://doi.org/10.1007/978-3-540-69934-7\\_12](https://doi.org/10.1007/978-3-540-69934-7_12)

