PROJECT IMPLEMENTATION PLAN ADDENDUM

27 February 2015

1.	**Project Code**	13-AG-23-GE-TRC-A
2.	**Project Title**	Self-learning e-Course on Value Addition to Agriculture Products
3.	**Timing:**	2 March–31 July 2015 (five months)
4.	**Implementing Organizations:**	APO Secretariat and National Productivity Organizations (NPOs)
5.	**Addendum No.**	1
6.	**Reference:**	APO Project Notification 13-AG-23-GE-TRC-A dated 7 May 2013; and APO Project Implementation Plan 13-AG-23-GE-TRC-A dated 24 September 2014
7.	**Details:**	Changes in Project Implementation Plan Item No. 4 "Timing"

7-1 Change in Item No. 4 "Timing"

The timing of the Self-learning e-Course on Value Addition to Agriculture Products has been changed to **1 April to 31 August 2015** (five months).

Unless otherwise modified by the APO in writing, the provisions of the Project Notification dated 7 May 2013 and Project Implementation Plan dated 24 September 2014 pertaining to this course remain valid.

Mari Amano
Secretary-General

PROJECT IMPLEMENTATION PLAN

24 September 2014

1.	**Project Code:**	13-AG-23-GE-TRC-A
2.	**Project Title:**	Self-learning e-Course on Value Addition to Agriculture Products
3.	**Reference:**	Project Notification 13-AG-23-GE-TRC-A dated 7 May 2013
4.	**Timing:**	02 March –31 July 2015 (five months)
5.	**Implementing Organizations:**	APO Secretariat and National Productivity Organizations (NPOs)
6.	**Number of Participants:**	Approximately 400 participants
7.	**Self-registration:**	Self-registration opens from 10:00 AM Japan Standard Time on 02 March 2015 on the APO's e-learning web portal: http://www.apo-elearning.org/

Note: Participants can register directly from this portal on the APO website. Those who are already registered can access the course by using the assigned username and password. If you have forgotten your username and password, please refer to the FAQs on the home page of the portal.

8.   Objective

a.   To enhance participants' knowledge and understanding of the concepts of and various approaches to value addition to agricultural products; and

b.   To develop critical thinking and practical problem-solving skills in value addition to agricultural products.

9.   Background

The demand for agricultural and food products, both raw and processed, is expected to increase substantially, especially in emerging and growth-leading economies. This trend provides opportunities for agribusinesses, especially in most developing countries with good agriculture bases, to diversify their product lines by undertaking value-adding activities to their primary or intermediate products to produce more diversified, higher-value products.

In agribusiness, value addition may involve the initial processing of raw commodities from farms into intermediate items that are subsequently processed in further stages, adding market value at each stage. It can also refer to other processes that add market value through product differentiation. For example, food grown and processed organically or in eco-friendly ways, regionally branded food products, hormone/antibiotic-free meat, farm by-products or waste processed into goods, and certification of products that meet the specific requirements of consumers can also constitute agricultural value-added processes.

New allied enterprises can be created through value-adding activities such as storing, packaging, crating, labeling, and other postharvest handling that generates employment opportunities. The value addition concept and techniques need to be promoted, especially in developing countries, to improve productivity and create new, diversified enterprises. It is also a good strategy for stabilizing markets for farm produce to benefit small farmers.

10.   Scope and Methodology

This course will focus on learning the basics, concepts, trends, principles, techniques, and technologies, and develop critical thinking and practical problem-solving skills utilizing Bloom's taxonomy in value addition to agricultural products. A total system approach covering the journey from farm to table will be used in this course. It will cover the following modules:

Module 1:

Value addition of cold chains and logistics for perishable agrifood products: Concepts, principles, and postharvest handling to maintain quality and safety

Key concepts, controls, and challenges; Cold chains and their importance; Time–temperature management for perishable food products; Biodegradation of perishable foods, food losses and waste, and food waste reduction; Role of cold chains in modern global trade; Economic and health importance of temperature management; Quality maintenance (water RH, water activity, respiration); Food-borne illnesses and produce safety.

Module 2:

Product development, innovation, and value addition (and quiz)

Product innovation—concept, phases in new product development; Elements in food product development; Market trends for new products; Considerations in scaling up production.

Module 3:

Functional/nutraceutical food value addition

Understanding definitions of nutraceuticals and functional foods and sources; Growing awareness of nutraceutucals and market status; Functional and medical foods—claims, functional ingredients, and health benefits; Future trends and status of nutraceutical and functional foods markets; Generating new ideas and technologies in the creation of new products.

Module 4:

Packaging and labeling for more product information and value addition (and quiz)

Key concepts in food packaging; Definition, functions, and criteria for food packaging design; Packaging materials/types of food packaging; Food packaging—uses and examples; Trends in food packaging—Active packaging; Emerging trends in food packaging.

Module 5:

Utilization of by-products and farm waste to create new products for value addition

Definitions and utilization of co-products/by-products/waste and their impact; Adding value to co-products from crop waste; Residues, animal, marine, and fishery waste to create new products; Potential creative new products from co-/by-products (food, feed, pharmaceutical/ medical, food supplements, cosmetics).

Module 6:

Emerging R&D on utilization of by-products and waste products (and quiz)

Sources of by-products: plants, animals; Emerging trends and technologies: adding value to make profits and reduce environmental risk (green technologies); Innovative new technologies (extraction, bioreactors using green, consumer-friendly solvents; Separation, ultrafiltration, and purification to recover value-added ingredients; Biotechnology and enzymology—potential practical applications, delivery systems.

Module 7:

Foods produced with natural ingredients and food ingredients derived from by-products/ waste

Trends: natural/organic food markets; Health, whole, natural, and organic foods; Sources of natural food ingredients; Food products that contain natural food ingredients; Benefits of consuming foods made from natural ingredients; Criteria for successful ingredients; Natural antimicrobials and antioxidants as food ingredients.

Module 8:

Emerging global trends in new and value-added products with successful stories

Why all natural and organic products? Halal/kosher, nutraceuticals, and functional foods; Whole grain claims: low sodium, reduced calories, no transfat, high-fiber, gluten-free, nutrient dense, convenient, safe, less expensive and tasty food for a healthy lifestyle; New and value-added products with successful stories.

Module 9:

Value addition through quality, safety, and quality assurance certification system

Need for Hazard Analysis and Critical Control Points (HACCP), Good Hygienic Practices (GHP), Good Manufacturing practices (GMP), and Product Life Monitoring (PLM); Selected food certification systems; Market trends and opportunities for items produced by certified companies.

Module   10:

Final Exam

This course consists of self-learning e-modules. This will be supplemented with additional learning materials for participants, quizzes for learning assessment, and a final exam to earn the APO certificate.

11.   Qualifications of Candidates

The target participants for this course are CEOs, product development managers and officers of agribusiness companies, officers of government and NGOs, researchers and extension officers from academia, and consultants involved in agriculture, food and agribusiness planning, or promotion and extension.

12.   Eligibility for e-Certificate

A minimum score of 70% on the final examination is required to qualify for the APO e-certificate.

Note: Participants from nonmember countries are welcome to take the course for self-development, although APO e-certificates will not be provided.

Mari Amano
Secretary-General

PROJECT NOTIFICATION

7 May 2013

1.	**Project Code**	13-AG-23-GE-TRC-A
2.	**Project Title**	Self-learning e-Courses for the Agriculture Sector
3.	**Timing**	Throughout 2013
4.	**Implementing Organizations**	APO Secretariat and National Productivity Organizations (NPOs)
5.	**Number of Participants**	Minimum 380 participants per course
6.	**Registration**	APO's e-learning web portal: http://www.apo-elearning.org/moodle19/ (Participants can register directly from this portal on the APO website.)
7.	**Objective**	To provide basic training to numerous participants in productivity tools and techniques in selected subject areas of broad significance related to the agriculture and food sectors in a cost-effective manner and create a mass of productivity professionals.

8.   Background

Depending upon the needs of APO members and relevance of subject areas, the APO develops self-learning e-courses and offers them on its e-learning portal (http://www.apo-elearning.org). These courses are developed based on the APO's experience and knowledge accumulated over years of organizing capacity-building projects in its focus areas. In 2011, the APO conducted a pilot self-learning e-course on the Occupational Health and Safety Management System (OHSAS 18001) that received positive feedback and huge success with more than 2700 participants taking the course. The APO plans to organize similar or upgraded self-learning e-courses relating to food safety management and value addition to agrifood products, etc. in 2013.

For each course, a separate project implementation plan (PIP) will be issued and it will contain specific information on the course and subject. NPOs are requested to start promoting the course only after receiving the PIP.

9. Scope and Methodology

The scope of each course will be decided based on the subject and will be detailed in the PIP issued later for each course.

Each course will consist of self-learning e-modules, additional study material for participants, intermittent quizzes for self-assessment, and a final examination to qualify for the APO certificate.

All learning modules, carefully prepared by internationally recognized experts, will be uploaded to the course site on the e-learning portal as PDF files.

10. Modality of Implementation

Courses will be offered through the APO's dedicated e-learning portal: http://www.apo-elearning.org/moodle19/. Participants can register on this portal and create their own accounts.

Registered participants are required to complete all learning modules and self-assessment quizzes before taking the final examination. Based on the results of the final examination, successful participants from APO member economies will be awarded an APO e-certificate in a PDF file. The certificates will be sent after the official duration of the course.

11. Special Features

a) Participants can register on the APO e-learning portal and create accounts by themselves.
b) Registered participants' progress will be tracked and monitored by the APO Secretariat throughout the course.
c) Participants can complete the course at their own pace within the prescribed official duration of the course.
d) Completion of all modules and quizzes is compulsory before taking the final examination.
e) A minimum score of 70 % on the final examination is required to qualify for the APO e-certificate. The e-certificates will be sent to participants' registered e-mail address after course completion.
f) Successful participants may be given preference based on merit for selection to attend future APO multicountry face-to-face projects on the same subject in consultation with NPOs.

12. Qualifications of Candidates

The target groups are productivity practitioners, consultants, managers, academics, and all professionals working in the subject area concerned. They may come from food industries, agriculture, agribusiness companies, NPOs, government organizations/departments, universities, and consultancy firms that wish to acquire a working knowledge of the subject.

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13. **Financial Arrangements**

a)   To be borne by the APO

1.   All costs related to development of the self-study modules, additional study material(s) pertaining to the course, self-assessment quizzes, and examination.

2.   Cost of hosting the course on the APO's e-learning portal and operating it from the APO Secretariat.

b)   To be borne by participating countries/NPOs

1.   Coordination and communication support during the course.

2.   Any other local costs.

14. **Actions by participating member countries/NPOs**

Each participating country/NPO is requested to:

a)   Promote and market the course by sending the project notification and PIP to as many relevant organizations as possible and encouraging all interested individuals to participate.
b)   Upload the course announcement on the NPO's website and/or provide a link to the APO's e-learning portal.
c)   Interact with registered participants and provide them with necessary inputs and guidance, if necessary.
d)   Provide all necessary support and cooperation proactively to the APO Secretariat for successful implementation of the course.

15. **Participation of Individuals from Nonmember Countries**

Participants from nonmember countries are welcome to take the course for self-development, although APO certificates will not be provided.

Ryuichiro Yamazaki
Secretary-General