

E-learning programme on Post Harvest Technology

NagaLaxmi M. Raman
Project Support Officer
**Amity International Centre for Post Harvest
Technology & Cold Chain Management**
Amity University Uttar Pradesh,
Sector-125, Expressway, Noida (U.P.) India
E-mail : nlraman@amity.edu ; nlraman@gmail.com

Training workshop on Characterisation of Fresh and Processed Fruit Quality, organised by the CUC, University of Southampton and the Nong Lam University, Vietnam funded by Leverhulme Trust, UK. Dated: 23-25 July, 2012.

Introduction

E-learning

- E-Learning is the use of technology to enable people to learn anytime and anywhere.
- E-Learning can include training, the delivery of just-in-time information and guidance from experts.
- Through e-learning, we can provide the convenience, speed and cost effectiveness with the personal touch of traditional learning.
- This technology adds to necessary appeal for teaching/learning experience in order to achieve
 - ✓ an easy assimilation of ideas based on principles such as interactivity,
 - ✓ evaluation and feedback capabilities,
 - ✓ and the integration of multiple media formats (animation, video, audio, interactive activities, etc.).

Attributes of e-learning

The four main benefits of e-learning can be summarized as:

- Learner control – of both pace and content
- Accessibility – from anywhere at any time
- Availability – just-in-time
- Personalized – it meets their own individual requirements in terms of content and assignments.

Collaboration

- Amity International Centre for Post Harvest Technology & Cold Chain Management (**AICPHT&CCM**) and **The Postharvest Education Foundation (PEF)** are in the process of setting up a model Integrated Postharvest Management Center on the Amity University campus in Noida.
- This New training center's launch in 2013, AICPHT &CCM, PEF and Tamale Polytechnic in Ghana are offering postharvest technology training via **two new Postharvest E-learning Programs for young horticultural professionals.**
- The **South Asia 2012 Postharvest E-Learning Program** is open to qualified applicants from India, Pakistan, Bhutan, Sri Lanka, Nepal and Bangladesh
- **The Global 2012 Postharvest E-Learning Program** is open to applicants from any country in the developing world.
- **The programs are being run from Amity e-learning Centre, Amity University Uttar Pradesh, Noida.**



E-LEARNING ACTIVITIES

- 1) **Postharvest training materials**
 - online via secure log-in on Amity University E-learning center website
 - provided to trainees on CDRom
- 2) **Weekly interactive sessions with instructors via www.Linkedin.com**
 - Discussions on training topics
 - Questions & answers
 - Sharing links and ideas
- 3) **Access to web-based resources and technical information**
 - Postharvest blog
 - Postharvest libraries
- 4) **E-mentoring (via email and [LinkedIn.com](http://www.Linkedin.com))**



TARGETING THE ACTIVITIES TO :

- Young postharvest professionals around the world.
- A wide range of clientele including trainers in :
 - Small and Marginal farmers,
 - postharvest professionals,
 - NGOs,
 - horticulture companies,
 - extension workers,
 - research scientists,
 - graduate students in Africa, South Asia, SE Asia and the Middle East.



OVERVIEW OF THE POSTHARVEST TRAINING AGENDA

Training materials:

A folder of training materials has been compiled for each assignment and includes a "Read first - Instructions" file.

Interactive web-based activities:

Forums: [eForum](#)-the system to clear your doubts and interact with the faculty

- **10 Assignments**
- Internet searches for orientation
- Reading assigned training materials (online and/or on CD)
- Fieldwork – data collection, interviews, observations
- Required written reports (4)
- Interactive social media ([LinkedIn.com](http://www.Linkedin.com) Postharvest Training groups, postharvest.tumblr.com blog) for Q&A sessions and mentoring
- Postharvest Tool Kit for those completing all 4 reports on time
- Site visit to Amity Postharvest Center in Noida, India or in Kigali Rwanda for the top 3 trainees (as judged by instructors)



Steps to improve the factors affecting losses and bridge the gap in knowledge/skills :

- Improve understanding of harvest indices of fruit plant and how maturity is related to quality and shelf life
- Improve sorting and grading practices during preparation for market.
- Remove damaged /decaying foods to enter the supply chain and spread decay to other fruits
- Improve quality packages which provide protection during handling, transport and storage
- Delays in marketing without proper storage (cool storage for perishables)
- General lack of education on appropriate postharvest handling practices and technologies:
 - leading to rough handling,
 - mechanical damage,
 - Improperly handled mixed loads, and
 - food safety dangers
- Lack of the utilization of sustainable cost effective postharvest practices, leading to high levels of food losses on the farm, and in wholesale and retail markets

AMITY UNIVERSITY **LEARNING MANAGEMENT SYSTEM**

Modules

Learner

Instructor

Administration

AMITY UNIVERSITY **Learner Module**

- Can undertake either web-based learning or class room learning.
- Can customize his / her learning plan.
- Teaching calendar, progress chart, and communication with teacher as well as with student community, view FAQ etc.
- Online quiz to test his knowledge.

Lesson	Books	Locality	Notes
1	1	1	1
2	1	1	1

AMITY UNIVERSITY **Administration Module**

- The entire application is controlled via the administration module.
- The user interface is user friendly.
- Exhaustive reports keep the management well informed.
- Define roles and permissions, account creation, course management, can make announcements and take back ups of the database.

Username	Role	Description
admin	Admin	Administrator
teacher	Teacher	Classroom Teacher
student	Student	Classroom Student

AMITY UNIVERSITY **Instructor Module**

- The order of the course elements.
- Assignment of learning contents to students.
- Teaching calendar, progress chart of students.
- Intercommunication with students & FAQ.
- Evaluation of Assignments.

AMITY UNIVERSITY **Video Conferencing**

Live Presentation by Dr. Kate Dr. Kate addressing the gathering at Amity

[Bael pulping/processing](#)

AMITY UNIVERSITY **EXPECTED OUTCOMES**

By the conclusion of the program, trainees can expect to:

- 1) Gain confidence in their capabilities to work with small horticultural farmers, traders and marketers in order to help them to:
 - reduce food waste and
 - **improve postharvest life of horticultural crops via practices such as:**
 - gentle handling, • improved packages,
 - low cost cooling, • storage or processing
- 2) Improve their knowledge and skills in postharvest handling and small-scale postharvest technology assessment, modification, utilization, promotion and trouble shooting in order to **reduce postharvest losses and quality problems**
- 3) **Gain access to evolving internet based postharvest resources, information and e-mentoring to support long term professional development and improved job performance**

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AMITY UNIVERSITY **CONCLUSION**

The knowledge and skills gained from this practically oriented field based training will help to improve :

- postharvest training programs for small and marginal horticultural farmers,
- the quality of extension work,
- a variety of food handlers,
- processors and
- marketers.

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AMITY UNIVERSITY **Resource Persons**

AMITY UNIVERSITY E-LEARNING CENTER

Website: <http://www.amityelearning.com/>

Dr. Susanta K. Roy : skroy@amity.edu
 Ms. NagaLaxmi M. Raman: nraman@amity.edu , nlraman@gmail.com
 Mr. Manoj Sharma : mssharma@amity.edu
 Dr. Neeru Dubey : ndubey@amity.edu
 Dr. Shailendra Kumar Dwivedi : skdwivedi@amity.edu

