

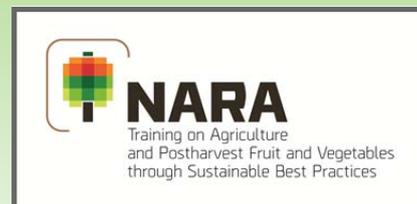
NARA Project: Training on Agriculture and postharvest fruit and vegetables through sustainable best practices

Newsletter n°3

July 2016

Dear Reader,

welcome again to the third Newsletter of the “NARA Project: Training on Agriculture and postharvest fruit and vegetables through sustainable best practices” funded by the European Commission under the Erasmus+ Program. The Newsletter aims to keep you up to date with the progress of the project and in particular with its results.



NARA information & partners

The project is co-financed by the European Union.

Program: ERASMUS +

Key Action: Cooperation for Innovation and Exchange of good practices

Field: Strategic partnerships for vocational education and training

Call: 2014

Co-ordinator:

Aula Dei Scientific and Technological Park Foundation – PCTAD (Spain)

Partners:

- * Luxembourg Institute of Science and Technology – LIST (Luxembourg)
- * Università degli Studi di Catania (UNICT) - Department of Agriculture, Food and Environment – Di3A (Italy)
- * Marketmentor Ltd (Cyprus)
- * Tecnopackaging (Spain)



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Contents:

- * NARA & partners
- * 4th meeting
- * NARA course contents
- * Dissemination
- * Piloting actions



NARA meeting in Catania last June 2016

4th meeting: Catania

Last June 15th and 16th, the fourth consortium meeting of NARA Project took place in Catania at the premises of our Italian partner, the Università degli Studi di Catania.

During this meeting a small review of the activities already carried out by the consortium, on-going and pending ones were exposed and discussed. The main objective of this meeting was to fix the latest issues of the NARA course to be able to launch the pilot e-learning platform in September.

The contents of each thematic were reviewed, including some pedagogic and practical aspects. Furthermore, Tecnopackaging, the NARA partner in charge of the e-learning platform, showed all the possibilities of the platform that is going to be used, a draft of a NARA module to check its appearance and also some examples of possible types of exercises to be implemented as the evaluation tool of the e-learning platform.

It was also agreed the beginning of the NARA piloting actions for the next September 5th in every consortium countries.

You can follow the developments of the Project by visiting the NARA Project website <http://naraproject.eu/en>

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The contents of the NARA course are already developed and now we are validating them and fixing them in the e-learning platform, which soon will be available. Here you have a summary of the contents of the different thematic areas:

Food safety

This first module of the NARA course will train farmers in understanding the importance of food safety in the food supply chain, the responsibility farmers have in this field and providing them guidance to implement GAP, HACCP and even Food Safety Schemes.

The Food Safety module is made up of two learning units called "Principles and importance of Food Safety in food supply chain, especially in farms" and "Good Safety Practices and Food Safety Regulations". Throughout the study of them, farmers will learn the basic terms of food safety, several aspects concerning contamination, hazards and foodborne diseases, but also any issue related to its control and preventive measures, including, among others, Good Hygienic Practices, Good Handling Practices and Good Agricultural Practices for farmers. In addition, an introduction to European food safety regulations is done and every key aspect to help farmers in the implementation of a HACCP System in their business is also included. Finally, a general review of the main Food Safety Standards is gathered.

Postharvest Technologies

This module is an intensive study of the biology and current technologies used for handling fruits and vegetables.

The module is focused in the latest insights in the biology of postharvest development, ripening and deterioration processes in fresh horticultural products, the most important factors for measurement, evaluation and modelling of product quality and loss and in the use of current technologies for storage, packaging and handling. Postharvest and supply chain, particularly in relation to cold storage and international transport also is included and focused on strategies in order disease reduction in stored fruits and vegetables.

The aim of this module is for participants to learn the basic principles behind the factors and processes affecting postharvest quality and understand how to apply this information in their daily practice by developing strategies to maintain postharvest quality.

Transport & Logistics

This module will allow the farmers to understand firstly the issues of storage of production in a warehouse and secondly to have a good practice guide on logistics.

This module is divided into two sub-units. The first is the Warehousing of fresh products and aims to provide keys to the user regarding warehouse, post-harvest storage conditions and preservation techniques. The second sub-unit will explain to farmers the issues of logistics in presenting the different

transport modes, the preparation of fresh products for transport, how to organize a delivery round and which document should be delivered for transport.

Soil, Water & By-products

The fourth module of the NARA course will train farmers in understanding the importance of the soil where the agricultural activities are carried out, the water, since a natural but limited resource, and the byproducts valorization in view of the multifunctionality of the agricultural sector.

In the Soil learning unit, farmers will get familiar with the process that leads to agricultural soil formation (pedogenesis), the main chemical, physical and biological properties of the agricultural soil, the importance of fertilization in agriculture and how to carry out an efficient fertilization plan, and finally the differences between conventional and conservative soil tillage techniques.

Water learning unit will help farmers to understand the importance of water and irrigation in agriculture, the different irrigation systems and how to carry out an efficient irrigation plan. Fertigation technique is also mentioned throughout the learning unit.

Finally, the byproducts learning unit shows the different byproducts, according to their inherent properties, and the related bioconversion methods are discussed. The production of compost from agricultural residues as a resource to improve the soil properties and the cascading principles on the use of byproducts to activate a bio-economy (circular economy) in Europe together with the legislation for composting and renewable energy production is introduced.

Packaging

This module will train our farmers in understanding the need of packaging, its natural purpose and the trendy options, as well as provides guidance to choose environmentally friendly alternatives.

The Packaging unit is divided in two learning subunits entitled "Packaging possibilities" and "Environmental friendly options". The former one will shed light about the general concepts of packaging that should be kept in mind when considering it for the farmer products. The course comprises concepts from the definition of packaging, passing through the standards of classification, main regulations to bear in mind or even the most common industrial transformation processes to produce them. The second subunit, immerses the student in understanding three modules: how to become more environmental friendly in terms of packaging and what kind of tools can we use to measure and show it to our clients and providers (such as the LCA and the ecolabelling); the current use of natural additives and the novelties arising around extending food shelf life, for finally show some trendy niche opportunities that may help to change the outlook of the standard food packaging view, especially for those entrepreneur farmers.

More of NARA training contents

Entrepreneurship

This final module introduces entrepreneurship in farm business and helps our farmers to obtain the necessary knowledge and skills to develop new business ventures and new business opportunities linked to the agricultural sector.

The module is made up of two learning subunits entitled “Creation, Organization and Management of a small profitable business” and “Implementation of administrative and financial issues related to farming business”. The first one concentrates on the general concepts of Entrepreneurship and trains the

participants in business planning, market penetration, market development and sales development. In addition, it presents the legal aspects concerning the business and its creation. The second subunit focuses on the financial administration of a business venture including the start-up capital and the financial statements. It also provides to the farmers the necessary knowledge on everyday management issues and the workforce management and introduces the importance of advertising and social media campaigns in entrepreneurship.

Dissemination activities



During last 6 months a new article about the NARA Project was published in the regional bimonthly newspaper, FACA, because it had been spread during the FIMA, the biggest International Fair of Agricultural Machinery, which took place last February in Zaragoza (Spain) and many farmers were going to attend the fair.



In the frame of the Fair, the V congress of Rural Development took place. This time the congress was dedicated to "Young farmers challenges" and in it,

economical, social and educational challenges were discussed. Regarding this training challenges, the NARA project was presented to the audience and also some new contacts had been made.



During the Final Conference of the Dibbiopack Project, held in Zaragoza, Spain, 24th February 2016, partners in the Project revised all technical details linked to planning, implementation and results as well as a visit to pilot lines. The final conference, accounted with institutional presence at the European, national and regional levels and included open sessions for stakeholder sectors. One of the main priorities of the act was show the awareness raising and the dissemination of knowledge on bioplastics and their application in Europe. Tecnopackaging was invited as stakeholder to share its experience in the development of biopolymer based products in the roundtable. Within this frame, the company had the chance to present the

NARA project as a different way to disseminate, educate and involve European society in the rising of a new circular economy.

Framed under the “Environment Week -University of Zaragoza 2016” last April 12th took place the “Encounter of ecoinnovative business”. The purpose of this meeting is to present the main results on products, processes and / or eco-efficient and eco-innovative projects to improve efficiency in the use of resources and energy. Tecnopackaging was invited to present its novelties in ecoinnovative products and projects and we had the opportunity to present the environmentally friendly approach of NARA project among others.



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In the frame of a conference on hemp cultivation and utilization, organized by the University of Catania - Di3A, Archè (an University association) and Kanesis (a start-up), NARA project has been presented. The conference was held on 14 May 2016, at the "Dipartimento di Agricoltura, Alimentazione e Ambiente - Di3A", Catania, Italy. Although the conference dealt with industrial hemp, it was decided to advertise NARA since several young farmers were attending it. Indeed, young farmers not only attended the conference because attracted by a renewed interest in hemp cultivation and utilization, but most of

them are keen to new systems and open to introduce agricultural innovation in their own farm, which is the main goal of NARA. The latest NARA newsletter has also been spread during the conference day.

Last May PCTAD also have visited the Specific Vocational Education School of Movera (IFPE Movera) specialized in Agricultural and Food industry education to present the NARA Project to some of the Agricultural Production VET students of level 3 EQF. We encouraged the student to participate in the Project piloting actions.



Piloting actions

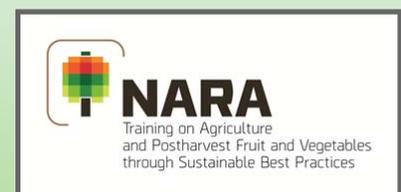
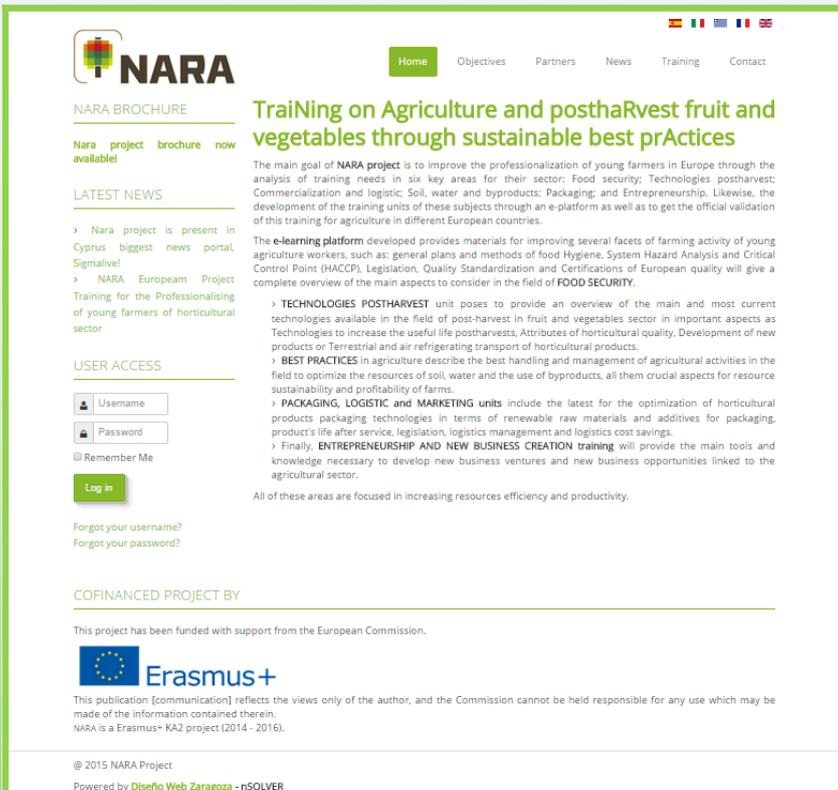
As soon as the NARA training course is internally validated, piloting actions will be carried out with a group of young farmers. So if you are interested in participating in this pilot trainings, please contact a NARA member in your country. We will be delighted to

have you enrolled in the Project. Also you can follow this link to [Register in the Pilotings.](#)

Piloting actions will begin in September 5th 2016.

What does *piloting actions* means?

Before the final launch of the NARA e-learning platform, we require the support, assistance and commitment of young farmers to make sure the efficiency, usefulness and concern of the NARA course.



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Don't forget to visit our Website!

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