



CALABRIA REGION

PEER REVIEW REPORT



Study Visit & Peer Review Workshop

14-15-16 May 2019

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1. SUMMARY

The present report is to show the results of the study visit that took place in Calabria Region from 14th to 16th May 2019, according to scheduled program of AgriRenaissance project. The study visit involved many agro-businesses, farmers, spread over the regional territory; public institutions, research centers and university.

The participants had the opportunity to see directly "what and how" is the sector of R&D in Calabria. They were introduced to the different levels and contest to verify the research and innovation in our agriculture:

- Universities labs and research centers
- Agro-businesses and farms with high investments in R&D in different sectors
- Some peculiarities in the R&D in agriculture, such as cataloguing fields to select agronomic varieties

The agenda was full of visits all over the region and the three days were spent to visit important examples of how the technological innovation is applied in agriculture.

The first day was dedicated to institutional presentation of the Regional Department of Agriculture in premises of Calabria Region headquarter. After that the agenda went on with the steering meeting with the presentation of regional diagnosis by each project partner. The second part of the meeting, carried out only by the project partners and not by stakeholders, was dedicated to analyze the "state of art" and to the planned and forecast steps. The economic evaluation of the achieved expenditures took the attention for the coming project phase. Important decisions were verified by partners















2. PEER REVIEW METHODOLOGY & RESULTS

2.1. PHASE 1: STUDY VISIT

The main purpose of the planned agenda was to show to project partners and stakeholders the research infrastructures, institution and enterprises, introducing some important cases with specific peculiarities.

The participants visited:

As institutional research organizations

- University "Magna Graecia" in Catanzaro
- University "Mediterranea" in Reggio Calabria
- University of Calabria in Cosenza
- Arsac experimental centers in Locri and Gioia Tauro

As private enterprises

- Statti vineyard in Lamezia Terme
- Capua srl processed citrons in Campo Calabro
- Barone Macri multifunctional farm in Locri
- Ferrocinto winery in Rende

14th May – first day

After the institutional and technical session in the morning the day prosecuted with the visit to Faculty of Pharmacy — University of Catanzaro, where participants were greeted by Prof. Mollace from the Department of Health Sciences. Specifically participants were introduced to laboratories specialized on "in-vitro" experimentation of different vegetables species to extract nutraceutical properties. The researchers explained the techniques of experimentation showing the many lab devices and machines. Prof. Mollace and his research team showed an interesting project, among the others, related to the effects of bergamot polyphenolic on lipid transfer protein and vascular oxidative stress, showing the importance of this research and the potential impact on human beings.















The visit concluded in Statti, a multifunction farm specialized in high quality production of olive oil and mostly wine with different varieties and labels. The participants saw:

- the olive trees fields with the different species of olives selected to be processed into various oils with different flavors;
- the plant to process livestock eflluents in energy to be used by the whole farm;









- The grapes fields, parted following the variety and the annexed processing plant, the cellar, the
- barrique rooms where different wine labels are stored.





15th May – second day

Participants were hosted by Faculty of Agronomy – University "Mediterranea" in Reggio Calabria. The dean introduced the Faculty with the different specialized departments and research labs dedicated to industrial and experimental research strictly connected to agro-economic, forestry and rural development. The dean underlined that the university mission is to offer a scientific support to agricultural world. After that Prof. Schena presented the focus of scientific research, mainly aimed to biological, environmental and economic aspects, showing also the dedicated labs.









The second visit was to Capua 1880, an agro-business specialized in the extraction of citron oils and specially on bergamot, a special local citron. They have an international reference market, they are present in 54 different countries in the world, their production satisfies around the 80% of essential oils, requested by cosmetics and parfume companies. AgriRenaissance team had the opportunity to see the productive chain, scientific labs, storage warehouses.





The third visit of the day took place in the ARSAC experimental centers, in Gioa Tauro and Locri, where Arsac officers showed the institutional activites implemented, such as: dissemination; technical research; training to farmers and agricultural experts; phytopatology; agro-meteo; extension services; certification and traceability of food.





The day ended to Barone Macrì farm, in Gerace (RC), a multifunction business with olive oil growing; vineyard; citrons fields; cereals and cow breeding; an important cheese production with special types, like the blue cheese made of milk and spyruline seaweed.





In addiction the farm is also a rehab center for kids affected by disease like autism, which is cured by horse-therapy and it is ongoing a project as didactic farm to host pupils and students.

16th May – third day

The last day of the study visit was spent in the province of Cosenza, it started visiting the University of Calabria in Rende (Cosenza) where participants visited the TECHNEST, an incubator of spin-offs and start-ups, created with the university support.











Many research projects were presented:

- Master program in "Quality and safety in food industry" Department of Mechanical, Energy and Management Engineering ;
- Plant Biodiversity in Silane Pastures, dedicated: to protection of genetic asset of species of conservation interests with agricultural potential; enhancement of biodiversity; preservation of threatened plant species;





- Food analysis, multivariete analysis on edible food; multivariete analysis on edible oils and milk derivations; water analysis
- free-form product in the world of butter and margarines.

In the second part of the morning all participants visited CREA institute - a leading Italian research organization dedicated to the agri-food supply chains, which operates as a legal entity under public law, supervised by the Ministry of Agricultural, Food, Forestry and Tourism Policies (Mipaaft). The scientific activity covers agricultural crops, livestock, fishery, forestry, agro-industry, food science and socio-economic analysis.



A team of researchers introduced an interesting international project, which is carrying out, on olive tree germplasm to identify the different species and variety, finalized to create a data-storage bank to preserve many endangered species.

The afternoon started a more operative session visiting an interesting agro-business in Corigliano Calabro named Minisci, specialized in processing different olive oils, some citron added to dress special type of food. The owner highlighted the various activities and project put into action, showing the processing plant for olive oil production and annexed labs.









In the premise of the same business another company was present, MAGISA, a female agro-business specialized in rice production, cultivated in flowing water, close to the sea,





which gives a special taste to the different rice.







2.2. PHASE 2. WORKSHOP & DISCUSSION

The study visit in Calabria concluded in the premises of Arsac headquarter in Cosenza, where after a short presentation by the top management of the institution, representatives of regional government made the lead to drive to the conclusion and analysis of the three days spent to see many different local and regional realities.

The methodology used by the consortium was the already approved and consolidated in the previous study visits, and so the AgriRenassaince group, plus regional and Arsac developers, were parted in small working teams to face up and open a discussion about the strength and weak points meet each day in the single places visited.

The questions to be answered were, as set below, each marked by a different color:

QUESITI:

1. Come la Regione Calabria può modificare la sua struttura legale ed economica e le sue politiche per incrementare la collaborazione fra settore pubblico e provato?

Trova la domanda dietro la domanda

- Delineare programmi di finanziamento per avere nuove risorse umane e per migliorare le infrastrutture

Suggerimenti sulle strategie e politiche da adottare

- Migliorare la cooperazione e lo scambio di conoscenze
- Sviluppare strumenti per avere nuove e più giovani risorse umane

Lezioni imparate

- La crezione di start-ups
- L'Arsac come rete di collegamento fra gli agrocoltori e le istituzioni
- Una stretta collaborazione fra studenti e ricercatori con le PMI
 - 2. Come può l'ibridazione con altri settori o l'integrazione con le "tecnologie abilitanti fondamentali" (identificate prevalentemente in biotecnologie, nanotecnologie e informatica) essere migliorata?

Trova la domanda dietro la domanda

I problemi chiave riguardano

- La regione ha un taglio prettamente orientato al settore tradizionale
- Le aziende non sono pronte ad un'integrazione con le KETs
- Focalizzato sul mercato tradizionale
- Mancanza di connessione fra le università





- Un buon livello di ricerca ma un debole trasferimento dalle istituzioni di ricerca alle aziende

Suggerimenti sulle strategie e politiche da adottare

- Incrementare le relazioni internazionali
- Le persone non parlano inglese
- Si dovrebbero creare reti e piattaforme di comunicazione
- Incrementare la discussione e la creazione di gruppin intersettoriali
- Creazione di poli del settore
- Cambiare la mentalità
- Bandi orientati alla soluzione delle necessità

Lezioni imparate

- La crezione di start-ups e spin-offs

1. How the R&I infrastructures and capacities can be improved or coordinated to obtain better results in terms of innovation?



YELLOW: FIND THE QUESTION BEHIND THE QUESTION

- 1. Infrastructures are more present in the private sector than in the public one and universities
- 2. Human resources: students and PhD students highly motivated but with not sufficient infrastructures and equipment
- 3. How to foster a good cooperation between research centers, universities and enterprises?



GREEN: POLICY SUGGESTIONS

- 1. Implementing investments for universities
- 2. Identify needs of research which want to develop some specific fields
- 3. Enhancing the cooperation



PINK: LESSONS LEARNED





- 1. Good level of infrastructures in the private business
- 2. Students and researchers very highly motivated
- 3. Good cooperation and good practices how to put food and agricultural products on the market





2. How can Calabria Region modify its legal and economic framework and its policies to increase the collaboration among public and private players?



YELLOW: FIND THE QUESTION BEHIND THE QUESTION

Identify financing programs to have new human resources and to enhance infrastructures

GREEN: POLICY SUGGESTIONS

- 1. Improving cooperation and knowledge exchange
- 2. Developing instruments to have new and younger human resources



PINK: LESSONS LEARNED

- 1. Start-ups establishment
- 2. Arsac as a connection network between farmers and institutions
- 3. A strictly cooperation between students and research and SMEs
- 3. How can the hybridization with other sectors or the integration of Key Enabling Technologies (Biotechnology, Nanotechnology, ICT) be fostered?



YELLOW: FIND THE QUESTION BEHIND THE QUESTION

Key problems are related to

- 1. Calabria region is oriented to traditional sectors
- 2. Businesses are not ready to be integrated in KETs
- 3. Productive sectors are too focused on traditional market
- 4. Lack of connection among universities
- 5. Presence of a high level of research but a low level of transfer from institutions to businesses



GREEN: POLICY SUGGESTIONS

- 1. Increasing the international relationship
- 2. People do not speak properly in English
- 3. More communication and network should be implemented
- 4. Increasing the communication to establish intersectorial team





- 5. Establishment of sectorial clusters
- 6. Changing the common thinking
- 7. Public calls to solve needs



PINK: LESSONS LEARNT

1. Start-ups and spin-offs creation







