Agricultural value chains, entrepreneurship and user aspects, Sarajevo, 01. October 2013

DEVELOPMENT OF EDUCATION AND TRANSFER OF KNOWLEDGE IN THE AREA OF FOOD TECHNOLOGY – EDUFOOD

Prepared by

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Partners

• Balkan partners:
  – University of Tuzla, Faculty of Technology
  – (UNTZ; main Balkan partner)
  – University of Novi Sad, Faculty of Technology (UNNS)

• Lead institution in Norway:
  – Sør-Trøndelag University College, Faculty of Technology (HiST)
To build capacity and competence of Western Balkan Universities to be resources for local producers and processors of fruit and wild berry through

- university
- enterprise cooperation

in education and development and by providing continuing education.
Focus in this presentation

- The cooperation with industry and other partners
- Building universities competence and capacity
What the Tuzla region industry need from university in their processes of development?

UNTZ has mapped challenges and potentials of improvements in production technology and hygiene as well as needs for continuing education, courses and workshops in industry -

- In October – December 2011: Written survey answers from industry and organizations
- A workshop including 22 participants outside university as a part of the Kick-off meeting January 2012
- Continuously in relevant project activities

Also UNNS has accomplishes similar processes with food industry in their region
Project activities based on industry needs as described in the Tuzla mapping processes

- Student thesis in cooperation with industry;
- 20 – 30 students and 15 teachers is involved.
- 5 UNTZ-students have in 2012 and -13 (also 4 UNNS-students) made practical thesis work at HiST laboratories in cooperation with Balkan and Norwegian supervisors.
Practical work on Tuzla student thesis at HiST

2012 Bachelor thesis:

1. Mahovac Edin: „PRODUCTS AND PROCESS DEVELOPMENT BASED ON RAMSONS“
   Mentor: Prof dr. Keran Husejn, Member of commission from HiST: Nils V. Juul

2. Senida Subasic: PRODUCT AND PROCESS DEVELOPMENT BASED ON FRESH AND DRIED PLUM“
   Mentor: Prof dr Amra Odobasic, Member of commission from HiST: Nils V. Juul

3. Azem Bašić: PRODUCT AND PROCESS DEVELOPMENT BASED ON WILD BERRIES AND BERRIES
   Mentor: Prof dr Snjezana Maric, Member of commission from HiST: Nils V. Juul
Practical work on Tuzla student thesis at HiST

2013 Master thesis:

1. Azra Begović: **INFLUENCE OF PROCESSING TO KEEPING OF BIOACTIVE COMPOUNDS FOR SIGNIFICANT SPECIES OF FRUIT IN BIH**  
   Mentor: Doc dr Ramzija Cvrk

2. Jasmina Mehic: **DETERMINATION OF BIOACTIVE COMPONENTS OF SOUR CHERRY AS SIGNIFICANT FRUITS SPECIES IN BOSNIA AND HERZEGOVINA**  
   Mentor: Doc dr Zahida Ademović
Practical work on Tuzla student thesis at HiST

HiST professors taking part in defence of thesis at UNTZ
A joint platform for disseminating the results of the projects will be formed together with the participants of another HERD project “EVALUATION OF FRUIT GENETIC RESOURCES IN BOSNIA-HERZEGOVINA WITH THE AIM OF SUSTAINABLE, COMMERCIAL UTILIZATION”
Project activities based on industry needs as described in the Tuzla mapping processes

Courses for industry

– September 18 and 19 2012 (20 participants):
  • QUALITY AND FOOD ANALYSIS
  • PRACTICAL ACTIVITIES OF FOOD ANALYSIS

– October 2013 (as planned; (20 participants):
  • FOOD SENSORY ANALYSIS
  • DEVELOPMENT OF FOOD PRODUCTS
Workshops with industry

Workshops title: PRACTICAL ACTIVITIES OF FOOD ANALYSIS

Workshop Leader: Remzija Cvrk

date: 19.09.2012.
Project activities based on industry needs as described in the Tuzla mapping processes

• Upgrading lab equipment at UNTZ 2012
  – **Spectrophotometer** (Identification food colour, biologicale active food components; also for students laboratory exercises)
  – **Microscope** (Identification of plant origin, pollen identification, research structure of plant and animals tissue)
Project activities based on industry needs as described in the Tuzla mapping processes

New sensory lab at UNNS 2012

– For student courses, courses and paid tasks for industry in Novi Sad region and for the UNNS-UNTZ-cooperation.
– Sensory work for HERD project on lamb carcasses (September 2013)
Project activities based on industry needs as described in the Tuzla mapping processes

Lab investments in 2013
Not yet Completed

- UNTZ: Water activity measurement, refractometer, upgrading of equipment for texture measurements

- UNNS: Upgrading of equipment for rheological measurements
Project achievements ....

Practical use of knowledge

– Contribution to developing the commercial use of Bosnian fruit and berries

– Developing competence on analyses important for determining important quality details in fruit and berries
Project achievements ....

• Institutional development and sustainability
  – Institutional agreements (HiST-UNTZ and HiST-UNNS; quite detailed) was worked out late 2011
  – A project steering committee (faculty leaders from the cooperating institutions) is meeting twice a year discussing results and plans for the EDUFOOD project.
  – Developing – (as well as developing tools for -) for university – enterprise cooperation in the area of food technology
  – A few strategic investments in laboratory equipment at the Balkan Universities makes possible research and teaching activities on new sectors at the Universities as well as making new possibilities within the universities’ cooperation for industrial innovation.
Ultimate project goal in Tuzla

- Establish Centre for knowledge transfer
  - The Industry – University cooperation in the mapping processes and the following project activities on courses for industry, work on student thesis’ and laboratory investments makes fundaments for this ultimate project goal in Tuzla
  - Preliminary strategies, plans were discussed at a workshop and Project Steering Committee meeting in Trondheim in June 2013.
  - Drafts for business plan will be discussed and evolved in the months to come. Workshop for development of «centre ownership» in industry?
THANKS FOR YOUR ATTENTION