



## BUGI

### Western Balkans Urban Agriculture Initiative



## PROJECT COORDINATOR: UNIVERSITY IN SARAJEVO, BOSNIA AND HERZEGOVINA

Project number: 586304-EPP-1-2017-1-BA-EPPKA2-CBHE-JP "This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein"

# Project outline

- Project number: 586304-EPP-1-2017-1-BA-EPPKA2-CBHE-JP
- Implementation period: 36 month (October 2017 – October 2020)
- Budget: 838.397,90 €
- Consortium:
  - University of Sarajevo-UNSA (BiH) – project coordinator
  - University Džemal Bijedić of Mostar-UNMO (BiH)
  - University of Donja Gorica-UDG (MNE)
  - University of Prishtina-UP (XK)
  - University of Haxhi Zeka in Peja-UHZ (XK)
  - Alma Mater Studiorum Università di Bologna-UNIBO (IT)
  - South-Westphalia University of Applied Sciences –SWUAS (DE)
  - University of Ljubljana-UL (SLO)

## Tangible and intangible results achieved

- **WP1 Preparation: Needs analysis**
  - Reports based on desktop and surveys on present and future competence needs according to WB and EU to be included in new curriculum:
    - *Regional and EU action plans and strategies report*
    - *Food supply chains analysis*
    - *Consumers preferences surveys*
    - *City-adjusted farm strategies in B&H, MN and XK*
- **WP2 Development: Curriculum modules and LLL center programs development**
  - New curriculum development for 5 WB HEIs:
    - *Curriculum draft*
- **WP3 Development: Developing capacities and facilities**
  - New teaching tools and teaching infrastructure for new curriculum implementation at 5 WB HEIs:
    - *Study visits and trainings*
    - *Purchase and installation of equipment*



# Tangible and intangible results achieved

- **WP4 Quality assurance and monitoring**
  - Monitoring project implementation, new curriculum and teaching tools:
    - *Quality performance framework*
    - *WPs quality evaluations and QAC functioning*
    - *Evaluation questioners*
    - *Evaluation reports*
- **WP5 Dissemination and exploitation**
  - *Promoting project and urban agriculture in WB:*
    - *Dissemination Strategy*
    - *Project web site and social media channels*
    - *Project promotional materials*
    - *Info days, open door day and UA conference*
- **WP 6 Project management**
  - *Project management procedures*
  - *Regular meetings*
  - *Management and report on the project activities*
  - *Project finance and administration*



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- **Impact observed**
  - **Society at large:**
    - Excellent acceptance at SMEs, NGOs
    - Good consumers acceptance
    - Moderated acceptance at farmers
  - **Institutions:**
    - HEIs - Excellent acceptance at HEIs outside of project, waiting for curriculum implementation to start. New collaborations and new projects with EU HEIs.
    - Public authorities- Excellent acceptance at PA in WB. New projects are proposed to use public spaces for youth employment in UA.
  - **Individual level:**
    - High interest for study visits at HEIs staff. During study visits, new business models, techniques and technologies are introduced. Many individual contacts with hosting institutions/farmers.
    - Moderated interest for farmers but high interest for UA sale strategies and business models.
- **Challenges encountered**
  - **Society at large:**
    - Social acceptance regarding food safety – increasing promotion and awareness campaign.
  - **Institutions:**
    - Problems in legal issues regarding Partnership agreement.
    - Differences in curriculum accreditation procedures in 3 WB countries - new curriculum is developed according to HEIs inputs. Deadlines for curriculum accreditations are monitored.
    - Equipment purchase is slow due to the specific items and joint tender procedures – UNSA facilitate legal issues according project proposal and Grant agreement.

# Curriculum draft of Master study program: Urban Agriculture

- The Master on Urban Agriculture is a two years master of 120 ECTS. It aims to train professional specialized in the field of urban agriculture and its related sciences in order to build cities more sustainable, more resilient and greener and to develop new economies related to urban agriculture activities. This master points to provide advanced knowledge in the field of urban agricultural systems, skills to develop and manage sustainable production systems, knowledges on urban planning and urban regulations, and expertises in urban agriculture business models. Fundamental importance within the master have the learning techniques related to Problem Based Learning (PBL) and Experiential Learning (EL), which promote the development of critical thinking skills, problem-solving abilities, and communication skills.
- **Target Skills** - To acquire and develop knowledge and skills related to urban agriculture, urban ecology and urban planning - To identify and assess entrepreneurial opportunities and innovation possibilities related to urban agriculture activities - To understand and explore the multifunctionality of urban agriculture in order to redesign and redefine urban spaces - To establish the skills needed to organize and lead multi-disciplinary groups with experts, including planning, setting up, coordinating, team working, business development, problemsolving skills - To plan green areas within the city framework - To write a business plan for development and management of economical activities - To analyse cities' food supply system and be able to shorten the food supply chain
- **Career opportunity** Urban planner specialized in greener cities; Manager of project related to urban agriculture activities; Consultant or researcher specialized in the deployment of sustainable planning techniques, methods and strategies in urban areas; By completing the master study program students acquire competence for their inclusion in the specialized academic and doctoral degree programs related to the same or similar field study.
- **Course program** : Two different master programs are developed. The first one is promoted by the University of Sarajevo (UNSA), the University "Dzemail Bijedic" Mostar (UNMO) and the University Donja Gorica (UDG). The second one is promoted by the University of Prishtina (UP) and the University of Haxhi Zeka in Peja (UHZ). The programs are structured in four semesters. First semester (30 ECTS) is common among the two programs and courses (all mandatory) are provided in English language and in distance learning modality. Second semester (30 ECTS) offers different courses in the two programs, but in both programs, mandatory and elective courses are present. For both programs, third semester (30 ECTS) is organized for internship and problem based learning activities and fourth (30 ECTS) is dedicated to the thesis

# Course structure

- First semester – 30 ECTS (mandatory)
- Same for all Balkan Universities (UNSA, UNMO,UDG; UHZ and UP)

COURSE	ECTS
Urban agriculture: introduction, history and evolution	5
Urban food system	4
Entrepreneurship and urban demands	4
Urban ecology	4
Precision agriculture and smart food production	4
Statistics	6
Experimental methodology	3
<b>Total ECTS</b>	<b>30</b>

**Cours structure for UNSA, UNMO and UDG**  
**Second semester (30 ECTS – 15 mandatory and 15 elective)**

<b>COURSE</b>	<b>ECTS</b>
<b>MANDATORY (15 ECTS)</b>	
Sustainable agriculture	3
Urban fruit and vine growing	6
Urban vegetable and field crop production	6
<b>ELECTIVE (15 ECTS)</b>	
Urban farming, nutrition and irrigation	3
Urban farming plant protection	3
Use and cultivation of ornamental plants	3
Aromatic and medicinal plants	3
Beekiping	3
Biogenic waste management	3
Application of GIS in Urban agriculture	3
Plant propagation in Urban Agriculture	3
Dynamic input and climate management in urban agriculture systems using informatic tools and DSS	3
Sustainable cities and eco inovation	3
Economic and organisation of UA production	3
Renewable energy sources: basics and applications	3
<b>Total ECTS</b>	<b>30</b>

**Cours structure for UP and UHZ**  
**Second semester (30 ECTS – 18 mandatory and 12 elective)**

<b>COURSE</b>	<b>ECTS</b>
<b>MANDATORY (18 ECTS)</b>	
Processing of fruits and vegetables	6
Urban horticulture production	6
Technology and engineering for production in urban environment	6
<b>ELECTIVE (12 ECTS)</b>	
Planning and urban design	3
Cultivation of medicinal and aromatic plants	3
Information science and communication	3
Urban beekeeping	3
Plant protection in urban agriculture	3
Urban agriculture production systems	3
<b>Total ECTS</b>	<b>30</b>

- **Third semester (30 ECTS):**
  - 18 ECTS- PBL and
  - 12 ECTS -Internship
- **Fourth semester- Master thesis 30 ECTS**