WP 1 Needs Analysis

Deliverable 1.1 Survey guide

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VERSIONING AND CONTRIBUTION HISTORY

Version	Date	Revision Description	Partner responsible
v.01	12/01/2018	First draft version	Bernd Pölling (SWUAS)
v.02	20/01/2018	Second draft version	Petar Glamočlija (UNSA)
v.03	26/01/2018	Third draft version	Bernd Pölling (SWUAS)
v.04	08/02/2018	Fourth draft version	Bernd Pölling (SWUAS)
v.05	09/02/2018	Final version	Bernd Pölling (SWUAS)

LIST OF ABBREVIATIONS

EU	European Union
FAO	Food and Agricultural Organization (United Nations)
HEI	Higher Education Institute
LLL	lifelong learning
NGO	Non-government organisation
UDG	University Donja Gorica
UHZ	University "Haxhi Zeka" of Peja
UNIBO	University of Bologna
UNMO	University "Džemal Bijedić" of Mostar
UNSA	University of Sarajevo
UP	University of Prishtina
SME	Small and medium-sized enterprise
SWUAS	South-Westphalia University of Applied Sciences
UL	University of Ljubljana
UNDP	United Nations Development Programme
WB	Western Balkan
WP	Work Package

Introduction WP 1 „Needs Analysis": General description and objectives

WP 1 „Needs Analysis" aims to deliver important information to design new curricula and lifelong learning (LLL) modules based on existing and new data from both, Western Balkan (WB) and European Union (EU). Additionally, it aims to provide an appropriate infrastructure for teachers' training on urban agriculture within Bosnia and Herzegovina, Montenegro, and Kosovo. In terms of education resources WP 1 defines skills and competences required to design teaching and learning environments supporting urban agriculture entrepreneurship. Thus, WP 1 is an essential requirement for BUGI's downstream WPs. Within WP 1 data collection embraces different levels in terms of materials and methods to define knowledge, skills, and competences needed for (new) entrepreneurship in urban agriculture. The surveys address practitioners and actors in urban agriculture (farmers, start-ups, but also actors in the food value chain) (Deliverables 1.3 and 1.4), different stakeholder groups, like NGOs, HEIs, public authorities, and SMEs including farmers (Deliverable 1.2), and consumers (Deliverable 1.5). The findings of the Deliverables 1.2-1.5 are going to be synthesized in Deliverable 1.6 „City-adjusted farm strategies in Bosnia and Herzegovina, Montenegro, and Kosovo".

Workload

All BUGI partners have a certain workload to be accomplished within WP 1. Table 1 provides an overview of what is expected based on the figures of the submitted and approved project proposal.

Table 1: Partners' workload in WP 1 (1 working day = 8 hours)

Partner	WP 1 workload (working days)				
	WP 1 total	Manager	Teacher/Trainer/ Research	Technical Staff	Administrative Staff
UNSA	81	1	60	0	20
UNMO	51	1	30	0	20
UDG	111	1	90	0	20
UP	121	1	80	0	40
UHZ	51	1	30	0	20
UNIBO	41	1	20	0	20
SWUAS	111	1	80	0	30
UL	41	1	20	0	20
Sum	608	8	410	0	190

Suitable workload shares were dedicated to all the deliverables; especially the desktop research (1.2-1.4) and the surveys (1.3-1.5). The WP leaders SWUAS and UP recommend to spend minimum half of the overall WP1 workload to the surveys (sampling, conducting

interviews, data input) and the remaining share to desktop research and additional tasks. It was agreed at the kick off meeting at UDG that the collection of primary data from Western Balkan is of utmost importance to develop curricula and LLL resources of value for the whole region. The WP leaders SWUAS and UP are responsible for writing a draft of the synthesizing Deliverable 1.6, which will be discussed and agreed among all BUGI project partners before finalization.

Generic tasks for WP1 „Needs Analysis"

The constitution of expert working groups (1.) and definition of urban agriculture (2.) are generic tasks to be fulfilled at the beginning of the BUGI project lifetime and are due end of January 2018.

1.) Constitution of expert working groups

For providing appropriate procedures in WP1 it is important to perform the upstream task to constitute three expert working groups. The expert working groups are led by EU member states' partners (SWUAS/Germany, UNIBO/Italy, and UL/Slovenia) (Table 2). Furthermore, each Western Balkan partner country (Bosnia and Herzegovina, Montenegro, and Kosovo) acts in each expert working group with at least one representative. The working groups are:

- a. Business and networking (Lead: SWUAS)
- b. Agriculture and food processing (Lead: UNIBO)
- c. Urban planning, ecology, and energy efficiency (Lead: UL)

Table 2: Nomination of expert working groups' members

| Working Group | Lead | National representative in charge | | |
		Bosnia and Herzegovina	Montenegro	Kosovo
Business and networking	Bernd Pölling (SWUAS)	Aleksandra Nikolić (UNSA) Ahmed Dzubur (UNMO)	Vladan Božović (UDG)	Ibish Mazreku (UHZ)
Agriculture and food processing	Giuseppina Pennisi (UNIBO)	Zlatan Sarić (UNSA) Alma Rahimic (UNMO)	Vesna Maraš (UDG)	Nexhdet Shala (UHZ)
Urban planning, ecology, energy efficiency	Rozalija Cvejić (UL)	Amir Causevic (UNSA) Elma Temim (UNMO)	Vladan Božović (UDG)	Agim Rysha (UHZ) Sali Aliu (UP)

2. Definition „urban agriculture"

For the purpose of the project we define "urban agriculture" for WB conditions. Following several online iterations it was confirmed by all project partners that within BUGI urban agriculture is defined as follows:

> **Urban agriculture (UA) produces, processes, and/or markets food and non-food goods as well as it offers services. Actors and businesses are defined as UA when meeting the two criteria of (1) geographical proximity and (2) organizational proximity to cities and city dwellers.**

(1) Geographical proximity exists when the UA actors and businesses are situated within administrative city boundaries or their adjacent municipalities. However, the precise buffers around the cities have to be treated individually for each city (city-specific). Furthermore, under certain circumstances, entities from outside this area can also fulfil the geographical proximity requirement when having a well-established infrastructural connection to the city.

(2) Organizational proximity means that the UA actors and businesses are connected to the end consumers (food and non-food goods) or end users (services) either directly (no intermediaries) or by maximum one intermediary (e. g. processors, butchers, bakeries, restaurants, cafés, etc.). Distributors can be included in case that they buy and sell locally within the city region.

Deliverable 1.1 „Survey Guide"

WP 1 consists of seven Deliverables. These are (with deadlines in brackets):

      1.1 Survey guide (01.02.2018)
      1.2 Regional and EU action plans and strategies report (01.03.2018)
      1.3 Farms' models in region (01.03.2018)
      1.4 Food supply chains analysis (01.04.2018)
      1.5 Consumers' preferences surveys (01.05.2018)
      1.6 City-adjusted farm strategies in B&H, MN, and XK (01.06.2018)
      1.7 Partners' HEI infrastructure and teachers' assessment (01.07.2018)

The first Deliverable 1.1 „Survey Guide" provides a framework to reach the goals of WP 1 and the whole Erasmus+ project. This survey guide aims to homogenize desktop research and surveys including especially the collection, intake, and transfer of obtained data to the WP leaders. The two major methods to be used in WP 1 are, firstly, desktop research (Deliverables 1.2-1.4) and, secondly, surveys (1.2-1.5) (Table 3).

Guidelines for the desktop research and the questionnaires for the surveys are attached to this document for the Deliverables 1.2-1.4 (appendix). The procedures for the data collection are summarized here, while the intake into templates (excel) and transfer of obtained data will be provided individually for each Deliverable. Also Deliverable 1.5 guidelines will be sent around later. As indicated in Table 3, the WP 1 leaders propose in consultation with the project leader UNSA to change Deliverable 1.2 in terms of considered materials and methods. As documents and online information on business and labour needs and skills are expected to be very limited within the three partner countries Bosnia and Herzegovina, Montenegro, and Kosovo (desktop research), primary data will also be gathered in this Deliverable by using the questionnaire used in the Erasmus+ project URBAN GREEN TRAIN.

Table 3: WP 1 Deliverables methods and deadlines to be followed

| Deliverable | Short name | Methods | | Report | Deadlines (year 2018) | | | |
		Desktop research	Survey		Guidelines*	Data transfer**	Draft report	Final report
1.1	Survey guide			X	-	-	01.02.	10.02.
1.2	Needs/Skills	X	X	X	01.02.	02.03.	15.03.	01.04.
1.3	Business models	X	X	X	01.02.	02.03.	15.03.	01.04.
1.4	Supply Chains	X	X	X	01.02.	02.03.	01.04.	01.05.
1.5	Consumer preferences		X	X	19.02.	06.04.	01.05.	01.06.
1.6	Farm strategies			X			01.06.	01.07.
1.7	HEI infrastructure			X			01.07.	20.07.

Guidelines (Desktop research and survey designs and procedures) are provided by the WP leaders (SWUAS, UP) to ensure comparability
*** Data transfer from Bosnia and Herzegovina, Montenegro, and Kosovo to WP leaders for analyses and reporting*

Generic information on desktop research and survey procedures are summarized here – including surveys' minimum requirements. The appendix includes the desktop research and survey guidelines for the Deliverables 1.2-1.4.

Desktop research

Desktop research in the Deliverables 1.2, 1.3, and 1.4 aims to provide state-of-the-art in the partner countries Bosnia and Herzegovina, Montenegro, and Kosovo. It includes all kinds of documents (reports, action plans, strategies, articles, etc.) available in any form ranging from printed documents to online documents. The guidelines on desktop research procedures for Deliverables 1.2-1.4 are provided in the appendix 1 – guidelines for 1.5 will be sent around later.

Surveys

Within WP 1 primary data is going to be gathered via personal in-depth interviews and web-based surveys. The minimum requirements to allow statistical analyses and also to allow the desired recognition in curricula are presented in Table 4. However, the more primary data you are able to collect, the better it is.

Appendix 2 is about the farm survey questionnaire to be used for Deliverables 1.3 and 1.4, while the Appendixes 3-6 provide the questionnaires for Deliverable 1.2 on UA's business and labour skills and needs. Each of the four questionnaires (Appendixes 3-6) can be used for each target group (SME, NGO, HEI, and public authorities).

Table 4: Minimum requirements for the primary data collection Deliverables

Deliverable	Short name	Surveys		Minimum requirements (number of respondents)		
		Personal	Web	/partner country	/ target group*	In total
1.2	Needs/Skills		X	30	5	90
1.3	Business models	X	X	30		90
1.4	Supply Chains	X	X	30		90
1.5	Consumer preferences	X	X	125**		375

The four target groups in Deliverable 1.2 are SMEs including farmers, NGOs, HEIs, and public authorities
*** Minimum 100 via web survey and minimum 25 in personal interviews resulting in at least 125 per WB country*

APPENDIX 1

Guidelines for desktop research for Deliverables 1.2, 1.3 and 1.4

The aim of Deliverable 1.2 "Regional and EU action plans and strategies report " is to define:
- UA's businesses and workforce skills and needs at the present and future state according to the national priorities.

The aim of Deliverable 1.3 "Farms models in region" is to define:
- What are existing farming business strategies in the region?
- What are the success factors according to different farm business strategies?

The aim of Deliverable 1.4 "Food supply chains analysis" is to define:
- What are existing food supply chains?
- How are food supply chains organized according to the stakeholders?

WP1 expert working groups are:

1. Business and networking (SWUAS lead),
2. Agriculture and food processing (UNIBO lead), and
3. Urban planning, ecology, energy efficiency (UL lead).

For desktop research, WP expert working groups will analyze national reports, action plans and strategies within their field of expertise. While conducting research, the involved partners will have to recognize issues and areas, in which urban agriculture could have a relevant role. It includes all kinds of documents (reports, action plans, strategies, articles, etc.) from different sources (government bodies, FAO, World Bank, European Commission, UNDP) at the national and local level available in any form ranging from printed documents to online documents.

WP working group 1 (Business and networking):

- What is the share between self-consumption and selling/marketing in agriculture / UA in your country? How has the share been developing in the previous years?

- Does UA play a role in state-of-the-art literature at all and more specifically as an urban business in your country?

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- What are existing business strategies in agriculture/UA and what is their share in the market? Are there any interesting emerging trends in recent years detectable?

- What are the key success factors for viable business strategies?

- What are the main obstacles for agriculture in general and for specific city-adjustment strategies?

- What are the key stakeholder groups / actors in UA of your country? If applicable, how is the networking between stakeholders organized?

- What is required to improve networking between stakeholders?

WP working group 2 (Agriculture and food processing):

- Which skills and competences are needed and valued in agriculture and food processing at the present?

- What is the strategic national plan for agriculture and food processing?

- What skills and competences are required to meet strategic plans?

- What is considered as "strategic crop" and valued food processing product?

- Which techniques are used in agricultural production and processing?

- Which food supply chains exist and to which shares?

- How is the organization of food supply chains?

- Which skills and competences are required to improve networking between stakeholders?

WP working group 3 (Urban planning, ecology, energy efficiency):

- What is the share of agricultural land in urban areas?

- What is the number of farms in urban areas?

- Who owns the agricultural land in urban land?

- What share of agricultural land within urban areas is used for urban agriculture?

- What is the municipal plan for development of agricultural land?

- What is the state of urban ecology (biodiversity level, fragmentation, any other ecologically/biologically important aspects)?

- Are there action plans for improvement of urban ecology in place?

- What skill and competences are required to meet the municipal plan?

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- Is there an action plan including greening of public spaces?

- Is there an action plan including development of urban gardens? What is the current typology of urban gardens in the city and which types the action plan aim to develop?

-How equipped are the urban farming areas with the following infrastructure?

- irrigation (completely, partially, not at all)

- sewerage (completely, partially, not at all)

- electricity (completely, partially, not at all). What are the main electricity sources and to what extent are they renewable?

- What are the main water resources for irrigation? (river streams, groundwater, drainage water, rainwater collected from the rooftops and other surfaces, other (please define))

- Is the quality of soil and products monitored? How do you estimate the level of soil pollution and product quality?

Working groups will deliver a report in the form of **well-defined list of national priorities of business and labour needs and skills** - preferably linked to future students' and trainees' knowledge, skills, and competences. A synthesis of the three expert working groups is going to be provided by the WP leaders to guide the future BUGI work.

> **For a homogenized desktop research among the partner countries please conduct this task by following these guidelines.**

Besides the expert working groups' questions listed above, we ask all partner countries (in Bosnia and Herzegovina and Kosovo please share your tasks among the two national partners suitably) to use the following terms in all possible combinations in your national language(s) for an additional online search on three websites.

The following word combinations should be searched in the following portals:

(1) Google scholar
(2) Google
(3) AgEconSearch (http://ageconsearch.umn.edu/?ln=en)

For desktop research in **Deliverables 1.2** please use also these search items:

1st word: urban agriculture, urban farming, urban gardening

2nd word: business needs, business skills, labour needs, labour skills

For desktop research in **Deliverables 1.3 and 1.4** please use also these search items:

1st word: urban agriculture, urban farming, urban gardening
2nd word: business models, strategies, city-adjustments, short supply chain, direct sale, direct marketing

For each search term please consider at least the first 20 entries per search portal. When conducting the search please collect all reports, documents, etc. of interest to get insights into urban agriculture's business models and food supply chains in a list. With regard to your national conditions, please feel free to consult additional search portals and databases (university or national libraries, etc.) or add search terms. However, the term combinations named above are obligatory.

APPENDIX 2

Farm survey questionnaire

A) Key farm characteristics and production

1. What is your current farm size?
_____ ha or _____ m²

2. Define the share between cropland and grassland?
Cropland: _____ ha or _____ m²
Grassland: _____ ha or _____ m²

3. Define the ratio between owned and leased land.
Owned land: _____ ha or _____ m²
Leased land: _____ ha or _____ m²

4. What do you grow currently to which extent (cropland)? What is the average yield?
Vegetables: _____ ha or _____ m² _____ t/ha
Permanent crops: _____ ha or _____ m² _____ t/ha
Cereals: _____ ha or _____ m² _____ t/ha
Root crops: _____ ha or _____ m² _____ t/ha
Forage crops: _____ ha or _____ m² _____ t/ha
Legumes: _____ ha or _____ m² _____ t/ha
Oilseeds: _____ ha or _____ m² _____ t/ha
Others (please specify):
_____ _____ ha or _____ m² _____ t/ha

5. Do you use any greenhouses or foil tunnels?
□ Yes: _____ m²
□ No

6. Do you use irrigation systems? If yes, how much water do you use per year?
□ Yes: _____ m³/ha
□ No

7. If you keep livestock, please indicate the quantity (number)?
Mother cows: _____
Cattle: _____

Sow: _____
Fattening pigs: _____
Laying hens: _____
Fattening poultry: _____
Sheep/Goat: _____
Horses: _____
Others (please specify):

_____ _____

8. Are you working your farm as a full-time farmer or are you a part-time farmer with additional income streams from outside the farm?
☐ Full-time farmer
☐ Part-time farmer

9. Do you have certain quality certifications, like certified organic farming?
☐ No
☐ Yes, please specify: _____

B) Marketing

1. How much of the products do you consume on your own / in your family and how much do you sell?
Self-consumption: ca. _____ % of total yield
Selling: ca. _____ % of total yield

2. Do you process your products on your own; e. g. bread, jam, juice, etc.?
☐ Yes, please specify: _____
☐ No

3. Which channels do you use for selling your products? Please indicate the relative importance of these buyers.
☐ Private persons (consumer; direct sale): _____ %
☐ Regional retailers: _____ %
☐ Processors: _____ %
☐ Cooperatives: _____ %
☐ Wholesales: _____ %
☐ Others (please specify: _____): _____ %
☐ Others (please specify: _____): _____ %

4. In case you sell directly to consumers: How do you market directly?
☐ On-farm selling/shop

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□ Farmers' markets

□ Sale booths (at the street, etc.)

□ Delivery service to the costumers' home

□ Other, please specify: _____

□ Other, please specify: _____

C) Diversification

1. Do you have additional income streams on your farm? Here we do not include off-farm diversification.

□ Yes

□ No

2. If yes, which kind of services/income streams? If yes, since when?

□ Tourism services

    □ Gastronomy (since: _____)

    □ Accommodation (since: _____)

    □ Rental of facilities (parties, conferences, etc.) (since: _____)

    □ Horse services (since: _____)

    □ Others: _____ (since: _____)

□ Education services (since: _____)

□ Social services (since: _____)

□ Other public/private services: _____ (since: _____)

□ Renewable energies (please specify: _____ (since: _____)

3. If you have additional income streams: Which share of your income origins from these additional income fields?

Agriculture: ca. _____ % of total income

Additional income streams/services: ca. _____ % of total income

D) Location

1. Do you see a difference between urban and rural agriculture? Please mark a position (line/cross) between 0 (no difference) and 100 (strong difference)!

0 [_____] 100

(0: no difference)   (100: strong difference)

2. Is your farm situated rather urban or rural from your personal point of view? Please mark a position (line/cross) between 0 (very rural) and 100 (very urban)!

0 [_____] 100

3. Do you see the nearby city positive or negative for agriculture?
□ very positive
□ positive
□ neutral
□ negative
□ very negative

4. What are from your point of view the most important advantages for farms in/near cities?
    1. _____
    2. _____
    3. _____
    4. _____

5. What are from your point of view the most important disadvantages for farms in/near cities?
    1. _____
    2. _____
    3. _____
    4. _____

6. Please provide your postal address:
    _____
    _____
    _____

E) Socio-Economic Data
1. How many people are living on the farm?
_____ (number of persons)

2. How many people are working on the farm? Are there any employed people? How many people are working on the farm in full-time equivalent?
_____ (number of persons)
_____ (number of employed persons)
_____ (full-time equivalent)

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3. Sex?
□ female
□ male

4. What is your age?

_____

5. Do you have an assured successor of your farm?
□ Yes (please specify, e. g. son, daughter, neighbour, etc.): _____
□ No

6. Do you use any (public or private) agricultural advisory services?
□ Yes (Who is the advisor? _____)
□ No

7. How do you see the future of your farm?
□ very positive
□ positive
□ neutral
□ negative
□ very negative

8. Do you have plans to change your farm, e.g. other crops, other marketing, etc.?

_____

_____

_____

_____

Thank you very much for taking your time to take part in the survey. In case you are interested in the results, please give us your email or postal address.

APPENDIX 3

Higher Education Institutes (HEIs) survey questionnaire

1. Is Urban Agriculture integrated in your curriculum?
   - ☐ Yes (go on with question 2)
   - ☐ No (go on with question 3)

Field for descriptions / explanations:

2. In case Urban Agriculture is integrated in your curriculum, which fields do you teach specifically?
   - ☐ Plant production
   - ☐ Machinery / Engineering
   - ☐ Marketing / Trading
   - ☐ Project planning
   - ☐ Business Planning, Administration & Finances
   - ☐ Legal Framework
   - ☐ Communication & Networking
   - ☐ Urbanity[3]
   - ☐ Other:
   - ☐ Other:

[3]: *Urbanity summarizes physical, social and economic characteristics of cities and metropolitan areas, like urbanization, urban life, economy and sociology, density of buildings, population, added value & infrastructure*

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Field for descriptions / explanations:

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3. Would you / your HEI be interested in specific Urban Agriculture entrepreneurial education?
   - ☐ Yes
   - ☐ No

Field for descriptions / explanations:

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4. Which levels and kinds of education are from your HEI's point of view most suitable, and why? [multiple answers possible]
   - ☐ Universities
     - ☐ PhD
     - ☐ Master
     - ☐ Bachelor
   - ☐ Universities of Applied Sciences
     - ☐ Master
     - ☐ Bachelor
   - ☐ Technical school / vocational education
   - ☐ out-of-school education / "Life-long learning"
   - ☐ Computer-supported training courses (webinars, …)
   - ☐ Other:

☐ Other:

Field for descriptions / explanations:

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5. Which are the most important soft skills[1] to be taught for Urban Agriculture enterprises? [multiple answers possible]

[1]: soft skills are personal competences and qualifications not related to specific disciplines and subjects

☐ Communication
☐ Self-confidence
☐ Empathy
☐ Capacity for teamwork
☐ Analytical competence
☐ Trustworthiness
☐ Creativity
☐ Self-control
☐ Curiosity
☐ Ability to handle conflicts
☐ Time management
☐ Flexibility
☐ Other:
☐ Other:

Field for descriptions / explanations:

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6. Which are the most important hard skills[2] to be taught for Urban Agriculture enterprises? [multiple answers possible]

[2]: hard skills refer to specialized knowledge in disciplines and subjects

- ☐ Plant production
- ☐ Machinery / Engineering
- ☐ Marketing / Trading
- ☐ Project planning
- ☐ Business Planning, Administration & Finances
- ☐ Legal Framework
- ☐ Communication & Networking
- ☐ Urbanity[3]
- ☐ Other:
- ☐ Other:

[3]: Urbanity summarizes physical, social and economic characteristics of cities and metropolitan areas, like urbanization, urban life, economy and sociology, density of buildings, population, added value & infrastructure

Field for descriptions / explanations:

7. Which are from your HEI's point of view the specific training needs to be taught in Urban Agriculture entrepreneurial education? [multiple answers possible]

- ☐ Plant production
  - o Biology
  - o Ecology & Resource Management
  - o Cultivation
  - o Plant nutrition & manure management
  - o Crop protection
  - o Other:
  - o Other:
- ☐ Machinery / Engineering
  - o Tractor
  - o Planting, drilling and cultivation machinery

- o Harvest technology
- o Precision Agriculture
- o Greenhouse Technology
- o Irrigation
- o Post-harvest technology & logistics
- o Other:
- o Other:
- ☐ Marketing / Trading
  - o Sales & purchase organisation, negotiations and contracts
  - o Customer relations
  - o Market & trade mechanisms
  - o Quality management
  - o Certification
  - o Other:
  - o Other:
- ☐ Business and Project Planning, Administration & Finances
  - o Business and Project Planning
  - o Project management
  - o Business administration
  - o Personnel management
  - o Documentation
  - o Other:
  - o Other:
- ☐ Legal Framework
  - o Laws & Regulations
  - o Taxation
  - o Subsidies, e. g. CAP
  - o Other:
  - o Other:
- ☐ Communication & Networking
  - o Public relations & advertisement
  - o IT-Skills (webpages, social media, social networks)
  - o Other:
  - o Other:
- ☐ Urbanity
  - o Urbanization & urban sociology
  - o Urban demands and trends
  - o Urban economy
  - o Urban planning
  - o Urban green

    o Urban prerequisites (advantages & disadvantages)

    o Other:

    o Other:

☐ Other:

☐ Other:

Field for descriptions / explanations:

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APPENDIX 4

Small and medium-sized enterprises (SMEs) survey questionnaire

1. Would you / your SME be interested in specific Urban Agriculture entrepreneurial education?
   - ☐ Yes
   - ☐ No

Field for descriptions / explanations:

[ ]

2. Which levels and kinds of education are from your SME's point of view most suitable, and why? [multiple answers possible]
   - ☐ Universities
     - ☐ PhD
     - ☐ Master
     - ☐ Bachelor
   - ☐ Universities of Applied Sciences
     - ☐ Master
     - ☐ Bachelor
   - ☐ Technical school / vocational education
   - ☐ out-of-school education / "Life-long learning"
   - ☐ Computer-supported training courses (webinars, …)
   - ☐ Other:
   - ☐ Other:

Field for descriptions / explanations:

3. Which are the most important soft skills[1] to be taught for Urban Agriculture enterprises? [multiple answers possible]

[1]: soft skills are personal competences and qualifications not related to specific disciplines and subjects

- ☐ Communication
- ☐ Self-confidence
- ☐ Empathy
- ☐ Capacity for teamwork
- ☐ Analytical competence
- ☐ Trustworthiness
- ☐ Creativity
- ☐ Self-control
- ☐ Curiosity
- ☐ Ability to handle conflicts
- ☐ Time management
- ☐ Flexibility
- ☐ Other:
- ☐ Other:

Field for descriptions / explanations:

4. Which are the most important hard skills[2] to be taught for Urban Agriculture enterprises? [multiple answers possible]

[2]: hard skills refer to specialized knowledge in disciplines and subjects

- ☐ Plant production
- ☐ Machinery / Engineering
- ☐ Marketing / Trading
- ☐ Project planning
- ☐ Business Planning, Administration & Finances
- ☐ Legal Framework
- ☐ Communication & Networking
- ☐ Urbanity[3]
- ☐ Other:
- ☐ Other:

[3]: Urbanity summarizes physical, social and economic characteristics of cities and metropolitan areas, like urbanization, urban life, economy and sociology, density of buildings, population, added value &infrastructure

Field for descriptions / explanations:

5. Which are from your SME's point of view the specific training needs to be taught in Urban Agriculture entrepreneurial education? [multiple answers possible]

- ☐ Plant production
  - o Biology
  - o Ecology & Resource Management
  - o Cultivation
  - o Plant nutrition & manure management
  - o Crop protection
  - o Other:

- o Other:
- ☐ Machinery / Engineering
  - o Tractor
  - o Planting, drilling and cultivation machinery
  - o Harvest technology
  - o Precision Agriculture
  - o Greenhouse Technology
  - o Irrigation
  - o Post-harvest technology & logistics
  - o Other:
  - o Other:
- ☐ Marketing / Trading
  - o Sales & purchase organisation, negotiations and contracts
  - o Customer relations
  - o Market & trade mechanisms
  - o Quality management
  - o Certification
  - o Other:
  - o Other:
- ☐ Business and Project Planning, Administration & Finances
  - o Business and Project Planning
  - o Project management
  - o Business administration
  - o Personnel management
  - o Documentation
  - o Other:
  - o Other:
- ☐ Legal Framework
  - o Laws & Regulations
  - o Taxation
  - o Subsidies, e. g. CAP
  - o Other:
  - o Other:
- ☐ Communication & Networking
  - o Public relations & advertisement
  - o IT-Skills (webpages, social media, social networks)
  - o Other:

- o Other:
- ☐ Urbanity
  - o Urbanization & urban sociology
  - o Urban demands and trends
  - o Urban economy
  - o Urban planning
  - o Urban green
  - o Urban prerequisites (advantages & disadvantages)
  - o Other:
  - o Other:
- ☐ Other:
- ☐ Other:

Field for descriptions / explanations:

APPENDIX 5

Non-governmental organizations (NGOs) survey questionnaire

1. Would you / your NGO be interested in specific Urban Agriculture entrepreneurial education?
   - ☐ Yes
   - ☐ No

Field for descriptions / explanations:

☐

2. Which levels and kinds of education are from your NGO's point of view most suitable, and why? [multiple answers possible]
   - ☐ Universities
     - ☐ PhD
     - ☐ Master
     - ☐ Bachelor
   - ☐ Universities of Applied Sciences
     - ☐ Master
     - ☐ Bachelor
   - ☐ Technical school / vocational education
   - ☐ out-of-school education / "Life-long learning"
   - ☐ Computer-supported training courses (webinars, …)
   - ☐ Other:
   - ☐ Other:

Field for descriptions / explanations:

3. Which are the most important soft skills[1] to be taught for Urban Agriculture enterprises? [multiple answers possible]

[1]: *soft skills are personal competences and qualifications not related to specific disciplines and subjects*

- ☐ Communication
- ☐ Self-confidence
- ☐ Empathy
- ☐ Capacity for teamwork
- ☐ Analytical competence
- ☐ Trustworthiness
- ☐ Creativity
- ☐ Self-control
- ☐ Curiosity
- ☐ Ability to handle conflicts
- ☐ Time management
- ☐ Flexibility
- ☐ Other:
- ☐ Other:

Field for descriptions / explanations:

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4. Which are the most important hard skills[2] to be taught for Urban Agriculture enterprises? [multiple answers possible]

[2]: hard skills refer to specialized knowledge in disciplines and subjects

☐ Plant production
☐ Machinery / Engineering
☐ Marketing / Trading
☐ Project planning
☐ Business Planning, Administration & Finances
☐ Legal Framework
☐ Communication & Networking
☐ Urbanity[3]
☐ Other:
☐ Other:

[3]: Urbanity summarizes physical, social and economic characteristics of cities and metropolitan areas, like urbanization, urban life, economy and sociology, density of buildings, population, added value &infrastructure

Field for descriptions / explanations:

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5. Which are from your NGO's point of view the specific training needs to be taught in Urban Agriculture entrepreneurial education? [multiple answers possible]

- ☐ Plant production
    - o Biology
    - o Ecology & Resource Management
    - o Cultivation
    - o Plant nutrition & manure management
    - o Crop protection
    - o Other:
    - o Other:
- ☐ Machinery / Engineering
    - o Tractor
    - o Planting, drilling and cultivation machinery
    - o Harvest technology
    - o Precision Agriculture
    - o Greenhouse Technology
    - o Irrigation
    - o Post-harvest technology & logistics
    - o Other:
    - o Other:
- ☐ Marketing / Trading
    - o Sales & purchase organisation, negotiations and contracts
    - o Customer relations
    - o Market & trade mechanisms
    - o Quality management
    - o Certification
    - o Other:
    - o Other:
- ☐ Business and Project Planning, Administration & Finances
    - o Business and Project Planning
    - o Project management
    - o Business administration
    - o Personnel management
    - o Documentation
    - o Other:

- o Other:
- ☐ Legal Framework
  - o Laws & Regulations
  - o Taxation
  - o Subsidies, e. g. CAP
  - o Other:
  - o Other:
- ☐ Communication & Networking
  - o Public relations & advertisement
  - o IT-Skills (webpages, social media, social networks)
  - o Other:
  - o Other:
- ☐ Urbanity
  - o Urbanization & urban sociology
  - o Urban demands and trends
  - o Urban economy
  - o Urban planning
  - o Urban green
  - o Urban prerequisites (advantages & disadvantages)
  - o Other:
  - o Other:
- ☐ Other:
- ☐ Other:

Field for descriptions / explanations:

APPENDIX 6

Public authorities (PAs) survey questionnaire

1. Would you / your PA be interested in specific Urban Agriculture entrepreneurial education?

   ☐ Yes
   ☐ No

Field for descriptions / explanations:

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2. Which levels and kinds of education are from your PA's point of view most suitable, and why? [multiple answers possible]

   ☐ Universities
      ☐ PhD
      ☐ Master
      ☐ Bachelor
   ☐ Universities of Applied Sciences
      ☐ Master
      ☐ Bachelor
   ☐ Technical school / vocational education
   ☐ out-of-school education / "Life-long learning"
   ☐ Computer-supported training courses (webinars, …)
   ☐ Other:
   ☐ Other:

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Field for descriptions / explanations:

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3. Which are the most important soft skills[1] to be taught for Urban Agriculture enterprises? [multiple answers possible]

[1]: soft skills are personal competences and qualifications not related to specific disciplines and subjects

- ☐ Communication
- ☐ Self-confidence
- ☐ Empathy
- ☐ Capacity for teamwork
- ☐ Analytical competence
- ☐ Trustworthiness
- ☐ Creativity
- ☐ Self-control
- ☐ Curiosity
- ☐ Ability to handle conflicts
- ☐ Time management
- ☐ Flexibility
- ☐ Other:
- ☐ Other:

Field for descriptions / explanations:

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4. Which are the most important hard skills[2] to be taught for Urban Agriculture enterprises? [multiple answers possible]

[2]: hard skills refer to specialized knowledge in disciplines and subjects

- ☐ Plant production
- ☐ Machinery / Engineering
- ☐ Marketing / Trading
- ☐ Project planning
- ☐ Business Planning, Administration & Finances
- ☐ Legal Framework
- ☐ Communication & Networking
- ☐ Urbanity[3]
- ☐ Other:
- ☐ Other:

[3]: Urbanity summarizes physical, social and economic characteristics of cities and metropolitan areas, like urbanization, urban life, economy and sociology, density of buildings, population, added value &infrastructure

Field for descriptions / explanations:

5. Which are from your PA's point of view the specific training needs to be taught in Urban Agriculture entrepreneurial education? [multiple answers possible]

- ☐ Plant production
  - o Biology
  - o Ecology & Resource Management
  - o Cultivation

- o Plant nutrition & manure management
- o Crop protection
- o Other:
- o Other:
- ☐ Machinery / Engineering
  - o Tractor
  - o Planting, drilling and cultivation machinery
  - o Harvest technology
  - o Precision Agriculture
  - o Greenhouse Technology
  - o Irrigation
  - o Post-harvest technology & logistics
  - o Other:
  - o Other:
- ☐ Marketing / Trading
  - o Sales & purchase organisation, negotiations and contracts
  - o Customer relations
  - o Market & trade mechanisms
  - o Quality management
  - o Certification
  - o Other:
  - o Other:
- ☐ Business and Project Planning, Administration & Finances
  - o Business and Project Planning
  - o Project management
  - o Business administration
  - o Personnel management
  - o Documentation
  - o Other:
  - o Other:
- ☐ Legal Framework
  - o Laws & Regulations
  - o Taxation
  - o Subsidies
  - o Other:
  - o Other:
- ☐ Communication & Networking
  - o Public relations & advertisement
  - o IT-Skills (webpages, social media, social networks)
  - o Other:

- o Other:
- ☐ Urbanity
  - o Urbanization & urban sociology
  - o Urban demands and trends
  - o Urban economy
  - o Urban planning
  - o Urban green
  - o Urban prerequisites (advantages & disadvantages)
  - o Other:
  - o Other:
- ☐ Other:
- ☐ Other:

Field for descriptions / explanations: