



AgriSkills
Innovative Skills Transfer for the Development of Agricultural
Entrepreneurs
Project N°: 2018-1-DE02-KA204-005173



National Report – Slovakia

New Edu, n.o., Nitra, Slovakia

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Agriskills

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1 Background information on employment, population and importance of agriculture in Slovakia.

1.1 Land area, population density and percent of population in the target group in Slovakia¹.

- Land area - 49 035 km²
- Overall population (31. December 2018) - 5 450 421
- Population density – 111,15 per km²

1.2 Unemployment in Slovakia overall and in the target group

Table 1. EU Labour Force Survey 2016 – percent unemployment for the total population and for persons 15-24 years old in the European Union (EU) and Slovakia².

	Unemployment rates 2016 (%)	
	Total	15-24 years old
EU	8.6	18.7
Slovakia	7,3	8,4

1.3 Agriculture in Slovakia³

- agricultural land area (January 1, 2018):
 - o agriculture land 2 381 953 ha,
 - o arable land 1 408 660 ha,
 - o forestry land 2 024 374 ha.

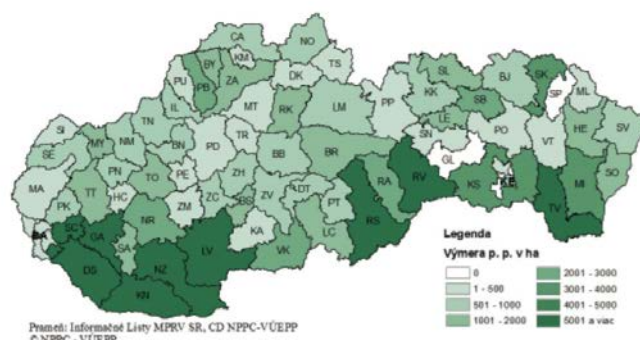


Figure 1 Agriculture land in 2016 (in ha)⁴

¹ <https://slovak.statistics.sk>

² http://www.prog.sav.sk/sites/default/files/2018-08/Bulletin_PU_CSPV_SAV_cislo_3-2018_jul_18.pdf,
https://www.upsvr.gov.sk/statistiky/nezamestnanost-mesacne-statistiky.html?page_id=1254

³ <http://www.skgeodesy.sk/files/slovensky/ugkk/kataster-nehnutelnosti/sumarne-udaje-katastra-podnom-fonde/statisticka-rocenka-2017.pdf>

⁴ <http://www.mpsr.sk/index.php?navID=121?start>

- contribution of the agriculture to the GDP⁵ (2016) – 3,78%.

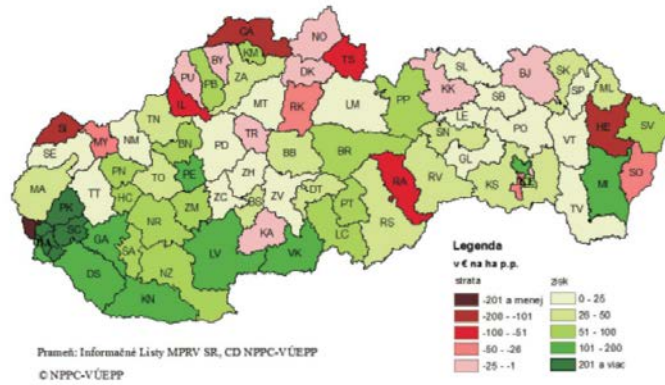


Figure 2 Profit of legal entities in 2016 (€ per ha)⁶

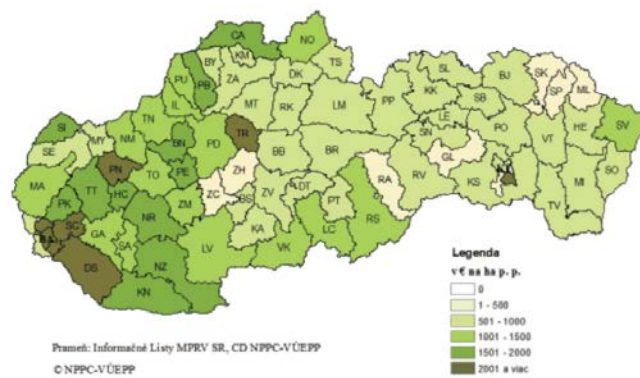


Figure 3 Agriculture production – legal entities in 2016 (€ per ha)⁷

⁵ <http://www.mpsr.sk/index.php?navID=121?start>

⁶ <http://www.mpsr.sk/index.php?navID=121?start>

⁷ <http://www.mpsr.sk/index.php?navID=121?start>

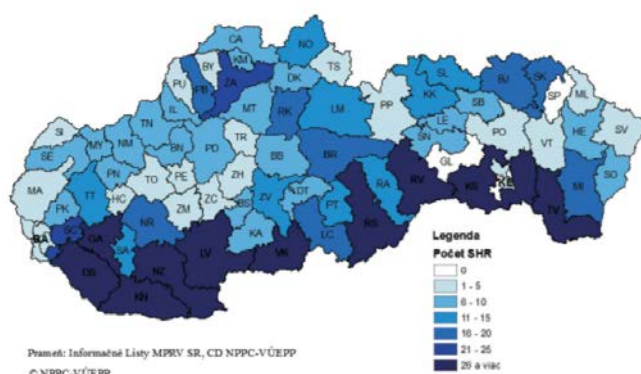


Figure 4 No of small and family farmers in 2016⁸

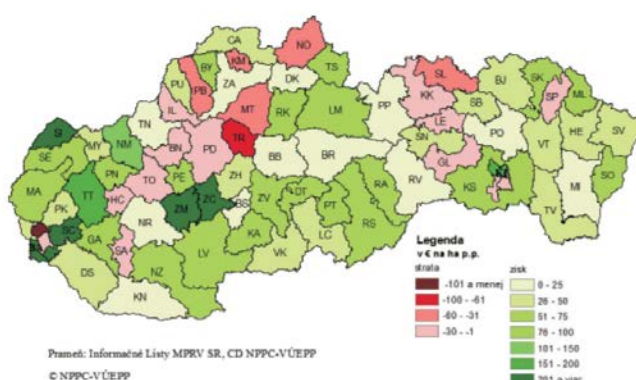


Figure 5 Profit of small and family farmers in 2016 (€ per ha)⁹

Table 2. Area, number and output value of agricultural operations in 2017 for Slovakia

Geographic area	Number of operations	Total agricultural land (ha)	Total output value (mil. euro)	Average output per operation (euro per ha)
Slovakia	944	1 910 654	2 389,4	46,6

Source: Green Report, 2018. Ministry of Agriculture and Rural Development of the Slovak Republic.
<http://www.mpsr.sk/index.php?navID=122&id=13741>

1.4 Employment and entrepreneurship in agriculture in Slovakia

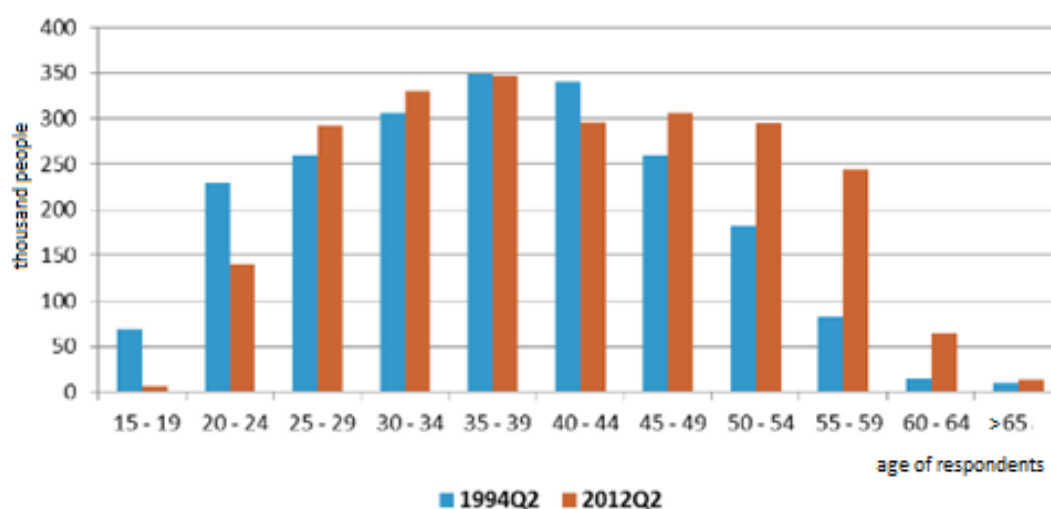
- total number of people leading an agricultural operation in Slovakia in 2016 – 50 100¹⁰
- number of people leading an agricultural operation in the age group from 15-24¹¹

⁸ <http://www.mpsr.sk/index.php?navID=121?start>

⁹ <http://www.mpsr.sk/index.php?navID=121?start>

¹⁰ <http://www.mpsr.sk/index.php?navID=121?start>

¹¹ <https://www7.statistics.sk/PortalTraffic/fileServlet?Dokument=03ecb369-50be-4764-8752-a2afb9656fa8>



- the majority of owners and directors of agricultural operations (over 75%) were people 45 years old or older (Table 3)
- roughly three times as many owner/director positions were held by men than those held by women (Table 3).

Table 3. Number of agricultural entrepreneurs/directors of agricultural operations in 2017 for Slovakia by age group and gender

Age group	Total number	Percent of total	Number male*	Number female*
15-24		4,5		
25-34		12,4		
35-44		21,4		
45-54		29,9		
55-64		29,3		
65+		2,5		
Total	48 500	100	35 900	12 600

- total number of labourers reported to be active in agricultural operations
- number of people were employed in permanent (non-seasonal) jobs in agriculture (Table 5)
- number of employees between the ages of 15 and 24

Table 5 Number of people working in agriculture [2017] for Slovakia by specialization of agricultural operation and labour type.

Specialization*	Number of operations	Total land (ha)	Total labour	Seasonal labour	Permanent labour	Family labour
Field crops		819 752				
Horticulture						
Permanent crops		132 151				

Specialization*	Number of operations	Total (ha)	land	Total labour	Seasonal labour	Permanent labour	Family labour
Specialist grazing livestock							
Specialist granivores							
Mixed cropping							
Mixed livestock holdings							
Mixed crops and livestock							
Totals							

*Specialization categories according to COMMISSION DELEGATED REGULATION (EU) No 1198/2014 supplementing Council Regulation (EC) No 1217/2009 setting up a network for the collection of accountancy data on the incomes and business operation of agricultural holdings in the European Union (Online at <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:32014R1198>)

1.5 Training and education opportunities in agriculture in Slovakia

The training and education system in Slovakia (Figure 1)

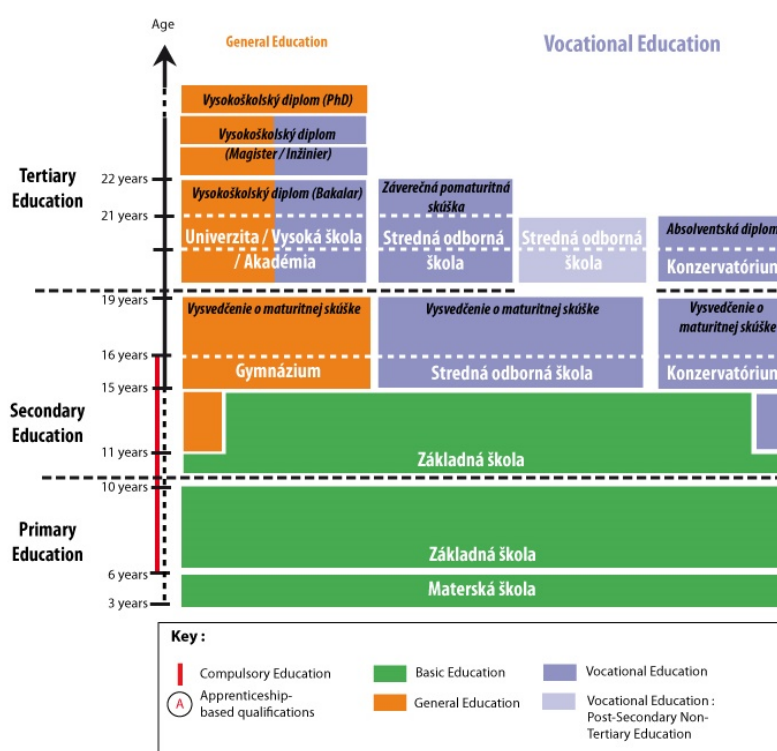


Figure 1: Slovak Education System¹²

¹² http://mavoieproeurope.onisep.fr/en/files/2012/11/slovaquie_en.jpg

The pathways young persons can take to obtain skills and enter employment in agriculture after completing primary school and gymnasium¹³:

1.5.1 Bachelor's study programs

- **Slovak University of Agriculture in Nitra:**
 - Human Nutrition
 - Safety and food control
 - Hippology
 - Landscape engineering
 - Special husbandry
 - Landscape and garden architecture
 - Agroecology
 - Viniculture and enology
 - Gardening
 - Management of animal production
 - Management of plant production
 - Food and Technologies in Gastronomy
 - General Agriculture
 - Sustainable Agriculture and Rural Development
 - Agrofood
 - Food safety and control
 - Landscape engineering
 - Agrobiotechnology
 - Agriculture Machinery
- **The University of Veterinary Medicine and Pharmacy in Košice:**
 - Kynology
 - Relation human-animal and its exploitation in canistherapy and hippotherapy
 - Feed and food safety
- **Technical University in Zvolen:**
 - Forestry
 - Applied Zoology and Wildlife Management
 - Arboriculture and Community Forestry

1.5.2 Master's study programs

- **Slovak University of Agriculture in Nitra:**
 - Safety and food control
 - Food Safety and Control
 - Food Technology
 - Agrobiotechnology
 - Agriculture Machinery
- **The University of Veterinary Medicine and Pharmacy in Košice:**
 - Market and food quality
- **Technical University in Zvolen:**
 - Applied Zoology and Wildlife Management
 - Forest Ecology
 - Adaptive Forestry

¹³ <https://www.portalvs.sk/en/>

- Forestry Technologies
- Forestry and Wildlife Management

Number of degree programs offered at universities and universities of applied sciences in Slovakia in [2019/20]:

- Slovak University of Agriculture in Nitra – **17 Bc study programs, 5 MSc study programs,**
- The University of Veterinary Medicine and Pharmacy in Košice - **3 Bc study programs, 1 MSc study programs,**
- Technical University in Zvolen - **3 Bc study programs, 5 MSc study programs.**

Number of people enrolled in universities in agricultural fields:

- Slovakia Slovak University of Agriculture in Nitra (2016/2017) – **7 515**¹⁴,
- The University of Veterinary Medicine and Pharmacy in Košice (2016/2017) – **1 711**¹⁵,
- Technical University in Zvolen – (2016/2017) – **2 672**¹⁶.

2 Agriskills online survey

In accordance with the Agriskills project goals of identifying training needs for unemployed people in the age group from 15-24 years to support employment and business establishment in agriculture, an online stakeholder survey was conducted (Appendix A).

2.1 Methods

As per the project proposal, a minimum of twenty-five individual responses were solicited from individuals in each country who either currently employ agricultural workers or advise and educate young people about how to find work. A list of potential respondents was collected from employers and educators known to the project partners as well as from personal contacts. An initial phone call was made to explain the goals and methods of the Agriskills project and to request participation. Upon receipt of a positive response, an email was sent with a link to the online questionnaire.

2.2 Characterization of Respondents

As the survey was conducted anonymously, respondents were asked to identify themselves according to their primary role in dealing with unemployed or otherwise disadvantaged people age 15-24 in Slovakia.

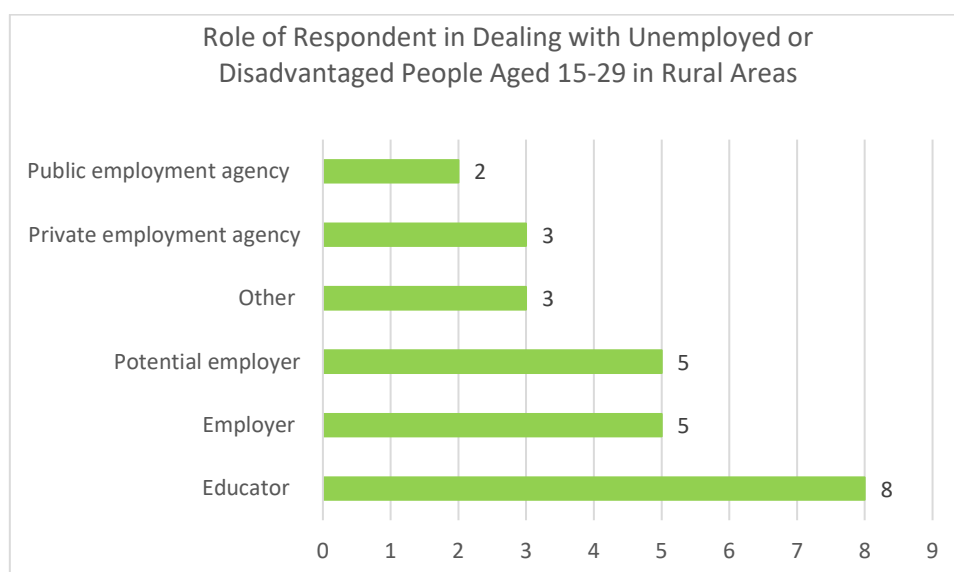
Table 6 Percentage of respondents to the online survey who identified themselves in each category

Role of respondent in dealing with unemployed or disadvantaged people aged 15-29 in rural areas	N	Percent
Educator	8	30,8%
Employer	5	19,2%
Potential employer	5	19,2%
Other	3	11,5%
Private employment agency	3	11,5%
Public employment agency	2	7,7%

¹⁴ www.uniag.sk

¹⁵ www.uvlf.sk

¹⁶ www.tuzvo.sk



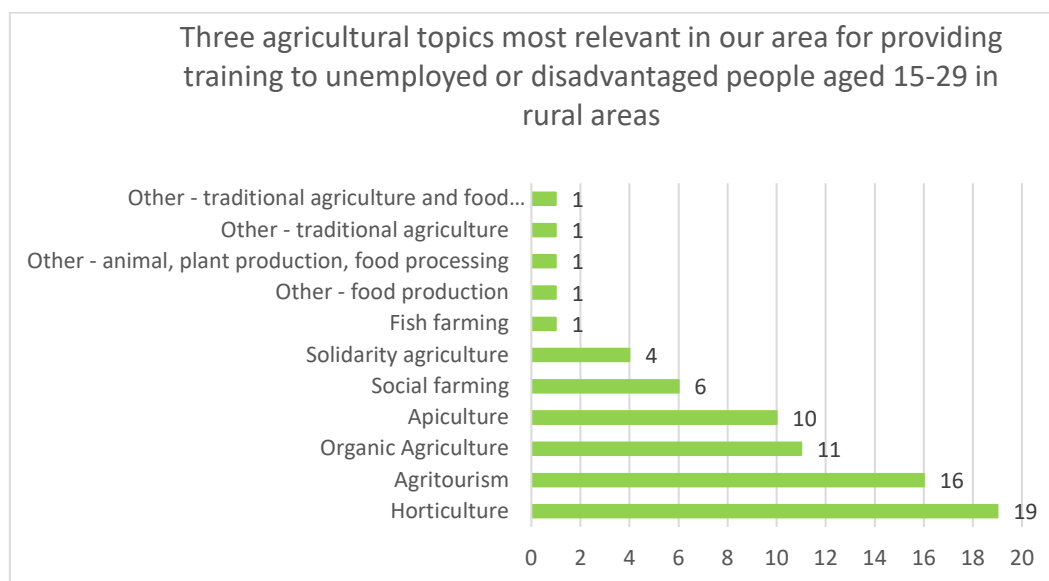
The largest number of respondents identified themselves as educator (31%) followed by employer/potential employer (both 19%). These categories comprised 69% of the total number of responses.

2.2.1 Respondents views on the most relevant agricultural areas for new labour and business entrants in Slovakia

One of the main goals of this project output was determining the most important agricultural fields in each partner country on which to focus training materials. Towards this goal, respondents were asked to choose the three most important agricultural areas in their country from a list of seven areas identified by the project partners. An additional free text field was provided so that respondents could identify fields that they felt were important that were not covered by the options provided.

Table 7 Respondents views on the most relevant agricultural areas for new labour and business entrants in Slovakia

Three agricultural topics most relevant in our area for providing training to unemployed or disadvantaged people aged 15-29 in rural areas	N	Percent
Horticulture	19	27%
Agritourism	16	23%
Organic Agriculture	11	15%
Apiculture	10	14%
Social farming	6	8%
Solidarity agriculture	4	6%
Fish farming	1	1%
Other - food production	1	1%
Other - animal, plant production, food processing	1	1%
Other - traditional agriculture	1	1%
Other - traditional agriculture and food production	1	1%



Our respondents have chosen Horticulture (27%), Agritourism (23%) and Organic Agriculture (15%) as the three most relevant agricultural topics in Slovakia. Their choices for horticulture could be explained as trendy - people are interested about their gardens and want to learn something useful that will help them to caring about the gardens. Agritourism has begun to be very popular in Slovakia, in part due to the priorities defined under the Rural Development Program for regions in eastern Slovakia, which have been identified as "disadvantage regions". Organic Agriculture (may be some misunderstanding appeared and significant part of responses should have in mind "bio farming") was the third most relevant topic chosen by respondents from Slovakia.

2.2.2 Potential Barriers to meeting goals of Agriskills project

The goal of the Agriskills project is to create training materials that will serve to support the target population in developing skills and gaining knowledge that will help them obtain employment in existing agricultural operations or establish new businesses related to agriculture. To better achieve this goal, we sought information from respondents with regard to potential barriers in reaching the target population and making careers in agricultural attractive to members of the target group. The following show the results.

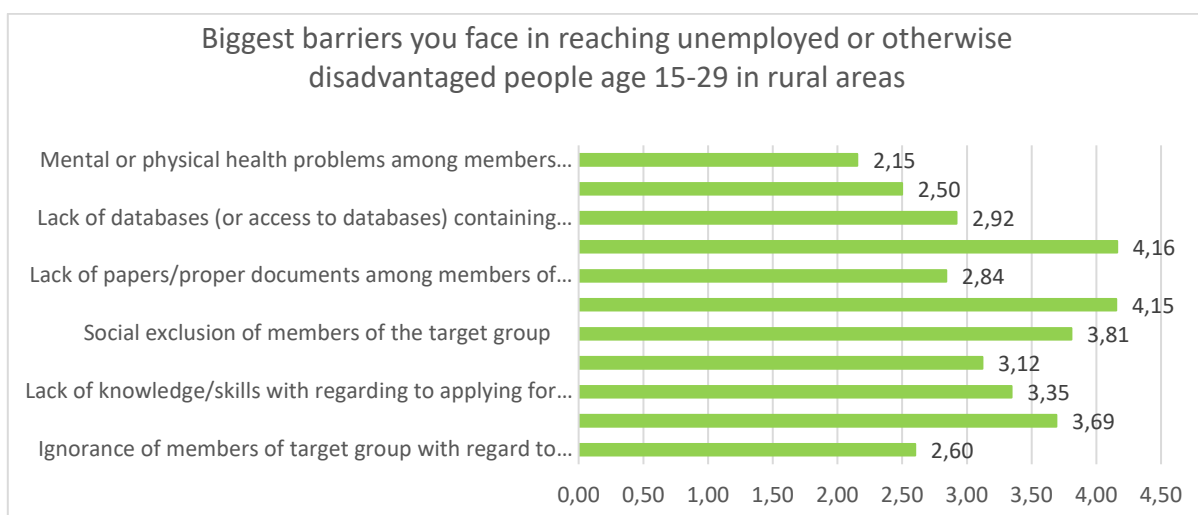
Respondents were asked to rate the barriers to reaching the target population on a scale from 1 (least important) to 5 (most important).

2. What are the biggest barriers you face in reaching unemployed or otherwise disadvantaged people age 15-29 in rural areas (members of target group)? Please rate from 1 (least important) to 5 (very important).

Biggest barriers you face in reaching unemployed or otherwise disadvantaged people age 15-29 in rural areas	N	Mean	Frequency (Rating)				
			1	2	3	4	5
Ignorance of members of target group with regard to potential aid/support from government	25	2,1	4	5	13	3	0
Mental barriers among the target group to applying for work	26	3,1	0	3	10	5	8

Lack of knowledge/skills with regarding to applying for a new job	26	3,1	1	7	6	6	6
Fewer work opportunities in rural areas than in urban areas	25	3,1	2	5	10	4	4
Social exclusion of members of the target group	26	3,1	2	1	4	12	7
Unwillingness of potential employers to hire members of target groups	26	4,1	1	2	2	8	13
Lack of papers/proper documents among members of target group	25	2,1	2	7	10	5	1
Lack of basic work ethic among members of the target group	25	4,1	1	1	4	6	13
Lack of databases (or access to databases) containing information about the target group	25	2,1	4	5	7	7	2
Alcohol or other substance abuse issues among members of the target group	24	2,1	7	5	5	7	0
Mental or physical health problems among members of the target group	26	2,1	11	6	5	2	2

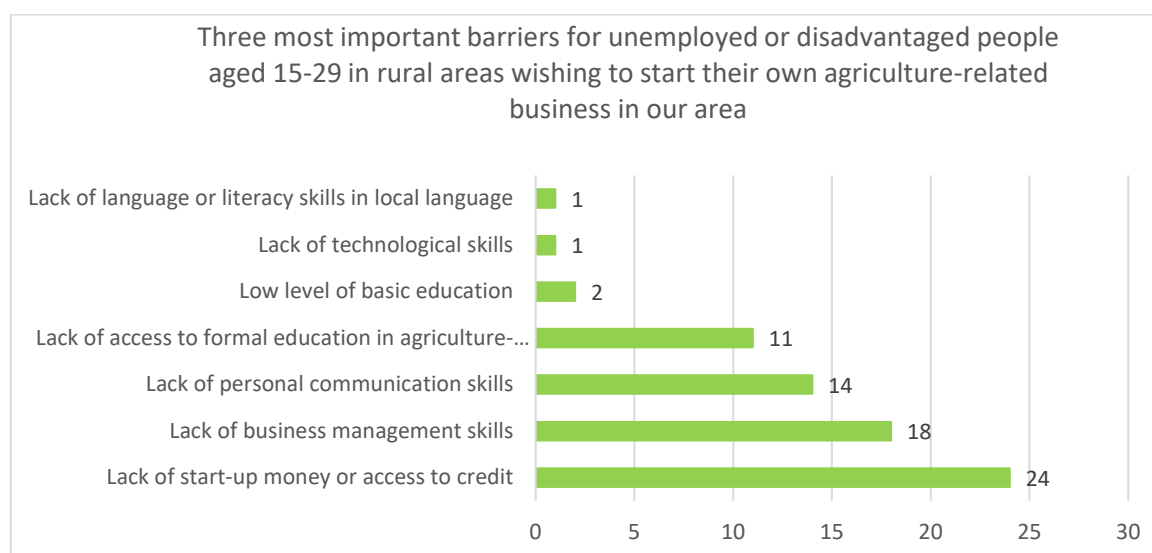
For this question, respondents ranked higher "Unwillingness of potential employers to hire members of target groups" and "Lack of basic work ethic among members of the target group" (both 13%). The reason for this group is probably in the fact that into the disadvantage groups belong the people from minorities and low skilled people, which social system do not push to work and after years they lose or they never work so they cannot obtain, work skills.



When asked to choose the three most important barriers to members of the target group starting a new business in agricultural fields (from a list of seven), respondents choose "Lack of start-up money or access to credit" 34%, Lack of business management skills 25% and Lack of personal communication skills 20%.

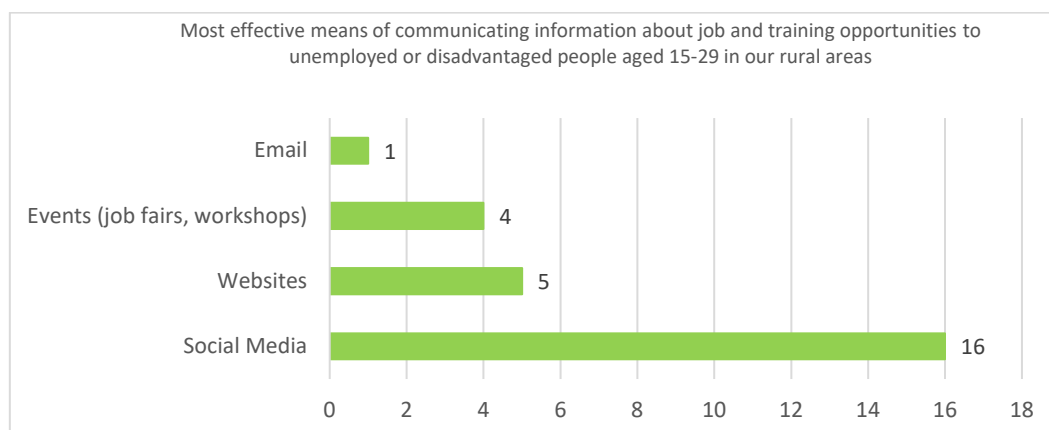
Three most important barriers for unemployed or disadvantaged people aged 15-29 in rural areas wishing to start their own agriculture-related business in our area	N	Percent
Lack of start-up money or access to credit	24	34%
Lack of business management skills	18	25%

Lack of personal communication skills	14	20%
Lack of access to formal education in agriculture-related occupations	11	15%
Low level of basic education	2	3%
Lack of technological skills	1	1%
Lack of language or literacy skills in local language	1	1%



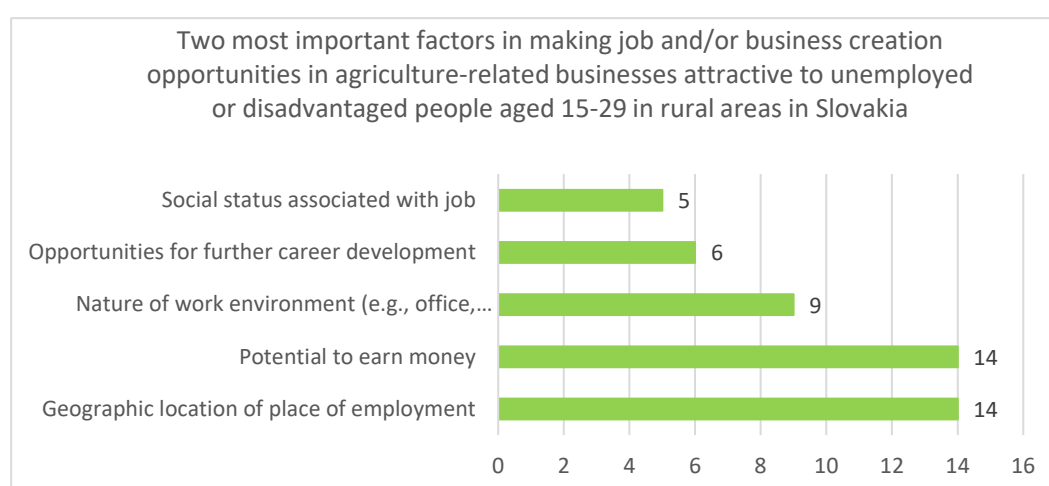
Respondents were given a list of four potential means for reaching the target audience and asked to choose the most effective. "Social media" were chosen by the highest number of respondents (62%) as the most effective means of communicating information about job and training opportunities to unemployed or otherwise disadvantaged persons aged 15-24 in the rural areas where we work. Facebook, YouTube, WhatsApp and Instagram are the most popular social media between target group. "Websites" and "Events" ranked right after "Social media" (19%, 15%), while "Email" ranked last, being chosen by only 1 respondent (4%).

Most effective means of communicating information about job and training opportunities to unemployed or disadvantaged people aged 15-29 in our rural areas	N	Percent
Social Media	16	62%
Websites	5	19%
Events (job fairs, workshops)	4	15%
Email	1	4%



When asked what factors would make training and subsequent job opportunities in agriculture attractive to the target group, respondents were given five choices and asked to choose the two most important. For the Slovakia, the two most important factors in making job and/or business creation opportunities in agriculture-related businesses attractive to unemployed or otherwise disadvantaged persons aged 15-24 in rural areas are “Geographic location of place of employment” and “Potential to earn money” (both 29%).

Two most important factors in making job and/or business creation opportunities in agriculture-related businesses attractive to unemployed or disadvantaged people aged 15-29 in rural areas in Slovakia	N	Percent
Geographic location of place of employment	14	29%
Potential to earn money	14	29%
Nature of work environment (e.g., office, factory, farm, forest)	9	19%
Opportunities for further career development	6	13%
Social status associated with job	5	10%



2.2.3 Respondents' views on key skills for which the Agriskills project should provide training materials

In addition to providing general knowledge about the specific most relevant agricultural topics in the relevant countries, the Agriskills project seeks to provide the target population with the necessary soft

skills and technological skills. To assess the skills most lacking in the target population of each member country, respondents were provided with a list of seven soft skills and asked to choose the three they felt to be most important for preparing the target population to become employees and entrepreneurs in agricultural fields.

Thirty-two respondents (42%) choose "Communication skills" or "Teamwork" as the most important soft skill for the target population. These skills were followed by "Cooperation with others" (14%). Only 3 respondents choose the "Negotiation skills".

Three most important soft skills that are lacking among unemployed or disadvantaged people age 15-29 in rural areas in Slovakia	N	Percent
Critical thinking skills	16	21%
Teamwork	16	21%
Cooperation with other	14	18%
Communication, e.g., with relevant stakeholders	11	14%
Time management skills	9	12%
Conflict resolution skills	7	9%
Negotiation skills	3	4%

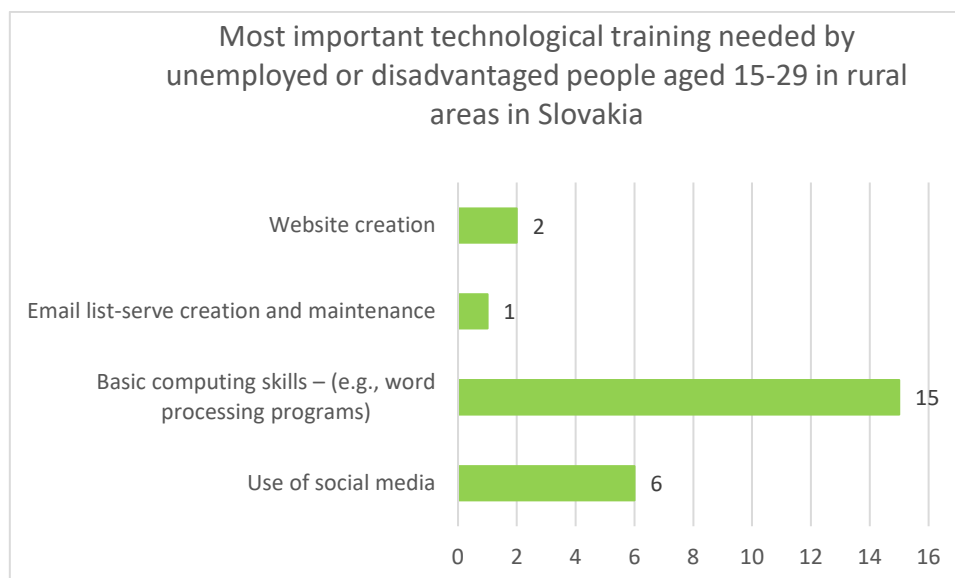


When asked to choose the most important technological training need from a possible list of four.

Basic computing skills is the most important technological training needed by unemployed or otherwise disadvantaged persons aged 15-24 in rural areas in Slovakia (63%). The rest of possibilities look less important for the target groups - social media chose only 6 respondents, email list-serve creation and maintenance 1 person and Website creation 2 persons.

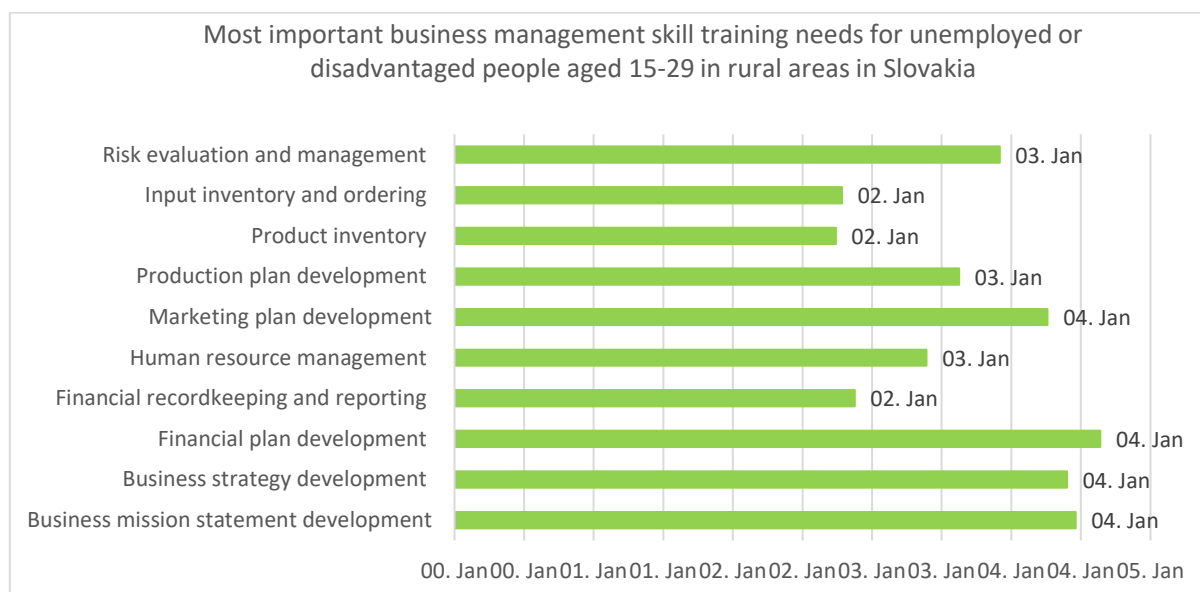
Most important technological training needed by unemployed or disadvantaged people aged 15-29 in rural areas in Slovakia	N	Percent
Use of social media	6	25%
Basic computing skills – (e.g., word processing programs)	15	63%
Email list-serve creation and maintenance	1	4%

Website creation	2	8%
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Respondents were asked to rate (from 1 – least important to 5 – most important) of specific business management skills training options (from a possible list of 10). The same highest ranked skills identified by the “employers” were “Business mission statement development”, “Business strategy development” and “Financial plan development” (all the same 4.1).

Most important business management skill training needs for unemployed or disadvantaged people aged 15-29 in rural areas in Slovakia	N	Mean	Frequency (Rating)				
			1	2	3	4	5
Business mission statement development	26	4.1	0	1	3	5	17
Business strategy development	25	4.1	1	0	3	5	16
Financial plan development	25	4.1	0	1	1	4	19
Marketing plan development	23	4.1	0	1	4	6	12
Financial recordkeeping and reporting	24	2.1	3	3	13	4	1
Human resource management	23	3.1	1	1	10	10	1
Production plan development	24	3.1	1	2	7	9	5
Product inventory	23	2.1	2	7	10	3	1
Input inventory and ordering	23	2.1	1	7	11	4	0
Risk evaluation and management	24	3.1	0	1	7	9	7



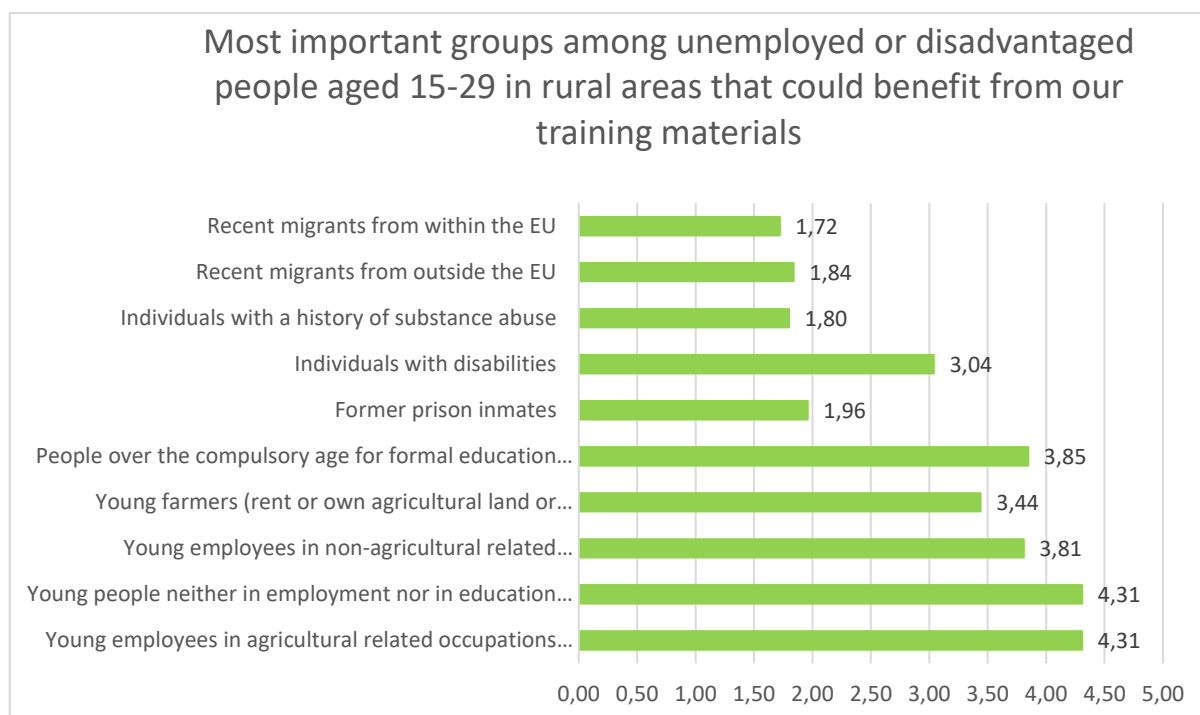
2.2.4 Respondents views on the most important subgroups that should be targeted by Agriskills training materials and activities

So that we can better target the most important groups when disseminating the training materials developed by the Agriskills project, we sought information as to the most likely subgroups within the target population in individual countries. Respondents were provided with a list of ten subgroups of potential beneficiaries of the training materials to be developed by the Agriskills project.

The same highest ranked skills identified by the “employers” were “Young employees in agricultural related occupations who are no longer enrolled in formal educational programs” and “Young people neither in employment nor in education and training (NEETs)” (all the same 4.1).

Most important groups among unemployed or disadvantaged people aged 15-29 in rural areas that could benefit from our training materials	N	Mean	Frequency (Rating)				
			1	2	3	4	5
Young employees in agricultural related occupations who are no longer enrolled in formal educational programs	26	4.1	0	3	4	1	18
Young people neither in employment nor in education and training (NEETs)	26	4.1	0	1	4	7	14
Young employees in non-agricultural related occupations who are no longer enrolled in formal educational programs	26	3.1	0	4	7	5	10
Young farmers (rent or own agricultural land or operations and currently involved in production)	25	3.1	3	3	8	2	9
People over the compulsory age for formal education not currently employed still enrolled in formal education programs	26	3.1	2	2	6	4	12
Former prison inmates	25	1.1	15	3	2	3	2
Individuals with disabilities	25	3.1	3	3	9	10	0

Most important groups among unemployed or disadvantaged people aged 15-29 in rural areas that could benefit from our training materials	N	Mean	Frequency (Rating)				
			1	2	3	4	5
Individuals with a history of substance abuse	25	1.1	14	3	7	1	0
Recent migrants from outside the EU	25	1.1	14	3	6	2	0
Recent migrants from within the EU	25	1.1	19	0	2	2	2



2.3 Summary and Recommendations

Most farmers in Slovakia, especially those who own small and medium-sized holdings, have serious problems with the work skills and work habits. This is the main finding from the survey in Slovakia. The members of the target group also lack the proper knowledge in the field of business skills, financial management and marketing, but they need training in the field of teamwork or communication skills. One important point that was not captured in the survey is traditional methods of production, support of which is one of the priorities of the Slovakian Ministry of Agriculture as is mentioned several times in strategic documents of the Ministry that focus on rural development.