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Innovative Skills Transfer for the Development of Agricultural Entrepreneurs
Project Nº: 2018-1-DE02-KA204-005173



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Country Report Germany

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

As noted in the EU report, the importance, extent and economic contribution of agriculture varies widely across the countries in which the AgriSkills consortium partners are active. Unemployment rates also vary, not only between countries, but also within them. Demographic characteristics of the overall populations and those already active in agriculture in the different partner countries also vary. The following section provides some basic statistics on the current agricultural situation in Germany and the employment status of the overall population and the target group in general and in the agricultural sector.

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

Germany is a country with a total land area of 358,000 km2 (35.8 million ha) (Statistisches Bundesamt Deutschland, 2018). The population of Germany in 2016 was 82.5 million, 77% of whom were living in urban or semi-urban areas (Statistisches Bundesamt Deutschland, 2018). This amounts to an average population of 231/km2. However, population density across the German states ranges from just over 4000/km2 in the city-state of Berlin to just under 70/km2 in the state of Mecklenburg-Vorpommern (Statistisches Bundesamt Deutschland, 2018). About 10.6% of the total German population in 2016 was between the ages of 15 and 25 (Statistisches Bundesamt Deutschland, 2018).

1.2 Unemployment in Germany and in the target group

According to the EU Labour Force Survey (2016), the overall unemployment rate in Germany in 2016 was low (4.1%) compared to the average unemployment rate in the EU (8.6%). The unemployment rate in Germany in 2016 in the age group from 15-24 years old (7.1%) was also lower than the EU average (18.7%), but still much higher than the overall unemployment rate (Table 1). Percent unemployment overall and in the target group varied widely across the German states, with the lowest percentages (Total 2.6%; aged 15-24 4.4%) in Bavaria, and the highest percentages (Total - 7.8%; aged 15-24 -12.2%) in Berlin (Table 1) (EU Labour Force Survey 2016). The rate of unemployed people in the target age group (aged 15-24) was lowest (5.3%) in rural areas, with rates increasing with increasing urbanization (6.8% in towns and suburbs and 8.5% in cities) (EU Labour Force Survey, 2016).





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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), Germany and the individual German States

	Unemployn	nent rates 2016 (%)
	Total	15-24 years old
E	J 8.6	18.7
GERMANY	4.1	7.1
Baden-Württemberg	3.1	6.0
Bavaria	2.6	4.4
Berlin	7.8	12.2
Brandenburg	4.6	10.1
Bremen	5.4	u
Hamburg	4.1	7.5
Hesse	3.9	8.4
Mecklenburg-Vorpommern	6.3	u
Lower Saxony	4.0	7.0
North Rhine-Westphalia	4.5	7.4
Rhineland-Palatinate	3.6	7.3
Saarland	4.9	10.1
Saxony	5.0	8.2
Saxony-Anhalt	7.4	10.6
Schleswig-Holstein	4.0	7.5
Thuringia	5.1	10.1
u = Data not published due to small sample size.		

Source: EU Labour Force Survey, 2016

1.3 Agriculture in Germany

According to the 2016 EU Farm Structure Survey (Statistisches Bundesamt Deutschland, 2016), approximately 16.7 million ha (ca. 47%) of the land area of Germany was used by 275,392 agricultural operations (Table 2). The distribution of both agricultural land and agricultural operations varied widely across the different German states (Table 2). The highest number of operations (8,860) and the largest area of agricultural land use (3,127,000 ha) were found in Bavaria, and the lowest number of operations (1,200) and area of agricultural land use (76,600 ha) in Saarland. The total output value of these agricultural operations in 2016 was 49,008,262,747 Euros (Table 2). This also varied widely across the different German states (Table 2). Despite the large land area devoted to agriculture in Germany, the total value added to German Gross Domestic Product in 2016 was only 0.6%. (World Bank, 2019).





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Table 2. Area, number and output value of agricultural operations in Germany and in each of the German states in 2016

Geographic area	Number of operations	Total land area (ha)	Total output value (euro)	Average output per operation (euro)
Germany	275,392	16,658,928	49,008,262,747	177,958
Baden Württemberg	40,589	1,415,980	4,132,575,556	101,815
Bavaria	90,162	3,125,366	8,688,734,599	96,368
Berlin	52	1,845	6,309,896	121,344
Brandenburg	5,318	1,315,469	2,225,432,331	418,472
Bremen	145	8,052	20,164,680	139,067
Hamburg	625	14,637	141,221,216	225,954
Hessen	16,259	767,332	1,649,644,353	101,46
Mecklenburg-Vorpommern	4,903	1,347,590	2,565,411,458	523,233
Lower Saxony	37,793	2,598,164	11,150,202,284	295,034
North Rhine-Westfalia	33,688	1,440,539	6,970,671,613	206,919
Rhineland-Palatinate	17,49	698,763	2,335,846,096	133,553
Saarland	1,213	77,755	119,784,082	98,75
Saxony	6,483	903,514	2,031,564,510	313,368
Saxony-Anhalt	4,349	1,174,525	2,401,007,759	552,083
Schleswig-Holstein	12,716	990,403	3,032,385,499	238,47
Thuringia	3,607	778,996	1,537,306,815	426,201

Source: Statistisches Bundesamt Deutschland. 2016. Betriebswirtschaftliche Ausrichtung und Standardoutput Agrarstrukturerhebung, 2016.

1.4 Employment and entrepreneurship in agriculture in Germany

Of the total of 276,100 people leading an agricultural operation in Germany in 2016, only 1,700 were in the age group from 15-24, while the vast majority of owners and directors of agricultural operations (over 75%) were people 45 years old or older (Table 3). In all age groups, these positions were overwhelmingly held by men.





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Table 3. Number of agricultural entrepreneurs/directors of agricultural operations in 2016 by age group and gender

Age group	Total number	Percent of total	Number male*	Number female*
15-24	1,700	0,615	1,600	100,000
25-34	18,800	6,807	16,200	2,700
35-44	47,700	17,270	42,300	5,500
45-54	98,900	35,807	89,600	9,200
55-64	86,400	31,282	79,600	6,800
65+	22,700	8,219	20,500	2,200
Total	276,200	100,000	249,800	126,400

Source: Betriebswirtschaftliche Ausrichtung und Standardoutput Agrarstrukturerhebung.. Statistisches Bundesamt Deutschland (*difference due to rounding up to thousands)

In 2016, a total of 940,100 labourers were reported to be active in agricultural operations in Germany. Of these, 204,600 people were employed in permanent (non-seasonal) jobs in agriculture of which 18,100 people were between the ages of 15 and 24, 10,900 of whom were employed full time (7,200 part-time) (Table 4). The number of seasonal workers (286,300) was greater than the number of permanent workers, and the number of family members contributing their labour (449,100) was nearly equal to both categories of employed labour combined (Table 4).

The largest number of operations, occupying the largest land area and employing the most people were those that specialize in rearing cattle, sheep and goats for slaughter and for production of dairy products (specialist grazing livestock) (Table 4).

Table 4. Number of people working in agriculture in 2016 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	83,939	6,015,416	271,600	114,200	37,500	119,900
Horticulture	6,359	70,145	94,100	55,600	28,300	10,300
Permanent crops	19,761	216,249	118,700	71,500	13,700	33,400
Specialist grazing livestock	113,986	5,946,504	272,200	5,000	63,600	203,600
Specialist granivores	15,993	823,833	42,300	1,300	19,200	21,900
Mixed cropping	3,448	179,981	40,100	29,700	4,600	5,800
Mixed livestock holdings	6,033	473,518	18,000	500,000	6,700	10,900
Mixed crops and livestock	25,873	2,933,282	83,000	8,600	31,000	43,400
Totals	275,392	16,658,928	940,100	286,300	204,600	449,100

Source: Betriebswirtschaftliche Ausrichtung und Standardoutput Agrarstrukturerhebung.. Statistisches Bundesamt Deutschland

^{*}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)





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1.5 Training and education opportunities in agriculture in Germany

The training and education system in Germany (Figure 1) offers several different pathways young people can take to obtain skills and enter employment in agriculture after completing primary and secondary general education.

STRUCTURE OF THE GERMAN EDUCATION SYSTEM **VOCATIONAL EDUCATION APPRENTICESHIPS** UNIVERSITY UNIVERSITY OF APPLIED (DUAL SYSTEM) **SCIENCES** LEVEL 4 (2 – 3 year programmes) 19 - 21 IFVFI 3 (3 year programme) **PRE-UNIVERSITY GENERAL UPPER** VOCATIONAL **EDUCATION SECONDARY UPPER SECONDARY EDUCATION EDUCATION** GRAMMAR SECONDARY EDUCATION **VET PROGRAMMES LEVEL 2** (GENERAL EDUCATION) SCHOOL 11 - 16 A PRIMARY EDUCATION 6 - 10

Figure 1. Structure of the German education system

Source: Berufsbildende Schule Wirtschaft 1, 2014

Vocational schools and the dual vocational and educational and training systems (VET) are particularly important and successful in Germany (Berufsbildende Schule Wirtschaft 1, 2014). In addition, 194 degree programs were offered at universities and universities of applied sciences in Germany in 2016 (Bildungsserveragrar, 2019). In 2017, approximately 33,000 people were enrolled in apprenticeships in agricultural fields in Germany, approximately 7,000 students were enrolled in agricultural vocational schools, and approximately 64,000 students were enrolled in agriculture-related degree programs in universities of applied sciences. (Bildungsserveragrar, 2019).

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).



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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 online sources. 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 Germany. Just over half (52%) of the German respondents to the online survey identified themselves either as an employer or potential employer in the agriculture sector. Of the remaining respondents, 24% identified themselves as educators, 12% as representatives of public or private employment agencies, and the remaining respondents (12%) listed the following as their occupations: coordinator of (educational) mentorships, social counselling professional orientation, and training consultant. For the analysis of the answers to some questions, two groups of respondents were formed. The first group consisted of the (13) employers, and the remaining respondents (12) were grouped together in a group that from herein is referred to as "educators".

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

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. In response, 21 out of 25 German survey participants cited organic agriculture among the three most important agricultural sectors in Germany and 20 identified Horticulture (Table 5).

Table 5. Respondents views on the most relevant agricultural areas for new labour and business entrants in Germany

	n	Percent
Organic Agriculture	21	84,0
Horticulture	20	80,0
Social farming	10	40,0
Solidarity agriculture	5	20,0
Agritourism	3	12,0
Fish farming	2	8,0
Apiculture	0	0,0

This reflects the increasing importance of organic food in the German market, as well as the stated goals of the German agricultural ministry to increase the area of agricultural land cultivated



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using organic methods (German Federal Ministry of Food and Agriculture (BMEL), 2017). Horticulture was the next most popular response, which reflects the increasing demand for fresh fruits and vegetables in Germany, particularly those produced locally (Bundesministerium für Ernährung und Landwirtschaft. 2016). Social farming was the third most chosen option, reflecting the potential this type of operation has for providing job opportunities for people with many different types of disadvantages, from addiction to learning disabilities (Van Elsen, T., Retkowski, A., 2019). Niche sectors such as apiculture, agritourism and fish farming were rarely chosen. Only three respondents added other areas (not among the possible choices) they deemed important. One cited both viticulture and vegetable gardening, one livestock farming, and a third, conventional farming.

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.

Respondents were asked to rate the barriers to reaching the target population on a scale from 1 (least important) to 5 (most important). While a lack of work opportunities in rural areas was not seen by respondents as an important problem, all respondents cited lack of basic work ethic among members of the target group as one of the most important barriers (Table 6). This reflects the ample work opportunities that exist in Germany (as evidenced by the overall low unemployment rates) as well as the well-developed infrastructure for finding training and work in Germany (Figure 1). It also indicates that, as research has shown, unemployed individuals are often subject to stereotypes that their situation is due to lack of motivation and initiative, rather than lack of skills or opportunities (Schmidt, M., Zwingmann, I., & Richter, F, 2015). This is further supported by the fact that respondents generally agreed that ignorance of the target group with regard to how to go about looking for jobs and where to go to get help, as well as mental barriers to applying for work are among the most important barriers. Less agreement was evident between employers and educators in terms of willingness of employers to hire members of the target group, the level of understanding among the target group about government aid in finding work and the degree to which potential employees are in possession of necessary documents.





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Table 6. Biggest barriers in reaching the target population mean values for all respondents and for the two groups

	n	Mean		1
			Em-	Educa-
		All	ployers	tors
Lack of basic work ethic among members of the target group	24	3,8	4,0	3,5
Mental barriers among the target group to applying for work	23	3,6	3,5	3,6
Lack of knowledge/skills with regarding to applying for a new job	23	3,6	3,6	3,5
Mental or physical health problems among members of the target group	23	3,4	3,3	3,5
Unwillingness of potential employers to hire members of target groups	24	3,1	2,8	3,4
Alcohol or other substance abuse issues among members of the target group	23	3,1	3,2	3,0
Lack of papers/proper documents among members of target group	24	3,0	3,3	2,8
Ignorance of members of target group with regard to potential aid/support from government	23	3,0	2,6	3,4
Social exclusion of members of the target group	24	2,6	2,4	2,8
Lack of databases containing information about the target group	24	2,5	2,8	2,3
Fewer work opportunities in rural areas than in urban areas	24	2,2	2,3	2,1

Respondents were 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). Lack of business management skills (72%), lack of access to start-up funds (56%), general low level of basic education (40%), and lack of personal communication skills (40%) were seen as the most important (Table 7). Given the well-developed educational system in Germany, this is an interesting finding.

Table 7. Most important barriers to members of the target group starting a new business in agricultural fields - absolute number (n) and percentage (percent) of total responses given

	n	Percent
Lack of business management skills	18	72,0
Lack of start-up money or access to credit	14	56,0
Low level of basic education	10	40,0
Lack of personal communication skills	10	40,0
Lack of access to formal education in agriculture-related occupations	7	28,0
Lack of language or literacy skills in local language	7	28,0
Lack of technological skills	5	20,0

Respondents were given a list of four potential means for reaching the target audience, and asked to choose the most effective (Table 8). Events such as job fairs and workshops were seen by respondents as the most effective way to communicate with the target population by 48% of the respondents, and social media seen as the most important by 35%.





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Table 8. Respondents views of the most effective means of reaching target population - absolute number (n) and percentage (percent)of total responses

	n	Percent
Events (job fairs, workshops)	11	47,8
Social Media	8	34,8
Email	2	8,7
Website	2	8,7

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. The potential to earn money was the most important factor cited (80%), with social status of the job being the second most important (48%) factor (Table 9).

Table 9. Respondents views on the two most important factors in making work in agriculture attractive to target group - absolute number (n) and percentage (percent)of total responses

	n	Percent
Potential to earn money	20	80,0
Social status associated with job	12	48,0
Nature of work environment (e.g., office, factory, farm, forest)	7	28,0
Opportunities for further career development	6	24,0
Geographic location of place of employment	3	12,0

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 obtain employment or start a business in agriculture. 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 (Table 10). Communication with relevant stakeholders was the favourite (84%), followed by time management skills (52%), and teamwork (44%) (Table 10).



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Table 10. Most important soft skills according to respondents - absolute number (n) and percentage (percent) of total responses

	n	Percent
Communication, e.g., with relevant stakeholders	21	84,0
Time management skills	13	52,0
Teamwork	11	44,0
Critical thinking skills	9	36,0
Conflict resolution skills	8	32,0
Cooperation with others	8	32,0
Negotiation skills	4	16,0

When asked to choose the most important technological training need from a possible list of four, respondents overwhelmingly chose basic computing skills which received 18 responses (Table 11).

Table 11. Most important technical skills according to respondents - absolute number (n) and percentage (percent)of total responses

	n	Percent
Basic computing skills	18	78,3
Website creation	2	8,7
Email list-serve creation and maintenance	2	8,7
Use of social media	1	4,3

Respondents were asked to rate (from 1 – least important to 5 – most important) specific business management skills training options (from a possible list of 10). The highest rated skills identified when both groups were considered together were Financial Plan Development (mean of 4,3), Business Strategy Development (4.1), financial recordkeeping and reporting (mean of 4,0). Again, though, differences between the two groups were seen with employers prioritizing Financial Plan Development and educators Business Strategy Development (Table 12).

Table 12. Mean values of importance of business management skills of all respondents and two subgroups

		Mean			
	n	All	Employers	Educators	
Financial plan development	24	4,3	4,3	4,2	
Business strategy development	25	4,1	4,0	4,3	
Financial recordkeeping and reporting	25	4,0	4,2	3,9	
Production plan development	23	3,8	3,9	3,7	
Marketing plan development	23	3,6	3,4	3,7	
Risk evaluation and management	24	3,5	3,3	3,6	





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Human resource management	24	3,2	3,2	3,2
Business mission statement development	24	3,2	3,5	2,8
Product inventory	24	3,0	3,0	3,0
Input inventory and ordering	24	3,0	2,8	3,2

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. New migrants to Germany both from outside and within the EU were cited by the majority of German respondents, as were Young people not currently working or involved in any other education or training programs. The educators group rated non- EU migrants as more important than those from within the EU, while employers made no distinction between the two (Table 13).

Table 13. Most important subgroups among the target population to tailor training materials towards

	n		Mean	
			Employ-	Educa-
		All	ers	tors
Recent migrants from outside the EU	23	3,9	3,8	4,0
Young people neither in employment nor in education and training (NEETs)	23	3,6	3,6	3,5
Recent migrants from within the EU	23	3,6	3,8	3,4
Young employees in agricultural related occupations who are no longer enrolled in formal educational programs	24	3,3	3,8	2,8
Young employees in non-agricultural related occupations who are no longer enrolled in formal educational programs	24	3,2	3,3	3,1
People over the compulsory age for formal education not cur- rently employed still enrolled in formal education programs	23	3,1	3,3	2,9
Individuals with disabilities	23	3,0	2,8	3,2
Individuals with a history of substance abuse	22	3,0	2,9	3,0
Young farmers (rent or own agricultural land or operations and currently involved in production)	22	2,7	3,0	2,4
Former prison inmates	23	2,5	2,8	2,2

2.2.5 Summary and Recommendations

The aging population of German farm owners and managers indicated by the data from the EU census of agriculture in 2016 (Table 3) indicate the clear need to involve more young people as owners and managers of agricultural operations in Germany. The lack of women in leadership positions also points to opportunities to create materials to attract more young women into these fields. This will require making jobs in agriculture more attractive to young people through such



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online learning platforms and multiplier events as planned through the AgriSkills project. Engaging current farmers (employers and potential employers) in our community and stakeholder workshops will help us better understand the current problems facing older people and women in these areas and tailor our learning materials to try to help young people understand and prepare to meet these challenges through skill attainment and targeted education paths.

The high number of seasonal workers relative to the number of permanent workers in agriculture in Germany, and the percentage of family member labour (Table 4) suggests both that job security in the agricultural sector in Germany is a key issue and that agriculture is still very much a family business in Germany. This lack of security also explains both the emphasis the respondents gave to the potential to earn money in agriculture and the importance of increasing the perceived social status of agricultural work. Thus, the multiplier events and the training materials developed by the Agriskills project should emphasize the importance of improving perceptions of both financial and non-financial rewards from work in agriculture. The emphasis all respondents gave to organic agriculture and horticulture reflect the relatively good economic situation in Germany, where the population is increasingly concerned with environmental issues and as well as supporting local community development through purchasing locally produced, high quality food products. These aspects should also be emphasized in the training materials.

In the discussions that took place with employers and educators while identifying potential survey participants, particularly employers stressed that due to the high level of knowledge required to produce both organic food products and to market them locally, the skill levels of potential workers and entrepreneurs must be high, both in agriculture and in communication with stakeholders. This was also reflected in the survey results, where communication skills were overwhelming chosen as the most important soft skills. The community workshop should also have a strong focus on obtaining information from participants as to their assessment of the potential of members of the target group to obtain these skills, and how best to provide a basis for that in the training materials developed. In particular, a better understanding of how to create materials that have the potential to motivate members of the target group to seek further, more intensive training to develop this higher level of skill and how best to provide information on how to access this training are important.

The survey showed that employers and educators seemed to differ in their views about the willingness of employers to hire members of the target group, and the level of understanding among the target group about how to find work. This suggests that the discussion at the planned community workshop should focus on the reasons behind these differences and an exchange of information between these two groups. A potential additional side benefit of the AgriSkills project not explicitly mentioned in the proposal could be improved communication between these two groups as to how well educators and employment agencies actually understand the needs of employers in agricultural fields.

3 Sources Cited

Berufsbildende Schule Wirtschaft 1. 2014. The German Education System – Overview. Retrieved from https://www.bbsw1-lu.de/en/about-us/german-educational-system.html. Accessed October, 15, 2018

Bildungsserveragrar. 2019. Zahlen zur Agrarbildung. Retrieved from https://www.bildungsserveragrar.de/service/zahlen-und-fakten/zahlen-zur-agrarbildung/. Accessed: October, 15 2018)



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Bundesministerium für Ernährung und Landwirtschaft. 2016. *Deutschland, wie es isst: Der BMEL-Ernährungsreport 2016.* Retrieved from https://www.bmel.de/SharedDocs/Downloads/Broschueren/Ernaehrungsreport2016.pdf? blob=publicationFile. Accessed: April 15, 2019

EU Labour Force Survey. 2016. Retrieved from https://ec.europa.eu/eurostat/web/lfs/data/data-base. Accessed October, 15.2018.

German Federal Ministry of Food and Agriculture (BMEL). 2017. *Organic Farming Looking Forward Strategy Towards Greater Sustainability. In Germany*. Retrieved from https://www.bmel.de/SharedDocs/Downloads/EN/Publications/OrganicFarmingLookingForwards.pdf? blob=publicationFile. Accessed, March 30, 2019.

Schmidt, M., Zwingmann, I., & Richter, F. (2015). Was soll nur aus euch werden: Arbeitslos, ziellos, perspektivlos? Eine Untersuchung zur Zielorientierung jugendlicher Arbeitsuchender. *Zeitschrift für Arbeitswissenschaft*, 69(3), 152-165.

Statistisches Bundesamt Deutschland. 2016. *Land- und Forstwirtschaft, Fischerei Betriebswirtschaftliche Ausrichtung und Standardoutput Agrarstrukturerhebung 2016*. Fachserie 3 Reihe 2.1.4. Retrieved from <a href="https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Landwirtschaft-Forstwirtschaft-Fischerei/Landwirtschaftliche-Betriebe/Publikationen/Downloads-Landwirtschaftliche-Betriebe/betriebswirtschaftliche-ausrichtung-standardoutput-2030214169004.pdf? blob=publicationFile&v=3. Accessed April 9, 2019.

Statistisches Bundesamt Deutschland. 2018. Statistisches Jahrbuch Deutschland und Internationales 2018. Retrieved from https://www.destatis.de/DE/Themen/Querschnitt/Jahrbuch/statis-tisches-jahrbuch-2018-dl.pdf? blob=publicationFile&v=5. Accessed February 15. 2018.

Van Elsen, T., Retkowski, A. (2019). Neue Perspektiven für Grüne Sozialarbeit. Gesundheitsförderung durch Soziale Landwirtschaft hat Entwicklungspotenzial. *Forum Sozialarbeit + Gesundheit*. (2): 30-32.Retrieved from http://www.soziale-landwirtschaft.de/FDF/Publikationen_und_Materialien/Publikationen/2019-02FORUMElsenRet-kowski.pdf. Accessed April 15, 2019.

World Bank. 2019. World Development Indicators Database. Retrieved from https://data-bank.org/data/reports.aspx?source=2&country=DEU. Accessed January 29, 2019.