# YOUNG FARMERS AND FOOD SOVEREIGNTY



### STUDY - YOUNG FARMERS AND FOOD SOVEREIGNTY

Erasmus+ Project **Growing Growers** no: 2018-2-RS01-KA205-000464

Project leader: Ama Centar za negu čoveka i prirode Partner: Zelena mreža aktivističkih grupa (ZMAG)







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# INTRODUCTION

Before you is the Study on the situation regarding young farmers in Serbia and Croatia, that is, a study of their attitudes and plans, the questions that are the most important to them and their reasons becoming farmers. The Study was created within the project Growing Growers, financed by the European Commission through the program Erasmus+ - Key Action 2: Strategic Partnerships for Youth. The project was developed by AMA - Center for the Care of People and Nature, from Serbia, and ZMAG (Green Network of Activist Groups) from Croatia.

The study consists of two sections. The first section provides an explanation of the term food sovereignty in order to have a clearer context within which we conducted not only this research, but also the entire scope of the collaboration between the AMA Center and ZMAG. This section also provides a brief overview of the current state of affairs in agriculture and in rural areas in both countries, with a special emphasis on the status of young farmers.

The second section of the Study presents the results of a survey conducted and the analysis of obtained data. It is important to note that the survey itself consisted of two segments, the data from which was processed differently in the analysis. The first segment consists of a survey that had already been conducted on the level of the EU, which was done by CEJA - the European Council of Young Farmers and it served us well in drawing comparisons between the situation(s) in Serbia and Croatia and the current state in Europe, and in order to compare the attitudes of these farmers and the ones in Europe. Besides comparative analyses, that segment of the survey is processed using the SPSS program. The second segment of the survey relates to the so-called open issues and here young farmers wrote their own answers without having already formulated ones - which makes them extremely valuable, since they provide a chance for a more indepth and wider-scope insight into the attitudes of young farmers. We asked them to explain in their own words what motivated them or compelled them to pursue farming, the challenges they face, what they need in order to make their production more sustainable and the financial situation more stable, and how they see the role and responsibilities for the ecosystem of food production of other major actors in their country.

The completed surveys were transcribed and the following methods were used during analysis: simultaneous data collection and desk analysis, multi-level open coding in the program Atlas.ti for qualitative data processing and conceptual analysis.

We could say that the collaboration between the two organizations arose out of a need to find out whether there are actors in the agricultural sector, especially young ones, who could become one of the main policy bearers of sustainable food systems, for which six criteria that register improvement need to be satisfied: ecological, economic, social, ethical, the criterion of health, and finally, resilience/adaptability (Galli et al. 2018).

It needs to be pointed out that this was a unique piece of research in either of the countries, because it offers an insight into the attitudes and thoughts of an extremely vulnerable social group, yet one that is exceptionally important for a sustainable future.

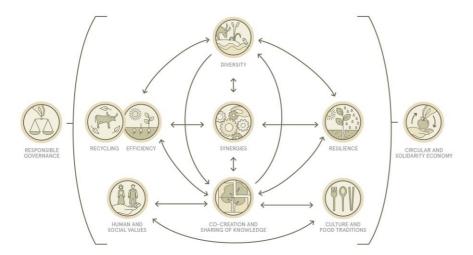
That is why we believe presenting these results is of extreme importance for society as a whole and that the Study will serve as a promoting and advocating tool for the activities of young farmers in Serbia and Croatia.

## 1 KEY TERMS

The Growing Growers project deals with young farmers in Serbia and Croatia. It is important to stress that their position within the food production ecosystem and how they are treated by big actors places them in the context of the concept of food sovereignty, which is therefore important to clarify. The concept of food sovereignty is very often linked to the notion agroecology.

As stated in the 2017 Nyéléni, Mali declaration, food sovereignty is the right to healthy food and food that has been prepared in a culturally acceptable way, produced through ecologically responsible and sustainable methods, and it is also the people's right to set up and create their own food and agricultural systems. The needs and rights of those who produce, distribute and use the food are placed at the center of decisions on food systems, rather than the demands of the market and corporations. Food sovereignty also safeguards the interests of future generations. Very often the concept of food sovereignty is connected to the concept and the science of agroecology. Agroecology can be defined as a political tool for strengthening dignity and freeing small farmers from agriculture run by corporations (Wezel et al. 2009, LVC 2010, Altieri and Toledo 2011, Rosset et al. 2011). In other words, we can say that agroecology is a tool for the defense, reconfiguration and transformation of contested and impoverished rural spaces into territories of proud peasants (van der Ploeg, 2010). Vía Campesina as a world network of small food producers, farmers and peasants points out that its agroecological approach includes "social, cultural and political principles". In line with that, we can say that food sovereignty advocates and brings together sustainable models of food production, which are related to local culture and identities, as well as to ecosystems, acknowledging the specificities and uniqueness of all actors through emphasizing the importance of connectedness and networking of all sections into one unit - a global network of life (bio)diversity (Perényi et al., 2016).

UN Food and Agriculture Organization emphasizing how agroecology is based on abiding by the 10 principles depicted in the image below (FAO, 2018):



According to the report of the High Level Panel of Experts on Food Security and Nutrition (HLPE, 2019), agroecology and related principles are the only things that can save the food sector, which finds itself at a crossroads, and fulfil UN's second sustainable development goal of eradicating world hunger.

Food sovereignty is based on six pillars or defining principles:

- 1. Focuses on food for people every person on the planet has the right to food, which is not just a commodity or means of agri-business lobby.
- 2. Values food providers the people who produce our food are extremely valuable, especially if they belong to certain vulnerable social groups.
- 3. Localizes food systems which brings two-fold benefits: for food providers, who are thus protected from unfavorable and unsustainable global trade agreements and regulations, as well as consumers, protected from poor quality and unhealthy food.
- 4. Puts control locally food providers and citizens who consume it have the right to use it, while ensuring the sustainability of the ecosystem and biodiversity and maintaining social justice.
- 5. Builds knowledge and skills it is vital to preserve and spread local knowledge on food production which has been developed, adapted and improved over centuries, precisely to yield the best results at a specific place.
- 6. Works with nature food production methods and the use of ecosystems occurs with respect to their integrity and value, while simultaneously strengthening sustainability, resilience and adaptability, especially in the context of climate change.

These six pillars set up fair and sustainable relationships between producers and consumers, and between food production and natural resources it depends upon.

The concept of food sovereignty should not be confused with the concept of food security, though at first glance they may seem quite similar and close. The latter has,

however, made some strides when it comes to unsustainability of food systems in which large amounts of food as discarded as waste, large numbers of people are undernourished or hungry, large amounts of money and energy are invested in an unsustainable food production system the costs of which are paid by someone else, the planet or future generations, while large numbers of people become sick and suffer from obesity because of consuming unhealthy cheap food. It is incredible how much energy and money we invest into a food system that leaves so much pollution in its wake, producing food of poorer quality and reduced nutritional value, which means it fails to satisfy its main function of providing our body with the necessary energy (ETC Group, 2017). For every dollar the consumer spends on conventional food, it creates two dollars' worth of expenses for the healthcare and environment, which have to be suffered, paid or settled by someone else and the society (Chancellor, 2019). In the context of health, there are five "impact channels" through which food systems are effecting our health:

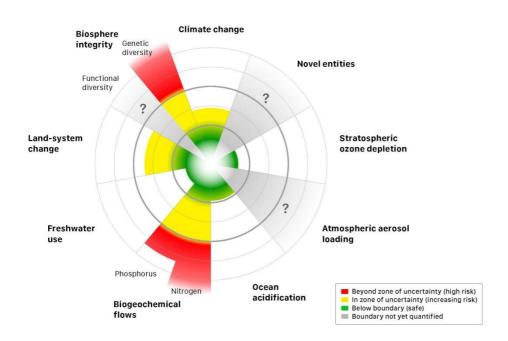
- 1. Occupational hazards the people producing the food become sick because of working in unhealthy conditions
- 2. Environmental contamination we are all at risk because of water, soil and air contamination due to unsustainable agricultural methods
- 3. Unsafe food we become sick because of food that is unfit for consumption and should not be available in shops
- 4. Unhealthy dietary patterns unhealthy dietary habits result in a long list of illnesses and negatively reflect on global health
- 5. Food insecurity people become sick because they cannot afford and do not have access to healthy, adequate and affordable food (Rocha, 2017).

The concept of food security is actually a locked-in system, in which security is mainly reflected in ensuring the market, both in terms of opening new markets and increasing the shares of the biggest food and biotech corporations on the markets in which they already have monopolies. This does not resolve any of the nine lock-ins through which industrial agriculture maintains power: export dependency, the expectation of cheap food, 'need to feed the world' narratives, nonholistic thinking, short-term thinking, measures of success and the position of dependency (Frison, 2016).

The concept of food security puts the main focus on the growing population, very often in impoverished countries, which need to be fed, with the aid of technological solutions and crops that guarantee bigger yields and production control. In doing so, very little attention is paid to the causes of all of these problems, such as the reasons for population growth in impoverished countries, and related to that, the position and rights of women, and the fact that today we produce more than enough food for every person on the planet and the fact that hunger is today a political and economic problem and not the result of lack of food. There is no doubt that the problem of undernourishment and

hunger and the problem of food in general in today's world requires different, more holistic approaches and not just approaches that place the main focus on bigger yields of the world's major crops.

What is more, all recent research and scientific breakthroughs point to the fact that agriculture and a different approach to food production are today one of the foundations of sustainability of a future world, one that needs to be built and designed on different foundations, which understand the patters of processes in nature and their impacts, the value of resources such as quality soil and seeds, our connectedness to ecosystems, the respect for people who produce the food that is healthy for us and take into account solidarity when creating food policies. One of the most valued representations of our relationship to ecosystems on the planet is given in *Planetary Boundaries 2.0*, an analysis conducted by researchers from the Stockholm Resilience Centre (Steffen et al., 2015). They determined that there are nine planetary boundaries on our planet, that is, nine areas the stability of which needs to be maintained in order for the functions of the ecosystem to continue sustaining the quality of life on the planet. The boundaries for our planet are shown on the image below, as well as balanced zones (green), zones of increased risk (yellow) and zones where thresholds have already been crossed (red).



We can see that in as many as four Earth-processes we have crossed the boundary of sustainability and stability: climate change, land use, loss of biodiversity and phosphorus and nitrogen flow processes, of which the latter two are already in the zone of high risk. Here we point out that the latter two are directly linked to and one of the consequences

of today's conventional agriculture and its unsustainable and inefficient methods of food production, processing and distribution and the amassment of huge quantities of waste, pollution and greenhouse gas emissions.

Climate change, though it is a wider problem, with multiple causes and far-reaching consequences, is also inseparable from today's mainstream agriculture which is today one of the sectors that most profoundly affect climate change, even more so than transportation. This creates a sort of vicious circle in which climate change increasingly affects the stability and quality of food production. According to a UN Environment Programme report, food systems are responsible for 60% of the global terrestrial biodiversity loss, a quarter of all greenhouse gas emissions, a third of all areas where soil as a resource has been degraded, the depletion of 61% of 'commercial' fish populations, and the over-exploitation of 20% of the world's aquifers (UNEP, 2016). We can add two more problems to the list. The first is food waste, though it always sounds incredible that on the global level we throw away up to a third of all the food we produce, while in some countries this figure is even higher (Gunders, 2012). The other problem is huge emissions, as well as the ecological footprint, produced solely by, for the most part, unnecessary transportation of food, with countries exporting and importing almost equal or close to equal amounts of food and nutritional products (Keller, 2019). In the context of this Study, it is interesting to note a UK research, conducted by professor Nigel Baker's team from Coventry University, which compared losses from discarded food of a local supermarket and a Canalside Community Supported Agriculture (CSA) group. The results showed that as much as 55,2% of the food that was produced and entered the system was disposed at the supermarket, compared to only 6,7% at the CSA (Hitchman, 2019).

Even at first glance, it is safe to say that agricultural policies and the status of small food producers in the entire region are pretty far removed from the concept of food sovereignty and agroecology.



In the introduction we mentioned that young farmers are an especially vulnerable social group. We can stress they are a vulnerable group on several levels simultaneously, which makes their position particularly difficult, jeopardizing their rights, recognition and advancement in society. An UNDP research on social inequality correctly remarked on the issue

of social policies, that a social group – which contains several unfavorable or disadvantageous circumstances, as part of its social position, and then also as part of its

identity, very often forced on it - is considered to be in a very grave position. For example, it mentions a category of citizens who are socially excluded because such people are simultaneously unemployed, poor and isolated because of their religious, political, gender characteristics or on other grounds. Just one of these presents a considerable burden for any individual but when, for example, all three are present in a person's life, we are talking about excluded persons, whom the society does not notice; those who do not exist (UNDP, 2006). In some regions of Croatia, the number of "excluded" citizens is as high as one in four people, which very strikingly illustrates the devastating state of underdevelopment and poor quality of life, extreme regional inequalities and the state's incapability to ensure equal rights for all of its citizens, regardless of where they live and what their starting point in life may be. These are also agriculture regions which is a good status reflection of small farmers and family food producers.

The situation of young farmers is not such a dire one, but they are still a vulnerable group for several reasons. It is a telling situation that a large number of the poorest people, who also have poor quality of life, live in areas where food production is prevalent. This means that they are entering a profession in a sector that is today increasingly less valued, which is absurd, considering how obsessed we are with food and everything around it. An increasingly smaller number of people in western societies works in food production and the situation in Serbia and Croatia, though far behind western standards of development, is no exception.

Among other things, such an environment and the relationship towards agriculture that is not supportive and encouraging, is one of the reasons why this is an increasingly aging sector, which means that its population is ageing while there is a shortage of younger, especially highly educated generations. In fact, news in the media about young farmers who are successful and satisfied often have an air of the exotic, as if they were an endangered or exclusive species.

Secondly, the entire system is set up in a way that it favors centralized and massive industrialized production, favoring big players, supporting a monopolist attitude towards nature, production and the market. In such a system, the entry into the sector for young farmers, even if they are not small manufacturers, which most of the participants in the survey are, is a very difficult one. Both in Serbia and in Croatia, a small number of large manufacturers of basic crops and landowners control most of the production of the majority of products, they get awarded state subsidies and hold the biggest stakes of the market. In Croatia, 40% of state subsidies for agriculture is awarded to the 1% of the biggest manufacturers, which is one of the most pronounced examples of inequality in awarding incentives for food production within the EU. Even the subsidies for ecological agriculture are mostly awarded to pastures and meadows, and only a much smaller

amount goes into subsidizing basic products for fruit and vegetables production that are lacking. The problem of the monopolization of the food production sector by controlling the market is a global one, and it was only made worse a few years ago with the finalization of mergers of big corporations which already controlled the biggest stakes of the market when it comes to seeds, genetically modified crops, patents, agrochemical products. ChemChina bought Syngenta, Bayer bought Monsanto and Dow and DuPont merged, producing three mega-corporations which wield even more influence and exert indisputable food market control (Mooney, 2017).

Another problem is the big influence of intermediaries and brokers who control the market and access to it. A clear example of this are tremendous reductions in the price of basic products, which raspberry growers in Serbia experienced a few years ago, reaching levels so low they did not cover the costs of production (Petrović, 2018). Similarly, one ecological farmer from Croatia revealed to us in a conversation that the regulations on margins, purchase prices and payment deadlines imposed on him by one supermarket chain which likes to brag about their relationship to employees and shoppers, not only did not cover overall costs and investment for one particular product, which ended up on the shelves of this supermarket chain, but it even generated a loss of half a kuna per sold item for him. When asked why they would agree to something so untenable and unfair, their reply was marketing. They realized that the supermarket chain controlled the market and that their commercials and PR strategies allowed them to reach a greater number of consumers, whose characteristics might make them more inclined to their organic products. Their position was reduced to a situation in which they were losing money by selling at this chain, but they were also hoping it would make them more visible to their potential and future buyers who would then learn about their products and buy from them directly. Today they no longer invest in such a crazy sort of promotion.

The third reason why young farmers are considered a vulnerable group is something that in both countries transcends agriculture and is one of the biggest strategic and long-term problems – there are fewer young people in general, since a growing number of young people move away. In certain areas of Serbia and Croatia, there are "dead" regions, in terms of human capital, as schools and other institutions and services are being shut down, which also makes food production all the more difficult. In media reports and scientific papers we can trace in a different time and with some other numbers the absurd testimonies of young people who prefer waitering in one of bigger cities in Europe than producing food at home. Here, the level of difficulty and strenuousness are less frequently listed as factors for such a life choice, but rather it is a sense of general uncertainty and utterly diminishing prospects in countries they have left, as well as poor quality of life, lack of activities for young people and a disgraceful treatment of rural

areas, that creates an atmosphere in which they feel more valued as waiters than as food producers.

Together, these three reasons comprise a devastating set of factors which place young farmers in a vulnerable social group. That is why performing field research on the Growing Growers project proved so challenging, because the number of possible participants was so low, and often even if we managed to reach a particular farmer who did satisfy the criteria of young food producer, they either were not interested in participating or they were too busy with food production.

However, as our survey shows, there is a brighter side to the story. There is an increasing number of creative and brave young people who enter the food production sector and for a large number of them this is a new area, which they enter filled with enthusiasm and love for nature and food. Before entering the sector, they keenly observe the market and find their niche with a range of products that are underrepresented on the market and which an increasingly demanding and expanding organic food market wants and needs. This group is not yet that large in numbers – as we have pointed out, it was extremely difficult finding the necessary number of participants for the project – but it is possible to note a growth trend, and what is most interesting, most of these young people did not take up farming out of necessity but pursued it of their own will. This brief observation should by no means devalue the problems and challenges of young farmers stated earlier, but it would be extremely unfair to them not to stress the arduous and focused work, the sound financial bases of their businesses, the products that are in demand, and as such, for many of the participants it would be surprising if they were not present in the sector in five or more years' time. At the end, this is a good base for sustainable rise under food sovereignty principles.

# 2 A SURVEY OF YOUNG FARMERS' ATTITUDES – Serbia and Croatia

As we have already pointed out, it was quite difficult to conduct this field research of the attitudes of young farmers in Serbia and Croatia. The number of farmers is on the decline in both countries, while most of them belong to older age groups and were therefore not eligible to complete our survey. However, the Croatian Young Farmers Association (HUMP) website lists that 9% of all farmsteads in Croatia are run by farmers under the age of 40. In line with European agricultural policies and approaches, a young person in agriculture is anyone under the age of 40, which means that in Croatia there are more than 16 000 such people. Unfortunately, this remained only a number on paper

for us, and by contacting the Croatian Young Farmers Association we didn't get any feedback from young farmers who are their members. In Serbia, we were not able to get much more cooperation from the equivalent association, which came as a surprise to the project developers.



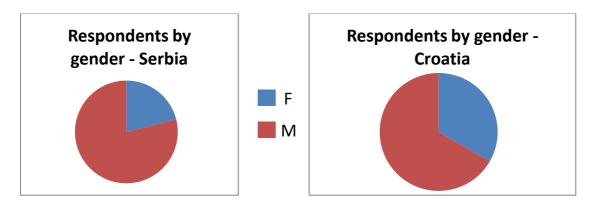
As we have stated in the introduction, the survey consists of two sections both of which serve a different purpose. Questions 1-18 were part of the survey conducted by the main organization of young farmers in the EU, CEJA - European Council of Young Farmers, in 2017, with farmers under the age of 40 in all member states. The research included 978 respondents and as is visible

from the data presented, they received only one response from Croatia.

The data they collected will serve to compare the results obtained in our survey with the attitudes of young farmers in the EU. Since their main goal was to explore the attitudes among young farmers towards sustainability, this complements our intention of researching attitudes towards food sovereignty and agroecology.

Despite all the challenges we faced in the course of conducting the survey, we were able to reach and even surpass the set goal of a total of 50 respondents (25 young farmers in each country) which was an estimate stated in the project application. The survey was conducted during February and March of 2019 and includes 27 young farmers in Croatia and 38 in Serbia, which makes a total of 65 respondents.

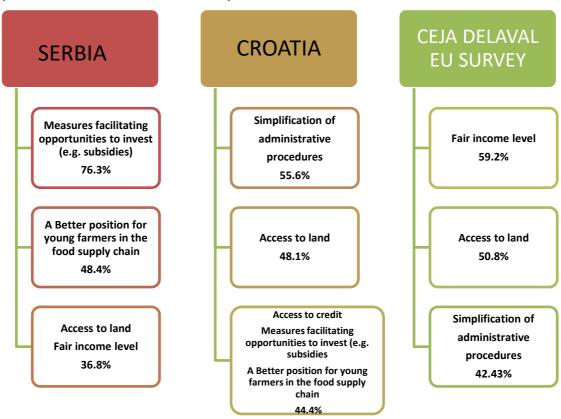
The following image gives the breakdown of respondents by gender. It is interesting that in Croatia, every third young farmer is female while the average age is 33.



We will also offer a comparison of data for Serbia and Croatia with those from the original survey conducted by CEJA in 2017.

Let us observe the answers to the following questions.

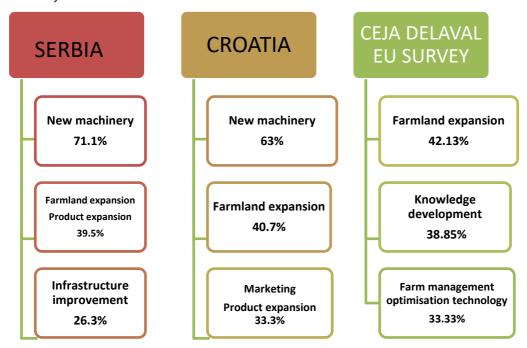
Question 11: What would you need to develop your farm in an economically sustainable way? (choose a maximum of 3 answers)



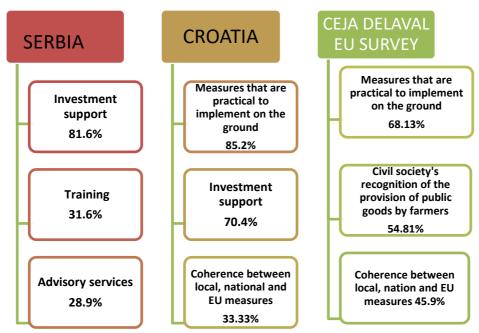
The table shows the three most frequent answers among young farmers regarding what their primary needs are to make their business more economically sustainable and stable. The order and level of agreement with some of the needs varies, but many of them are reiterated. For example, the need for more farmland is expressed in all three cases, while there are several needs present on the level of EU and Croatia (simpler administrative procedures) or on the level of EU and Serbia (fairer earnings for source producers).

The need for bigger incentives/subsidies is highly pronounced in Serbia, where over three quarters of respondents stated this as the most important issue. One of the possible reasons is the difficult economic situation of young farmers in Serbia.

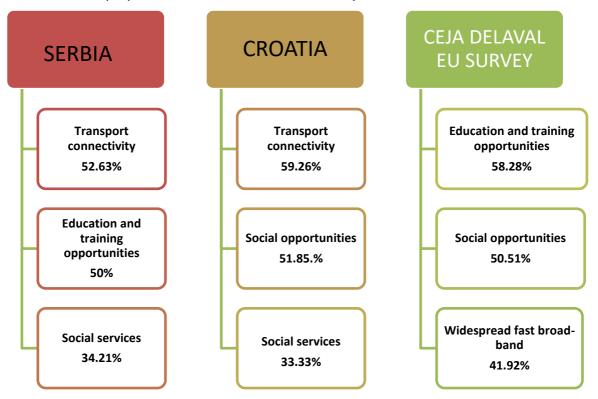
Question 12: What are the 3 most important on-farm investments you would make to develop your farm in an economically sustainable way? (choose a maximum of three answers)



The differences in answers to this question are the result of different circumstances in agriculture and of young farmers in all three cases, however, farmland expansion is listed in all three cases. Additionally, the need for new farming machinery is high on the list both in Serbia and Croatia, while in the EU this need is ranked fifth, whereas needs for knowledge and strengthening capacity, such as additional training and farm management optimization technology are ranked much higher. Question 13: As a young farmer, what do you need most to enable you to safeguard the environment through farming practices?



Question 14: What do you think is necessary to lead a vibrant and sustainable lifestyle in a rural community? (choose a maximum of 3 answers)



We can see that in Serbia and Croatia there is a need for improving social services, while in EU this need is marked as "only" the fifth one. A great number of respondents in Serbia and the EU expressed the need for additional education and training opportunities. The two highest ranked needs in Croatia, that is, the need for better transport connectivity and more opportunities for socializing, demonstrate that people living in rural areas feel very isolated.

Question 15: European young farmers are now faced with the challenges of producing more with less, while also being custodians of the countryside. As a young farmer, do you feel responsible for ensuring a sustainable agricultural sector?

Variable	Country	Total	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
		N	%	%	%	%	%
European young farmers are now faced	Serbia	38	21.1%	15.8%	34.2%	13.2%	15.8%
with the challenges	Croatia	26	46.2%	42.3%	7.7%	3.8%	0.0%
of producing more with less, while also being custodians of the countryside. As a young farmer, do you feel responsible for ensuring a sustainable agricultural sector?	Total	64	31.3%	26.6%	23.4%	9.4%	9.4%

We can see that a great number of respondents in Croatia agrees, to varying degrees, with a sense of responsibility for the sustainability of agriculture, a total of 57.9%. In the EU this number is even higher and a total of 89.78% of all respondents agrees with this statement. In Serbia, the number of respondents who agree is quite similar to the number of those who have a neutral attitude.

Question 16: Can you state the reasons for your decision to become a farmer?

\/aviahla	Country	Total	No	Yes
Variable	Country	N	%	%
	Serbia	38	71.1%	28.9%
Family tradition	Croatia	27	44.4%	55.6%
	Total	65	60.0%	40.0%
I had no other	Serbia	38	97.4%	2.6%
opportunities for employment	Croatia	27	100.0%	0.0%
	Total	65	98.5%	1.5%
	Serbia	38	65.8%	34.2%
Passion for agriculture and nature	Croatia	27	22.2%	77.8%
	Total	65	47.7%	52.3%
	Serbia	38	68.4%	31.6%
Desire to be my own boss	Croatia	27	48.1%	51.9%
5000	Total	65	60.0%	40.0%
	Serbia	38	97.4%	2.6%
Desire for good earnings	Croatia	27	88.9%	11.1%
earmings	Total	65	93.8%	6.2%

We can see that in Serbia, the greatest number of respondents became farmers out of love of nature and food production, a desire to be their own boss and because it was their family tradition. In Croatia, the situation is similar, except family tradition switched places with the desire to be their own boss.

To the question whether they still see themselves in this profession in five years' time, most young farmers in both Serbia (64.9%) and Croatia (76%) responded positively, stating that they love what they do.

The following table shows the figures about the size of the farm operated by these farmers.

Variable	Group	N	Min	Max	М	SD	С	Q1	Q3
Area in	Serbia	37	0.03	120.00	10.65	22.181	3.00	1.00	7.00
ha	Croatia	27	0.15	135.00	19.41	34.025	3.00	2.00	19.00

There are huge differences in size between farms that run small nurseries and greenhouses and those that produce on huge areas or work in forest management. However, we can still note that more than half of young farmers in Croatia (55.55%) produce food on farms of 5 ha or less, while over two thirds (65.78%) of farms in Serbia

are of this size, and the agricultural activities are most often related to fruit and vegetable production and arable crops. In the EU survey the situation is very different, with as many as 56.15% of young farmers producing food on farms of 100 ha or larger.

Group	N	Number of employees	Seasonal or occasional workers	Volunteers
Serbia	38	102	168	24
Croatia	27	51	84	28
Total	65	153	252	52

The numbers of employees on these farms are as follows:

We can see that in Serbia the average number of continuously employed workers is 2.68, while in Croatia there are fewer than two continuously employed people per farm (1.77). A great number of farmers do all the work themselves and have no help at all. In Croatia more than half of all farms do not have any employees and all the work is done by one farmer, while in Serbia a quarter of farms has this situation.

It should be pointed out that the situation in the EU is no better on this issue, with 45.94% of respondents report having no employees at all, which is even more surprising given the large workable surfaces of their farms. What seems the most striking is the very low percentage of using volunteers and interested people, especially young people, as it is common abroad, for example through WWOOFing (World Wide Opportunities on Organic Farms).

When it comes to being open to collaborations and participating in organizations with similar interests as theirs, the participation in Croatia is much higher than in Serbia, as we can see from the table below.

Are you a member of any guilds and/or interest groups or associations?

Country	Ν	Yes	No
Serbia	38	31.6%	68.4%
Croatia	27	59.3%	40.7%
Total	65	43.1%	56.9%

In our research we were also interested in the farmers' willingness or focus on sustainable and ethical food production methods, while a large portion of our respondents in Croatia are already part of the ecological food production system, even to a much greater degree than in the EU (19.63%).

Variable	Country -	Total	Conventional	Organic
variable	dable Country		%	%
	Serbia	38	92.1%	7.9%
Type of production	Croatia	27	40.7%	59.3%
	Total	65	70.8%	29.2%

In Serbia, the answers to the question about the possible reasons for switching to ecological food production were: the desire to produce healthy food, greater earnings from organic products, and thirdly, environment and the local ecosystem preservation. As to what they would need the most in order to make this transition, the respondents in Serbia listed: secured place on the market and higher state incentives for organic farming, while in Croatia they also listed a secure market, lower costs of organic status certification, and more training on organic farming.

In addition to comparing our results to those in the CEJA-DeLaval survey on young farmers in the EU, we decided to create an additional set of questions for our respondents in order to get an even clearer picture of their attitude and make our results more accurate. This set of questions helps us learn more about the attitudes of young farmers in Serbia and Croatia and relates to their value systems, their views of the economic and social system and roles, that is, the responsibility of the state and other important actors in this system. We tested the differences between Serbia and Croatia and tried to determine whether there was a statistically significant difference between these groups. Afterwards, we tested this set of questions in relation to situations and attitudes of our respondents to the type of food production they are involved in (organic or conventional), that is, their reasons for working in food production. In order to check the differences in certain beliefs and how pronounced they are between the countries, a t-test was used for independent samples, by which the difference is considered statistically significant if the p value is less than 0.05. The respondents gave answers on the Likert scale of 1-5, where 1 was strong agreement and 5 strong disagreement. The table below shows the questions and the breakdown of answers.

Variable	Group	N	М	SD	t	Df	р
The state and the ministry work for	Serbia	38	4.0	1.24	2.24	63	0.028
the benefit of small farmers	Croatia	27	3.3	1.14	2.24	03	0.028
I believe that small farmers can	Serbia	38	1.9	1.00	-0.50	63	0.620
survive only if they join forces	Croatia	27	2.0	0.81	-0.30		0.020
The state should ensure better	Serbia	38	1.4	0.67	-3.07	39.28	0.004
market conditions for small farmers	Croatia	27	2.1	1.12	-3.07		0.004
Food that is not competitive on the	Serbia	38	2.3	1.31	-0.72	62	0.474
market should not be produced	Croatia	27	2.5	1.19	-0.72	63	0.474
There are no quality support	Serbia	38	1.7	1.01	2 27	63	0.001
programs to young farmers in my	Croatia	27	2.6	0.97	-3.37	03	0.001

	_						
country.							
If I get an opportunity for a better	Serbia	38	3.2	1.47			
paid job in another field, I will stop being a farmer.	Croatia	27	3.9	1.26	-1.91	63	0.060
The price of food is too low	Serbia	38	1.9	1.11	-1.55	63	0.126
compared to its actual worth.	Croatia	27	2.4	1.04	-1.55		
I am happy with the work of the	Serbia	38	3.4	1.37	0.38	63	0.705
Advisory Service for Agriculture	Croatia	27	3.3	1.20	0.38	03	
I receive the most support for food	Serbia	38	1.6	0.76			0.989
production from my family	Croatia	27	1.6	0.89	-0.01	63	

Some of the questions yielded very strong agreement, for instance, both in Serbia and Croatia most respondents agree that they receive the most support from their family. The questions for which there was a statistically significant difference were:

- The state and ministry work for the benefit of small farmers, while there is a greater number of respondents in Serbia who do not agree with this statement, and, as we shall see later in the qualitative analysis, this is in line with their pronounced dissatisfaction with the role and state policies in the food production sector and beyond.

The following two variables for which we received statistically significant differences follow a similar pattern. In both instances, the respondents agreed or mostly agreed with the statement, but again in Serbia the number of those who agreed was much higher, expressing a critical attitude towards the responsibility of the state for small farmers and the creation of quality support programs for young farmers.

- The state should ensure better market conditions for small farmers
- There are no quality support programs to young farmers in my country.

Let us look at the data obtained for the second set of statements:

Variable	Group	N	М	SD	t	df	р
The state is responsible for food	Serbia	38	1.9	1.10			
production and the survival of farmers.	Croatia	27	2.4	1.36	-1.42	48.35	0.163
The consumers are only interested	Serbia	38	2.4	1.24			
in the price and not in the quality of the product.	Croatia	27	2.5	1.12	-0.50	63	0.619
The constitution of our country	Serbia	38	1.8	0.95			
should guarantee food sovereignty as one of our constitutional rights.	Croatia	27	1.7	0.61	0.54	63	0.593
Subsidies for agriculture need to be	Serbia	38	4.6	1.13	2.05	40.57	
discontinued.	Croatia	27	3.6	1.39	2.95	48.57	0.005
It would be best to have a few large	Serbia	38	4.4	1.22			
manufacturers that produce food for all of us.	Croatia	27	4.7	0.45	-1.48	49.71	0.145
Food production is a strategically	Serbia	38	1.7	1.07	2 52	62	0.014
important sector and the state	Croatia	27	2.4	1.31	-2.53	63	0.014

should guarantee parity purchase prices and the value of local products.	_						
Ecologically produced food is	Serbia	38	3.1	1.25			
overrated, taking advantage of the people's care for their health.	Croatia	27	4.0	1.02	-3.37	63	0.001

Again we see the respondents' answers matching on certain issues, such as the idea to have a few big manufacturers that would produce most of our food, which is a trend occurring on a global level and an increasing problem, analyzed in more detail later in the Study. However, the statements that yielded statistically significant differences were:

- Subsidies for agriculture need to be discontinued, while the number of respondents opposed to this idea was much higher in Serbia.
- Food production is a strategically important sector and the state should guarantee fair purchase price and the value of local products, whereas in Serbia a considerably larger number of respondents agree that the state should have such a crucial role in guaranteeing purchase and the price of locally produced food.
- Ecologically produced food is overrated, taking advantage of the people's care for their health, whereas there was a considerably higher number of respondents in Croatia who do not agree with this statement.

The reason for this is undoubtedly the fact that more than half of our respondents in Croatia are actually ecological farmers and therefore understand the advantages of ecological production, both for the environment and the people. Some of them also have direct contact with their buyers and have short chains of supply which allows them to have prices that are adequate for a large number of people.





We also tested certain variables by country, so we were interested whether there were any statistically significant differences between responses in Croatia depending on whether the respondents produce the food using conventional or organic methods.

The responses yielded significant variation only for the following statements:

There are no quality support	Conventional	11	2.0	0.77			
programs to young farmers in my country.	Organic	16	2.9	0.93	-2.75	25	0.011
Ecologically produced food is	Conventional	11	3.4	1.12			
overrated, taking advantage of people's care for their health.	Organic	16	4.5	0.63	-3.37	25	0.002

The respondents who produce food organically have a more critical attitude towards support programs for young farmers and they would disagree more with the statement that ecologically-produced food is overrated.

As for the differences when it comes to the motivation for entering the food production sector, it is interesting and pertinent to our Study to point out the statistically significant difference in Croatia for the variable of consumer interests, between those who chose to become farmers out of love for nature and food production and those for whom this was not the reason.

The consumers are only interested in the	Ne	6	1.8	0.75			
price and not in the quality of the product.	Da	21	2.7	1.15	-2.22	12.45	0.045

We see that the respondents who had motives for entering the food production sector other than the love of nature and food, have a more critical stance towards consumers and believe they are only interested in the price. Those who are in the farming business for the love of nature and food production gave better feedback from the consumers, with whom they communicate and cooperate more.

The third segment of the analysis of the data on young farmers' attitudes in Serbia and Croatia comprises the analysis of 10 open-ended questions in which the respondents gave answers in their own words on topics which are important for their work and life, topics related to their needs and expectations and about their skills and capacities.

After their answers were transcribed, the obtained material was analyzed through thematic analysis, using the method of open coding in Atlas.ti software. The results are shaped into 48 codes for Croatia and 39 codes for Serbia, because in addition to answers they had in common, the respondents also gave more diversified answers, therefore, the results of the coding were different. The obtained codes have been grouped into 10 categories and are further grouped into 2 themes.

In order to present the interconnections between different codes and respondents' attitudes, lastly we also employed axial coding. This segment of the Study is also accompanied by quotes from young farmers' answers in order to provide a clearer idea of how their answers and attitudes relate to accompanying codes and in order to present their attitudes more clearly.

All the answers and codes were grouped into two main themes that were important to young farmers in both countries. The first theme is Challenges and it covers all the issues the farmers have to resolve. The second theme is entitled Partnerships and covers all the possible actors or institutions with which the young farmers could and should establish partner relationships, which sometimes leads to very satisfying and fruitful relationships, while in other cases they seem to be at opposite ends of the same issue. It will be clear when attitudes of young farmers in Serbia and Croatia stop to overlap and exhibit similarities, therefore, we will present these cases separately.

Here are the code tree tables for both countries. The first table shows the results for Croatia, while the second one relates to results in Serbia.

#### CROATIA

CHALLENGES				PARTNERSHIPS			
FINANCIAL SITUATION	FINANCIAL ASSISTANCE	SECURITY		STATE	POLITICS	CONSUMERS	
Direct market	Subsidies	Finance		Laws	Huge influence	Support	
Great effort/hard work	Credits	Market	:	Strategy	Corruption	Direct contact	
Necesarry time	Farmland	Education		Credits/ investment	Supporting big players	Education	
Without profit	Products Purchase	Advising					
		Product purchase Farmland		Farmland	Strategy needed	No cooperation	
			]	Birocracy			
ENVIRONMENT/ CLIMATE CHANGE	FDLICATION	DISAPPEARANCE OF FAMILY FARMS		Regulated marke	SCIENCE/ ASSOCIATION		
	Outdated	Access to market		Advice/training	Karan Indon		
Responsibility		Education			Knowledge		
Respect	More practical know-how	Communication			Cooperation		
Pollution	Poor quality	Administration			No point		
Extreme weather	Good Foundation	Unfavourable credits			Groups of Solidarity Exchange		
Chaning climate		Lack of farmland					

#### **SERBIA**

CHALLENGES				PARTNERSHIPS		
FINANCIAL ASSISTANCE	SECURITY	ENVIRONMENT/ CLIMATE CHANGE		STATE	POLITICS	CONSUMERS
Subsidies	Finance	Responsibility		Nothing useful	Huge influence	Interconnectedness
Credits	Training/Advising	Respect		Secured market	Corruption	Education
Farmland	Support to living in rural area	Pollution		Subsidies	Supporting big players	Supermarkets
Products purchase	Market	Extreme weather			Strategy needed	
		Chaning climate		Support to living in rural area		Negative attitude
				Training		
				Product purchase		
					SCIENCE/ ASSOCIATIONS	
EDUCATION	DISAPPEARANCE OF FAMILY FARMS					
Outdated	Inssuficient support				Knowledge	
More practical know-how	Investment in rural area				Cooperation	
Poor quality Good foundation	Low earning Low price for their products				No point	
	Supporting big players					

The theme Challenges consists of six categories: Financial situation, Financial assistance, Security, Environment/Climate change, Education and Disappearance of family farms.

The Financial situation category corresponds to the possibility of making a living from food production and making a profit and in Croatia comprises four codes: Direct market, Great effort/hard work, Necessary time and Without profit. Here, as well as elsewhere, the respondents emphasized the importance of creating short chains of supply, solidarity groups consisting of them and the citizens, known in other parts of the world as Community Supported Agriculture or sometimes as Alternative Food Distribution Systems (AFDS). In fact, many farmers pointed out that precisely the creation of this type of market is the foundation for their survival and the possibility of living of their work, which again demonstrates positive changes in Croatia. The next two codes, Great effort/hard work and Necessary time are highly interconnected which is evidenced by the fact that many of the respondents who pointed out that today they can earn enough only because they invested so much hard work and effort in their production and sales, also pointing out that, in order to make decent earnings to sustain them, in addition to hard work and perseverance, it also takes time, because nothing in this sector comes overnight.

The fourth code relates to those farmers who at the moment have no financial gain and do not manage to make a profit from their production. There were six such respondents in the Study, that is, little over one fifth.

For Serbia this category is not present because fewer than one third of respondents reported being able to make a decent living from their work, therefore, such a small sample was insufficient to properly conduct coding.

The following is the schematic of the category Financial situation and accompanying codes (Croatia):



Person 1: "You can make enough money if you strive for completing the production cycle and direct sales. The problem is with investments which do not cover nearly all the cost of newcomers but are necessary to do business on a family farm legally."

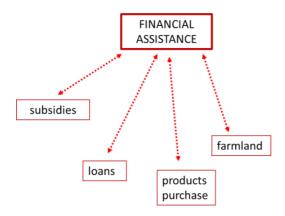
Person 2: "It is very hard to get by when you start out, let alone have high quality of life with some dignity. But after a couple of years of hard work and effort, I believe I will be able to lead a decent life and have quality of life, from the production and sales of food from my farm."

Person 3: "We make a living but we do not earn as much as we work. There are days when I don't even see my kids because I'm in the field from sunrise to sundown, not to mention everything else. It is a hard life."

The category entitled Financial aid in Croatia contains the codes: Subsidies, Farmland, Loans and Purchases. For Serbia, three of the codes are the same, while the code Loans is not present. The category comprises various sorts of financial support which our respondents believe would help them develop production and remain on the market. While three of these (Subsidies, affordable Loans, especially intended for beginners and guaranteed prices of Purchase) are understandable in the category of financial aid, the problem of insufficient farmland and access to land, even for young farmers is interesting and should be pointed out. The issue of farmland and land ownership is one of the key problems in the world nowadays and it is increasingly receiving attention, as was the case in the recent Land of Many report (Monbiot et al., 2019), while examples form Europe are particularly interesting, where different CSA initiatives and groups, through

different organizational models and legal subjects, aid in acquiring access to land and land use, for people who are willing to produce food for them (Volz et al., 2017). There are also positive examples from above, which can prove useful for decision makers and government representatives in the region – for example, the city of Valencia in Spain provides city land to young farmers for ecological food production (IPES-FOOD, 2018).

The schematic of the category Financial assistance and accompanying codes:



Person 1: "In order to expand production we need more land, in order to invest in modernizing production we need either affordable loans or measures for the development of rural areas with fair competitions criteria."

Person 2: "State subsidies of a few thousand kunas are ridiculous, and I think it would be better to discontinue them and on the other hand ensure the market operates on market principles, which is one of the main roles of the state. All state-owned land should be awarded under concession agreements, or even better, sold to interested local farmers, strictly supervising subleasing and farming on this land (I am speaking about the problems in the Neretva Valley)."

Person 3: "I need regular financial assistance in the form of subsidies and guaranteed purchase, especially in the beginning because investments are so great and I need a lot of things right away. Only now that I have some experience, I see how much this makes production easier."

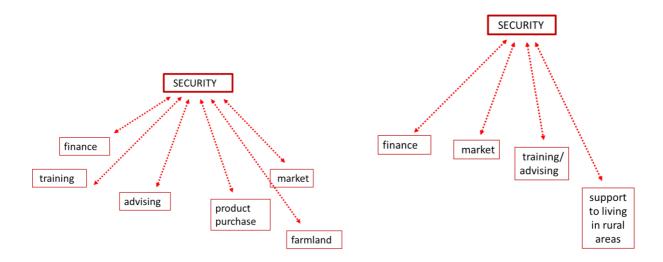
Person 4: "It would be advisable to give concession agreements to young people who have no land but are willing to stay and work in rural areas, at least 20 ha of land for 30 years, without the possibility of lease, loans are not necessary, and have ensured purchase with a guaranteed decent price so we can make a decent living."

The category Security comprises respondents' attitudes about what young farmers need, what need to be ensured in order to enter the food production sector in the first place. Here the following codes are included: Finances, Education/Training, Advising, Product purchase, Farmland and Market. Coding for Serbia produced somewhat different results,

which will be presented separately; here the codes are Finances, Market, Training/Advising, Support to life for living rural areas.

Respondents' attitudes in both countries can be subdivided into three sections: financial and economic, educational and advising, life and logistics. The first section, as in the previous category, relates to the respondents' expectations of getting support in the form of affordable loans, appropriate subsidies and parity prices for their products. Sometimes linked to these issues is the question of influence of import lobbies, selling cheap food from abroad, thus lowering the prices for local farmers. Since these attitudes were not so prominent, they were not covered in the coding, though this might be somewhat surprising considering this topic is very present in public debate on the topic of food. The second section relates to the need for training of young farmers who are only just entering the market and the food production sector, which covers both the need for expert training in the area of production itself and the often-cited role of County advisory services, as well as assistance with tackling administrative obstacles. The third section relates to the necessity of ensuring better quality of life in rural areas where most food is produces, which is an issue in both countries. There is a need for support to life in rural areas, which in Croatia is expressed under the code Farmland, though this is a much wider issue of satisfying logistic preconditions while making a decision to live in a certain place.

Security schematic with accompanying codes (Croatia) Security schematic with accompanying codes (Serbia)



Let us look at some of the most interesting responses to the question of what would be needed to ensure and improve the process for young farmers entering the food production sector.

Person 1: "Practical training, affordable loans and institutions that would satisfy the needs of farmers rather than existing for their own sake."

Person 2: "High quality education in both theoretical and practical segments. Provide guidance for young farmers enabling them to write applications and apply to competitions. Good start-ups can provide young farmers with all the tips and tricks of the trade, but also teach them about the pleasure of making food."

Person 3: "The state should put in place simple procedures for acquiring concession agreements for farmland, without corruption in the process of awarding them. Also, following the Israeli model, it could ensure farmland infrastructure. In Israel, if you want to become a farmer, the state bears the expense of ensuring water and electricity infrastructure to your land. All you have to do is produce the food."

Person 4: "In addition to greenhouse production, young farmers need a chance to enter the agricultural sector; give them 20 ha and a favorable loan for machinery and automation, under the condition that on this land they need to produce a certain quantity of food at preset prices, and if they can make any profit from it, young people will not the country."

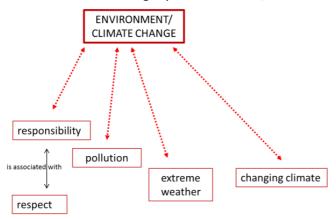
Person 5: "In order to ensure production, you need to have enough workers, the machinery to perform certain production tasks faster and simpler, followed by good transportation infrastructure in order to ensure fast connections with the market, production training for young farmers, and above all, you need to love farming."

The next category, Environment/climate change, is becoming increasingly prominent in connection to food production, while earlier in the Study we already explained that relationship to resources, the world around us, global climate changes and food production are inextricably linked. Such a trend can also be observed in the answers of our respondents. Almost all of them express their awareness toward the environment and the importance of the responsible use of resources. In Serbia only a few respondents expressed the opinion that climate change on our planet is a continuous process and that current changes are nothing unusual, while in Croatia only one participant expresses such attitudes on the causes and significance of current climate phenomena. Especially telling were the statements of young farmers in Serbia, who said they would preserve resources and the living environment more, however the "demands for product protection and synthetic fertilizers are becoming greater" so they have to use them.

The attitudes of Croatian participants mostly correspond to those in Serbia, so again they are presented in a single schematic. The following codes have been determined: Responsibility, Respect, Pollution, Extreme weather and Changing climate.

The codes Responsibility and Respect are closely related and refer almost identically to the responsibility towards resources and respect to nature. A great number of respondents especially singled out polluted environment, in terms of air, water and soil pollution, which they consider a problem for them since it limits their production potential both in terms of quality and quantity. An extremely large number of participants provided answers that have been collected under the code Extreme weather, complaining about a growing number of unforeseeable weather events such as droughts and heat waves, excessive moisture, late bouts of frost, etc. Also, a large number of respondents agreed with the fact that the climate is changing and their answers clearly demonstrate that they see this as a negative occurrence dangerous for their profession and that they believe human kind's influence is fundamental in intensifying and instigating climate change as a global phenomenon.

The schematic of the category Environment/climate change with accompanying codes:



Person 1: "It is very important to preserve our living environment and natural resources, as far as I'm concerned, this is constantly on my mind and I feel bad that in some areas I am forced to act against my convictions...."

Person 2: "On my land I take care /make sure/ to preserve all resources, but I can't make my neighbors do the same if they think this is not important. I feel the consequences of climate change and organize my production with that in mind. Generally speaking, these days without irrigation, there is no agriculture."

Person 3: "I see and feel all the negative aspects of climate change, in anything from our health to changing weather and the effects on plants and our production yields/results. I am ecologically conscious and I try to be mindful of water, soil, plants and animals. But I see negative influences all around me, starting from the amount of waste we are surrounded with, to the quality of air we breathe, the poisons we intake through food and water."

Person 4: "This topic immediately brings tears to my eyes. Climate change becomes more visible each year and we are really not in the position to bury our heads in the sand. This is one of the biggest problems on the global scale and we need to tackle it very seriously; the change begins with us, but we also need to teach our children to act

differently, because the future is theirs. The fact that I produce ecological food is another reason to be mindful of climate change. I recycle everything I can and I try to reduce waste. Zero waste is the future we should all aspire to."

Person 5: "I don't see the point of this question because we personally can't effect any significant changes, all we can do is adjust. The solutions are outside the sphere of agriculture."

Person 6: "The state of the environment is very important for our production. We treat all natural resources with respect because, if they are out of balance, our products suffer quality loss. We feel the negative effects in diminishing numbers of natural pollinators, that is, insect, which play a vital role in the pollination of orchards."

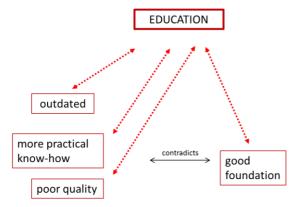
The next category of the theme Challenges is Education and it is one of the most important categories. Considering the age group of our respondents and the fact that they are entering a risky sector, the theme of education and/or training is not surprising. It is however, important to note that education and/or training also appears as a code in the category of Security, as well as in the categories related to the relationship with consumers and disappearance of family farms. This clearly illustrates that in both countries young farmers are aware of the importance of education and training, especially considering that, overall, the sector lacks advanced and innovative know-how and well-educated people in both of these countries. It is important that they consider the need for education within the context of their own security and sustainability and the cooperation with crucial stakeholders and that they value this very highly – as important as financial support and sustainability. Nowadays, to be educated and keep up to date with the latest know-how and tools of sustainability, means also having a good starting position for economic sustainability.

In the category Education there are four codes and we present them jointly for both countries because there were not any considerable differences between them. The four codes are: Outdated, Poor quality, More practical know-how and Good foundations.

Expectations and the awareness of the importance of education, as well as crediting practical know-how with the survival of young farmers in the food production sector is quite contradictory to the attitudes to the educational system which is supposed to prepare young people for entering the world of agricultural production. The respondents in our survey mostly expressed negative views towards the educational system, simply pointing out that it was not good but without elaborating much on that, however, their answers could be grouped into three codes related to being outdated and offering obsolete knowledge, or that the system pays too little attention and time to acquiring practical know-how and work in the field. These views were expressed in Serbia by 21 respondents, that is 55%, while in Croatia the percentage of those who expressed generally a negative attitude to the educational system was even higher, that is 59% or

16 respondents. On the other side of the spectrum are the answers grouped under the code Good foundations, by which many respondents said things could be better but that there are good institutions where people can learn everything they need about food production and get a decent education and knowledge if they want to.

The schematic of the category Education with accompanying codes:



Person 1: "I believe it is not that bad but it could be a lot better, providing young people with real hands-on experience and advice from the start."

Person 2: "I believe the educational system and its institutions offer a high-quality education when it comes to agricultural production."

Person 3: "Having graduated from the Faculty of agriculture and participated in the educational system in Serbia, I'm able to give a positive opinion on this issue, but there is always room for improvement."

Person 4: "By no means, in Serbia only the pupils who couldn't get in to any other school attend agricultural vocational schools, just to graduate from somewhere, and they are supposed to be the ones feeding the people someday, god forbid."

The category Disappearance of family farms as is to be expected roused the most interest, especially when we take into account real data on the diminishing number of small farmers and family farms in Serbia and Croatia. Though we need to emphasize that this is problem entire Europe faces, while the EU by 2013 lost a third of its small farms in a period of 10 years (Brent, 2016). In this category there were a lot of codes in both countries, so we again present them separately.

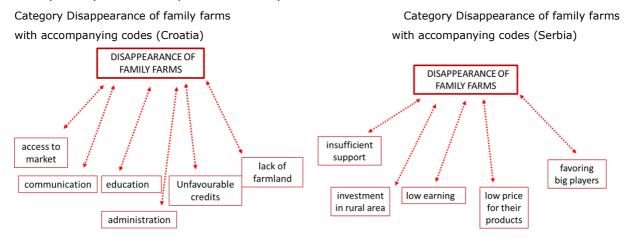
In Serbia, the codes in this category are: Insufficient support, Investment in rural areas, Low earnings, Low price of purchase, Favoring big players. This is the category in which our respondents exhibited and expressed the most bitterness. It is also the category in which there was the lowest number of repeating short answers, while the respondents went beyond the scope of the question and delved into in-depth analyses of politics, changing systems and of the devastation of rural areas and agricultural production. This category is, in a way, the reversed overview of the category in which we asked the

respondents to state what is needed to ensure a more sustainable and secure entry into agriculture for young farmers. The prerequisites for successfully becoming a young farmer in the former category, if they are not present or their opposite (e.g. Favoring big players) is here stressed as the main reason for the disappearance of family farms. In order to present the results more clearly, the codes per country are given separately, since in the case of Croatia there are some additional codes to note: Access to market, Communication, Training, Unfavorable loans, Administration, Lack of farmland. For example, a considerable number of participants in Croatia stated insufficient know-how as the reason for the inability of many family farms to stay afloat on the market in Croatia, as well as the overly complicated administrative requirements young farmers need to meet, and generally, the entire bureaucratic machine of agricultural policies. However, in the case of Croatia, it is especially interesting that one of the reasons for the disappearance of many family farms that the respondents gave was bad communication, that is, how they are presented in the media and the public, that life in the country is backward and unattractive. They very clearly state that in their case this is not so and that this is a gross cultural and communicational misconception which presents an impediment to many young farmers.





This is evident in some of the quotes listed, but it is clearly a topic to be explored more in-depth beyond the scope of this Study.



Let us look at some of the statements related to the category Disappearance of family farms.

Person 1: "I don't know much about it and I wasn't aware of the drop. Thank God, our business is improving year after year. We may face really harsh conditions, but we are used to it and we get by as best as we can. Mostly we don't complain and if others do the same maybe things will get better for all of us."

Person 2: "A large number of young people has left the countryside and the state needs to do something about it, either through policies or subsidies which would help farms to survive."

Person 3: "People don't want to risk entering such an uncertain market and I think everyone is turning to more secure profits, no matter how low they are. Every year, the state comes up with new ways to devalue the people in rural areas, even though agriculture is one of the pillars of any society or region. Not to mention the discrimination of people in rural areas. I say all this from experience, because there is a lot of talk about rural development but there are no concrete improvements. The more they talk about rural development, the less there is people who live here and work in agriculture. The solution is very simple, but I am not the one who should be working on this."

Person 4: "Absolutely. There are many reasons for this. A lack of interest and education, being removed from the market, focus on foreign countries, but it all comes down to one sentence: A person has to choose to be a farmer, rather than have it pushed on them, because it is a family tradition or their only choice."

Person 5: "Young people see their parents toiling, shedding blood, sweat and tears, trying to make ends meet, and the parents don't want such a life for their children. Farmers are third-rate citizens."

Person 6: "Nowadays being a farmer is not a particularly popular profession, especially among young people. Since we live in a world where distorted values are communicated, it is difficult to find on social networks or internet portals stories about young farmers. If you do see stories about young farmers it is mostly as a platform for marketing/banking/insurance and other such benefits and young farmer success stories are mainly singled out as exceptions. Traditional farming is stigmatized as hard labor with minimal gains, while the health benefits of spending time and working outdoors, with your hands and living a more tranquil life are never mentioned."

We now turn to the theme of Partnerships which comprises four categories: State, Politics, Consumers and Science/Associations.

The first category, State, is associated with the following codes in Croatia: Laws and regulations, Strategy, Loans/investments, Farmland, Advice/Training, Bureaucracy and Regulated market. In Serbia, there are some codes that overlap, as well as some

different ones, while there is a strikingly large number of respondents who believe that the state, its agencies and relevant bodies are not doing anything useful and express a negative attitude towards them (one in three respondents). The codes for Serbia are: Nothing useful, Secure the market, Subsidies, Support to life in rural areas, Training, Purchase/Parity. However, it is interesting to highlight that in both countries the state is perceived as extremely important, as having a vital role. That is why almost all the respondents had something to say on this topic, in fact, there is a striking correspondence and overlap between the codes in this category and in the category of preconditions which would help young farmers entering the market in a sustainable and secure way. For instance, prominent codes for Croatia are Laws and closely related Strategy, where unlike in other categories, a considerable number of respondents emphasized the need for a good law, that is, a development strategy for agriculture. It is not, however, entirely clear, what they are asking for, since the Agriculture Act is in place in Croatia (Official Gazette 03/2015) and the National strategic plan for the development of agriculture and fisheries of Croatia 2020 is currently in development phase and it is open for comments and participation.

This category is best illustrated by the comments of the respondents themselves:

Person 1: "As an investor and guarantor. As the provider of adequate training, as the body that will ensure young farmers an easier start (inspectors first as advisors, not as punishers), as the source of accurate and up-to-date information for farmers. The state should bring innovative foreign and local farmers to transfer knowledge and ensure funds for gaining practical know-how."

Person 2: "I think of the state and its institutions as someone who creates the rules of the game and but doesn't have much experience in the field and in practice. These rules often do not make any sense and limit us."

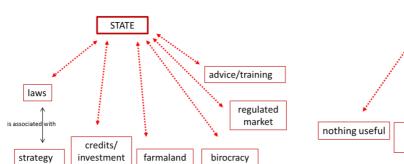
Person 3: "When you listen to state officials and representatives, you would think that that the possibilities for assistance to farmers were endless, but the reality is far removed from that. The state invest huge amounts into agriculture but obviously completely inadequately because the situations is very bad despite all that. The ministry is the one responsible for such foolish spending of money. Direct incentives have been increased for ecological production and transition period. If, several years later, huge amounts of money have been spent, the amount of hectares under ecological has been increased, at least on paper, but there are still no products on the market, then this means the incentives system is inefficient and needs to be reexamined."

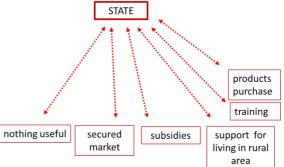
Person 4: "At this point there are ruining agriculture, and they are doing a good job of it."

Person 5: "The role of the state is very harmful because it gives more to those who already have plenty, while us small ones do not have a chance to 'grow'."

Category State with accompanying codes (Croatia)

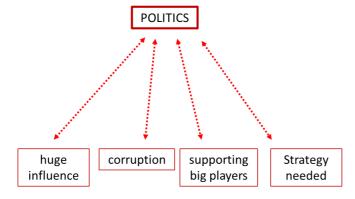
Category State with accompanying codes (Serbia)





The Politics category is closely related to the previous category and most young farmers in the survey feel the influence of politics on the sector of agricultural production is too great, followed by opinions that most feel this influence is negative. In fact, politics is seen as the corrupted factor in the agricultural sector and as one abusing its role in the market by favoring big players at the expense of local small food manufacturers. Some respondents think that politics can effect changes but that this influence is not used to its full potential or is not directed to implementing strategic documents. In Croatia, only five respondents stated that politics does not affect the agricultural sector, while in Serbia only three young farmers thought that. This category comprises the following codes: Huge influence, Corruption, Supporting big players, Strategy needed.

The schematic of the category Politics with accompanying codes



Person 1: "Yes, in the sense that huge amounts of money are being made in agriculture thanks to political ties. But not in the sense that politics actually coherently and constructively works on making agriculture a leading branch of Croatian economy. Politics could have influenced decisions on national level to protect local products, to favor local products on the national market over cheap imported goods, to introduce measures that ensure links between purchase and processing, to ensure regulated and

guaranteed purchase at prices in agreement with producers, to not allow import while our fields are full of produce, to support export...."

Person 2: "Yes, people who have the support of politics have a much better chance of getting state land, favorable loans and subsidies."

Person 3: "Politics has always been around and always will be. I am apolitical so I don't know the extent of politics' influence on agriculture. I think a smart person can go around politics and create their own way of working, using politics as a chain of values."

Person 4: "Yes, I think it does, but in a wrong way. Without a doubt politics is necessary, but not the way it's done here. It needs to guide production towards teaming up, education through research and local spending."

The following category relates to the relationship with consumers, which can in some instances take on a role as significant as still performed solely by the state. The growth of the Community Supported Agriculture (CSA) model throughout the world is becoming one of the key support structures and pillars of ensuring security for small and even medium-size manufacturers and farmers (Perényi et al. 2016). In Croatia these initiatives usually take the form of Groups of Solidarity Exchange or Solidarity Eco Groups, while the Croatian partner on this project, ZMAG, is developing its own model Food for Good, through the Cooperative for Good Economy. The Cooperative is also a member of the Urgenci network – the international CSA network bringing together over a million of people involved in its organizations and other network members. Only in Europe there are currently over 5 thousand active CSA initiatives (FOE Europe and Urgenci, 2015).





In Croatia there are currently 10 active initiatives, but it is interesting than there is not one such group active in the southern part of the country where we have occasional selling through social networks. However, various initiatives, groups and cooperative in Istria, Rijeka, Zagreb and Osijek actively contribute to the sustainability and security of small and young farmers in Croatia and it is evident that this is the reason why a portion of the respondents in this survey expressed their positive experiences with conscientious

consumers through these solidarity cooperation models between citizens and food producers.

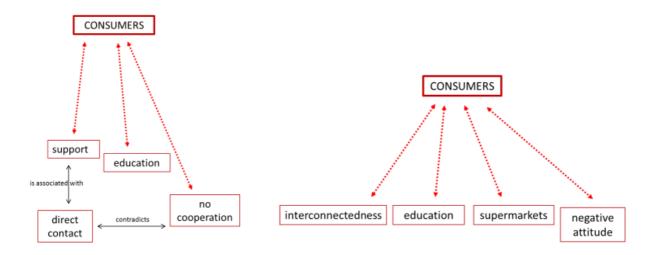
This is just one of the codes that influenced the need to represent this category separately for the two countries. The importance of emphasizing the role of conscientious consumers in the creating of solidarity and ethical models of cooperation with and support to local agriculture is best evidenced by the fact that CSA models and groups in Europe are most often (41%) started on the initiative of consumers themselves (Urgenci, 2016).

The codes for Croatia are: Support, Direct contact, Education, No cooperation. The first two codes are directly related to what we have just stated and are the result of positive experiences young farmers have had through systems of support and mutual assistance, as well as direct contact with their buyers. It would be safe to say that this is the way to create functional and efficient ethical and solidarity food networks of short chains of supply. Their number is surprisingly high, in a positive sense, and it is perhaps an indicator of certain new progressive directions in the food production sector.

In fact, even the two subsequent codes, though they are not necessarily the result of positive experience and good practices, are not filled with bitterness or anger. A portion of young farmers pointed out that consumers need to be educated about quality local food and placed the majority of the responsibility on other actors, while even the farmers who stated they do not cooperate with consumers or that the cooperation is bad, blamed for it a lack of information, generally low purchasing power in Croatia and the influence of the advertising industry and mass production of cheap food.

In Serbia we had the following codes: Interconnectedness, Education, Supremacy of supermarkets and Negative attitude. Attitudes grouped under the code Interconnectedness are the closest to the changes achieved in Croatia, and it is also positive that a considerable number of young farmers in Serbia believes that they are closely tied to consumers, and that they can either succeed or fail together.

The number of respondents who feel this way outnumbers the ones who view the relationship with consumers as negative and for this blame the consumers because they do not care for anything and just want to buy their agricultural products at the lowest possible price. Somewhere in between these two extremes are the farmers who, like in Croatia, express the need for active and focused education of consumers about the advantages of locally produced healthy food, and the ones who realize that today it is a challenge to support local and small producers because the supermarkets dictate the trends on the market and set the prices of their products with which nobody can compete.



Person 1: "This is a key factor. Spending dictates supply and every kuna spent on healthy, organic food that regenerates the ecosystem is important because it fosters more production of healthy food."

Person 2: "Making citizens more aware is one of the key conditions that need to be met in order for local quality food production to stay on the market. Of course, their economic and purchasing power are another important condition. We can make citizens more aware only by educating them on what we do."

Person 3: "For most consumers the money plays a key role in deciding what food they will buy."

Person 4: "As long as the consumers are focused on supermarkets as the only source of their food, small farmers will have a hard time staying afloat."

Person 5: "The people are stupid and uninformed. They eat all kinds of garbage and the state is again to blame for this because they import all this garbage into our stores. The people do not look at labels, the nutritional value or the origin of the food, they just care about the price and the brand."

In the context of supporting locally produced food and short chains of supply, it would be advisable to keep in mind the concept of the co-called foodshed, which refers to the geographical area from which portions of our food come. According to the schematic based on the Alternative Food Distribution Systems (Bednarek et al., 2005: 33), food produced within 160 km could be considered local food and it should comprise at least 60% of our total food consumption.

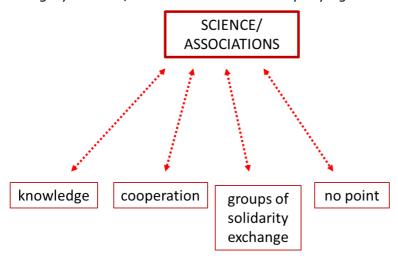


Many people highlight the enormously important role of producing food as close as possible or within the perimeter of cities by using abandoned spaces, rooftops, urban gardens and peri-urban surfaces that have not yet been taken over by the housing and roads infrastructure. This will become even more vital considering that today more than half of the population, with the tendency of further growth, lives in cities, which will make sustainable urban food policies, operating in synergy with energy, transportation, water use, health, waste management and citizen participation, a key factor in planetary sustainability in the 21<sup>st</sup> century (Halliday and Hawkes, 2017) and keeping the ecological footprint within the boundaries of sustainability and the biocapacity of the planet (Rees, 2018). It does not hurt to stress that these topics are directly related to many of the 17 Sustainable development goals and especially to the goal number 11 which is Sustainable cities and communities.

The final category under this theme relates to the relationship/openness to collaboration with scientific institutions and civil society organizations. Here we had the following codes: Know-how, Cooperation, Groups of solidarity exchange and No point. The codes for both countries mostly overlap, with the exception of the code of Groups of solidarity

exchange, which is not present in the case of Serbia and in Croatia it is cited as an example of good cooperation with civil society initiatives and organizations. In both countries up to five respondents do not see any point in this sort of cooperation. The rest of the respondents positively value the chance to broaden the knowledge, the fact that every such cooperation is a chance to make contacts and improve the situation in the agricultural sector.

Category Science/Associations with accompanying codes:



Person 1: "Everything is based on knowledge. Without knowledge there is no sustainable production nor is there progress. We can invest tens of thousands of euros but we don't have knowledge or know-how to run the production, it is the same as investing the money in a sports forecast."

Person 2: "Of course there are benefits. Scientific institutions are very important in giving young people the know-how to work in agriculture. Labor force is always welcome in order to be able to do more in a shorter amount of time, under the condition that they are paid for their work and they work hard, not just to tick the box and get out."

Person 3: "I do see positive aspects, because the cooperation between experts, manufacturers and those in favor of local farmers contributes to a healthier diet and, consequently, benefits the life of the community.

Person 4: "Of course, a good cooperation is any cooperation that develops into something more. Groups of solidarity exchange are one social aspect that assists farmers who are just starting out in reaching out to their final consumers."

In the end, we present the schematic of axial coding which we have conducted in order to establish the connections between individual codes. Though we already pointed to the links between some of the codes in the section dedicated to open coding, axial coding raises the entire analysis to a new level by finding interconnections between codes that might not always be visible to the "naked eye".

These interconnections are important because they provide us with not only a better organized and more precise overview of the young farmers' attitudes, but they also reveal how the respondents see the interconnections between the various challenges they face and the roles and responsibilities of the actors in the society that are important for food and agriculture sector.

Some of the interconnections might be obvious, for instance, that our respondents singled out access to the market as one of the foundations of security and sustainability, and that it is also believed to be one of the state's main responsibilities and roles to regulate it and ensure access for small and local food producers, and conversely, that the inability to access the market and the monopoly of big players, both in production and in the stores, are some of the central reasons for the disappearance of family farms.

Furthermore, farmland appears to be an extremely important code for getting the necessary financial aid because many small and young farmers when they are first starting out have difficulties in getting access to land. However, farmland is considered a task of the state, which needs to ensure access to land and award concessions for land use and farmland expansion to those who want to produce food. And that contributes to the sense of safe position for farmers.

Similarly, the poorly developed system of land administration and its use for food production is listed as one of the main reasons for the disappearance of family farms. In addition, this allows us to make comparisons with the current situation in Croatia and the development of models of solidarity cooperation between producers and consumers and the strengthening of the immediate market and direct contact, which provides considerable support to the financial situation of a growing number of (young) farmers. These cooperations are often initiated by civil society organizations.

Furthermore, education was one of the most cited activities and concepts necessary for the development of young farmers and it appeared in different places throughout the code tree. In terms of content, education as practical training is an important form of empowering farmers, and it is also a tool for raising awareness and providing know-how and skills needed for adapting to climate change.

Education and advisory services are one of the basic factors of security and a vital step in entering the food production sector, while education is also crucial in a proactive approach to consumers, providing them with more information and introducing them to the world of locally produced (organic) food.

#### The schematic of axial coding for Croatia

	CHALLENGES				PARTNERSHIP	S
FINANCIAL SITUATION	FINANCIAL ASSISTANCE	SECURITY		STATE	POLITICS	CONSUMENRS
Direct market	Subsidies	Finance		Laws	Huge infkluence	Support
Great effort/hard work	Credits	Market	1	Strategy	Corruption	Direct contact
Necesarry time	Farmland	Education		Credits/	Supporting big	Education
Without profit		Advising	_	investment	players	
		Product purchase Farmland	_	Farmland	Strategy needed	No cooperation
				Birocracy		
ENVIRONMENT/	EDUCATION	DISAPPEARANCE OF		Regulated marke	SCIENCE/ ASSOCIATION	
CLIMATE CHANGE	EDUCATION	FAMILY FARMS				
	Outdated	Access to market	\	Advice/training	Knowledge	
Responsibility		Education			Ü	
Respect Pollution	More practical know-how Poor quality	Administration			Cooperation No point	
Extreme weather	\	Unfavourable credits			Groups of Solidarity Exchange	
Chaning climate		Lack of farmland				

#### The schematic of axial coding for Serbia

CHALLENGES				PARTNERSHIPS		
FINANCIAL ASSISTANCE	SECURITY	ENVIRONMENT/ CLIMATE CHANGE		STATE	POLITICS	CONSUMERS
Subsidies Credits Farmland Products purchase  EDUCATION  Outdated More practical know-how	Finance Training/Advising Support to living in rural area Market  DISAPPEARANCE OF FAMILY FARMS Inssuficient support Investment in rural area	Responsibility Respect	/ /	Nothing useful Secured market Subsidies Support to living in rural area Training Product purchase	Huge influence Corruption Supporting big players Strategy needed  SCIENCE/ ASSOCIATIONS  Knowledge Cooperation	Interconnectedness Education  Supermarkets  Negative attitude
Poor quality Good foundation	Low earning Low price for their products Supporting big players				No point	

#### 3 CONCLUSION

It is very often said that the countries of Southeastern Europe are plentiful in resources and have very rich ecosystems, especially in comparison to the situation in many western countries. The report of the Croatian Academy of Sciences and Arts states that the value of the agricultural and forest portion of Croatia is worth 17 billion dollars. A growing number of people recognizes this value and we believe that the examples in our Study are an indication of some positive trends and that an increasing number of people will start to take advantage of the value of the ecosystem in a way that is sustainable and benefits the entire society. It that context, our young farmers are also a valuable resource that needs to be preserved and strengthened. The aim of the Growing Growers project is precisely that, to preserve and empower young farmers, and of course, in line with the activities of civil society organizations, to promote and advocate. Food sovereignty is an area that requires precisely this sort of rounded action, and even small projects like this one can assist in that.

The growing trend of the comprehensive interest in food, its origin and quality, will also undoubtedly assist in that. In Croatia there are now several stable groups of solidary exchange, organic solidarity groups and solidary cooperative consisting of aware citizens and small food producers. In Serbia, too, there is increasing interest in such advanced partnership models between manufacturers and consumers that have until now been without contact with each other. The number of people who come to local seed variety exchanges is growing and they realize the importance of seed quality and how it is preserved and exchanged, but also the importance of the quality and vitality of the soil as a valuable resource. There is a growing number of gardens in schools and cities where pupils and adults are staring to produce food, very often because of social necessity and for health benefits, but also out of a need for knowledge and self-realization. The EU's



New Organic Regulation on organic agriculture to come into effect in 2021 also contains some positive changes which up until a few years ago we could not have imagined being an integral part of official EU regulations. An increasing number of scientific studies and research, such as Agriculture at a Crossroads: The Global Report (IAASTD, 2008) or the recent Towards a Common Food Policy for the

European Union (IPES-FOOD, 2019), indicate that, in the future, due to a need for

revitalizing the ecosystem, only ecological food production methods will be able to ensure sufficient amounts of quality food, based on more sustainable lifestyles and social systems. Agroecology as a science closely related to food sovereignty responds to these necessities because it is "based on diversification and revitalization of small and medium-size farms and on transforming the entire agricultural policy and food system, with the aim of economic and ecological sustainability, both for the farmers and the consumers" (Petrović, 2018: 33).

Also in accordance with this are the five paradigm shifts, elaborated by the aforementioned International Panel of Experts on Sustainable Food Systems, which need to be achieved in order to establish a sustainable food policy (IPES-FOOD, 2019: 39)

- 1) Insure access to land, water and healthy soil
- 2) Build climate change-resilient and healthy ecosystems
- 3) Promote sufficient, healthy and sustainable dietary habits
- 4) Build short supply chains that are socially more just and less harmful for the environment
- 5) Put trade within the framework of sustainable development so that it benefits sustainable development.

We stated earlier in the Study that conventional agriculture is one of the biggest problems of today's society, in view of the consequences for the environment, our health and the future of our planet. At the same time, it is the first to get hit by the effects of pollution and climate change, thus completing a sort of vicious circle in which it is hard to distinguish between causes and consequences. The so-called "dead zones" are becoming more frequent, areas of the ocean and agricultural surfaces where the ecosystem has become so depleted that the only thing to do for its recovery is for humans to keep away. Numerous and frequent climate instabilities have an unfavorable effect on the quantities and quality of produced food, creating a sense of uncertainty. The same feeling is caused by disproportionately cheap and readily available food, which in the long run debilitates us and makes our organism more vulnerable instead of strengthening and building it up. However, through agroecology and respecting the basic tenets of food sovereignty, it is precisely agriculture that can become the main instrument of healing, causing a paradigm shift, both in terms of production and our health. Therefore, the increasingly frequent term "climate-smart agriculture" means that, thanks to regenerative activities and treatment of the earth and food production, agriculture acquires a key role in stopping the increase of greenhouse gas emissions" (Biščević i Motik, 2015). The report (2010) of the Special Rapporteur Olivier de Schutter to the UN General Assembly states that knowing and practicing the principles of agroecology for ten years can double the amount of produced food, at the same time creating a system that curbs climate change and reduces poverty in rural areas. In fact, it can also become the

main booster for local economic and sustainable development based on solidarity and ensuring healthy food lifestyles, as is the case in European cities like Vienna, Copenhagen and others, where a public procurement system is successfully employed (Barling et al., 2013). Agroecology can prompt the "transition from destructive conventional agriculture and food systems towards building agricultural resilience, rebuilding ecosystems, supporting local and fair trade food models and strengthening local communities" (IATP, 2019). Its action is three-fold: it is a scientific discipline, a practical tool and a social movement. That is why it possess transformative potential.

What we still lack in the region is closer connections and cooperation, setting up a network of working together and helping each other. As Tereza Gertnerova, a CSA group from Ostrava member expressed, "Being a member of a CSA group makes me feel like I am part of a whole" (CooLAND, 2018: 19). This sort of sentiment needs to be cultivated and strengthened in our region as well.





This would also dispel one of the biggest myths in the agricultural sector, that small farms have no place on the market because supposedly they cannot compete with the big players. Numerous examples from countries such as Austria, Italy, Switzerland or the Nordic countries where precisely the small manufacturers comprise significant portions of the market of certain products dismiss this myth. But they are able to do that precisely because they collaborate though numerous cooperatives and clusters and because they know that the whole is greater than the sum of its parts, especially if these parts do not even communicate with each other. This is also important for the two countries in which the Growing Growers project was conducted, because they have a predominance of small family farms. In Serbia almost half of all agricultural enterprises operate on less than two hectares of land, which is precisely the sort of farms that disappear the easiest, under the burden of economic and political regulations and decisions, yet it is precisely the existence of such farms and their development that are the foundation of life in rural areas. On the whole, such treatment of small farmers and manufacturers is absurd, given the fact that on the global level such farms produce 70% of all the consumed food (ETC Group, 2017; Chancellor, 2019).

The other problem in the region is the starting point of food sovereignty which states that the people have the right to determine the policy and structure of their food system in line with their needs, desires, possibilities and ideas. The problem in our region is that people are not used to making decisions freely or taking responsibility for their lives. Therefore, considerable investment in knowledge and communication skills will be required, as well as empowering all the major actors in the food system in order to make it more sustainable and fair. Lastly, we come to realize that, because of its interconnections with other areas of our life and society, agriculture cannot be observed independently and in isolation like some sort of contraption. It is pretty hard to imagine a paradigm shift in food production without a turn to more fairness, solidarity, sustainability and responsibility in our societies, that is, in the economic and political sphere of modern civilization.

That is why the Growing Growers project and the accompanying research demonstrates that it is vital to support young food producers, because without them there is no sustainable future, a future that has to be built on the foundations of food sovereignty.



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#### QUESTIONNAIRE AS IT WAS USED IN THE RESEARCH

1. Sex	
<ul><li>□ M</li><li>□ F</li></ul>	
2. Age	
3. County/region where you live	
4. Please indicate which categories of land use mostly app (more than 1 answer is possible)	ly to you and your production
Category	Tick
Arable crops	
Orchards	
Vineyards	
Olive groves	
Meadows and pastures	
Medicinal herbs	
Vegetables	
Fallow land	
Forests	
Nurseries	
5. Please state the size of the surfaces you use for food pro 6. Please state your role/function at the farm (e.g. head or segment, one of the workers, family member, etc.)	
7. Please state how many people are involved in agricultude of 1 Regularly employed employees	ral production on your farm
<ul> <li>2 Seasonal or occasional workers</li> </ul>	
<ul><li>3 Volunteers</li></ul>	

0	1 Family tradition		
0	2 I had no other opportunities for employment		
0	3 Passion for agriculture and nature		
0	45		
0	5 Desire for good earnings		
0			
O	o other		
9. Do	you see yourself in this profession in 5 years' time?		
0	1 I enjoy what I do and my answer is yes		
0	2 I do because I do not have any other options		
0	3 If I could choose, I would choose a different profession	on	
0	4 If my profits increase then yes		
0	5 I hope that in the next 5 years I will stop being a farn	ner and move abro	ad
0	6 Other		
0	re you a member of any guilds and/or interest groups of a No  2 Yes (state which ones)		
0 0 11. W	1 No 2 Yes (state which ones)  /hat would you need to make your farm more economic		 estainal
0 0 11. W (choo	1 No 2 Yes (state which ones)  /hat would you need to make your farm more economicse a maximum of 3 answers)	cally stable and su	 estainak
0 0 11. W (choo	1 No 2 Yes (state which ones)  /hat would you need to make your farm more economicse a maximum of 3 answers)		 stainal
0 0 11. W (choo	1 No 2 Yes (state which ones)  /hat would you need to make your farm more economicse a maximum of 3 answers)  ategory	cally stable and su Tick	estainal
0 11. W (choo	1 No 2 Yes (state which ones)  /hat would you need to make your farm more economicse a maximum of 3 answers)  ategory  armland expansion	cally stable and su Tick	
Ca Fa	1 No 2 Yes (state which ones)  /hat would you need to make your farm more economicse a maximum of 3 answers)  ategory	cally stable and su Tick	
11. W (choo	1 No 2 Yes (state which ones)  /hat would you need to make your farm more economicse a maximum of 3 answers)  ategory  armland expansion airer credit	cally stable and su Tick	estainal
Ca Fa Bi	1 No 2 Yes (state which ones)  /hat would you need to make your farm more economicse a maximum of 3 answers)  ategory  armland expansion airer credit agger incentives/subsidies	cally stable and su Tick	stainak
Ca Fa Fa Sii Be	1 No 2 Yes (state which ones)  /hat would you need to make your farm more economicse a maximum of 3 answers)  ategory  armland expansion airer credit agger incentives/subsidies airer earnings for original producers mplification of administrative procedures etter position on the market for young farmers	cally stable and su Tick	estainal
Ca Fa Bi Fa Sii Be Fa	1 No 2 Yes (state which ones)  /hat would you need to make your farm more economicse a maximum of 3 answers)  ategory  armland expansion airer credit agger incentives/subsidies airer earnings for original producers mplification of administrative procedures etter position on the market for young farmers airer regulations on the global level	cally stable and su Tick	stainak
Ca Fa Bi Fa Sii Be Fa	1 No 2 Yes (state which ones)  /hat would you need to make your farm more economicse a maximum of 3 answers)  ategory  armland expansion airer credit agger incentives/subsidies airer earnings for original producers mplification of administrative procedures etter position on the market for young farmers	cally stable and su Tick	estainal
Ca Fa Bi Fa Sii Be Fa	1 No 2 Yes (state which ones)  /hat would you need to make your farm more economicse a maximum of 3 answers)  ategory  armland expansion airer credit agger incentives/subsidies airer earnings for original producers mplification of administrative procedures etter position on the market for young farmers airer regulations on the global level	cally stable and su Tick	stainak

8. Please state your reasons for becoming a farmer.

## 12. What are the three most important on-farm investments you would make to develop your farm in an economically sustainable way? (choose a maximum of 3 answers)

tegory	Tick
vitching to organic farming	
rmland expansion	
owledge development	
ew machinery	
sing digital technology	
arketing	
botics and automation	
one of the above	
rm management and production optimization	
oduct certification (local, regional, quality, etc.)	
frastructure improvement	
oduct expansion and positioning on the market	
sing digital technology arketing bbotics and automation one of the above rm management and production optimization oduct certification (local, regional, quality, etc.) frastructure improvement	

Other:		

# 13. As a young farmer, what do you need the most to help with your production. (choose a maximum of 3 answers)

- o 1 Access to science-based research
- o 2 Measures that are practical to implement on the ground
- o 3 Coherence between local, national and EU measures
- 4 Advisory services
- 5 Education and training
- o 6 Investment
- o 7 Participation in public procurement procedures
- o 8 Other

### 14. Are you interested in switching to organic farming? If yes, what would be your main motivation for that?

- 1 Higher earnings from selling organic products
- o 2 Production of healthy food
- o 3 Land and local ecosystem preservation
- 4 Access to a niche growing market
- 5 Personal convictions and beliefs
- o 6 Other

15	. If v	you were to switch from conventional to organic food production, what would you			
		the most in order to make this transition? (choose a maximum of 3 answers)			
	<ul> <li>1 More training on organic farming</li> </ul>				
	<ul> <li>2 Higher state incentives for organic farming</li> </ul>				
	0	3 Secured place on the market			
	0	4 Assistance in completing the paperwork			
	0	5 Lower costs of organic status certification			
	0	6 Additional workforce			
	0	7 Other			
	٠.				
		ate what benefits do you see from organic farming. (choose a maximum of 3			
an	swe	•			
	0	1 Access to science-based research			
	0	2 Measures that are practical to implement on the ground			
	0	3 Coherence between local, national and EU measures			
	0	4 Advisory services			
	0	5 Education and training			
	0	6 Investment			
	0	7 Participation in public procurement procedures			
	0	8 I do not see any particular benefits			
	0	9 Other			
17	۱۸/	hat are the areas in which more investment would improve the quality of life in rur	al		
		? (choose a maximum of 3 answers)	aı		
arc	:as:	(choose a maximum of 5 answers)			
	Category				
	Social services				
	Education and training opportunities				
		st broad-band Internet			
		isure activities			
		tter transport connectivity			
		cess to digital technologies ore social opportunities			
	IVI	טוב שטנומו טאאטו נעווונובש			

Other \_\_\_\_\_

18. European young farmers are now faced the challenges of producing more with less, while also being the custodians of the countryside. As a young farmer, do you feel responsible for ensuring a sustainable agricultural sector?

1 Strongly agree

- o 2 Agree
- o 3 Neither agree nor disagree
- o 4 Disagree
- o 5 Strongly disagree

# 19. On a scale of 1 to 5, state the degree to which you agree or disagree with the following general statements.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
The state and the	1	2	3	4	5
ministry work for the					
good of small farmers					
I believe that small	1	2	3	4	5
farmers can survive only					
if they join forces					
The state should ensure	1	2	3	4	5
better market					
conditions for small					
farmers					
Food that is not	1	2	3	4	5
competitive on the					
market should not be					
produced					
There are no quality	1	2	3	4	5
support programs to					
young farmers in my					
country.					
If I get an opportunity	1	2	3	4	5
for a better paid job in					
another field, I will stop					
being a farmer.					
The price of food is too	1	2	3	4	5
low compared to its					
actual worth.					
I am happy with the	1	2	3	4	5
work of the Advisory					
Service for Agriculture					
I receive the most	1	2	3	4	5
support for food					
production from my					
family					

# 22. On a scale of 1 to 5, state the degree to which you agree or disagree with the following general statements.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
The state is responsible	1	2	3	4	5
for food production and					
the survival of farmers.					
The consumers are only	1	2	3	4	5
interested in the price					
and not in the quality of					
the product.					
The constitution of our	1	2	3	4	5
country should guarantee					
food sovereignty as one					
of our constitutional					
rights.					
Subsidies for agriculture	1	2	3	4	5
need to be discontinued.					
It would be best to have	1	2	3	4	5
a few large					
manufacturers that					
produce food for all of us.					
Food production is a	1	2	3	4	5
strategically important					
sector and the state					
should guarantee parity					
purchase prices and the					
value of local products.					
Ecologically produced	1	2	3	4	5
food is overrated, taking					
advantage of the					
people's care of their					
health.					

The following questions are open-ended. They are meant to give us a better insight into your attitudes and opinions. Please answer them freely, this is your space to express yourself without anyone offering you already formulated answers.

1. How do you see your earnings from the production and sales of your food? Do
you make enough money to get by? Do you make enough to have good quality of
life and lead a decent life?
<del></del>
2. Do you need financial assistance for your food production in the form of loans,
investments, subsidies, affordable concession agreements or secured purchase of
your products? If so, state which forms of financial assistance do you currently
use.
use.
3. How do you see the role of the state and competent bodies in the agricultural
sector?
<del></del>
4. What steps do you think are needed in order to ensure a secure and sustainable
entry of young farmers into the sector of food production?
, , , , , , , , , , , , , , , , , , ,

5. How do you see the role of consumers and citizens in the sector of food production?
6. How important do you think the condition of the environment is for your production?  How do you treat the resources around you? Do you feel any positive or negative effects o climate change around you?
7. Do you think the educational system and the institutions preparing young people for agricultural production are of good quality?
8. Do you think politics has too much influence on agricultural production?

9. Do you see any benefits of cooperating with scientific institutions and/or civil society institutions and organizations?
10. We are witnessing decreasing numbers of family and small farms over the last several years. What do you think is the main reason for this and what would you suggest to change this trend?

WE ARE EXTREMELY GRATEFUL TO YOU FOR INVESTING YOUR TIME AND COMPLETING THIS QUESTIONNAIRE