Sustainability and family farms

An exploratory study of Croatia

Karmen Crevar

Aalborg University, 2022
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Abstract

This study aims to explore the complex topic of sustainability and the role family farms play in it. The purpose of this study is to uncover family farms' influence on the sustainability of the food industry in Croatia. Through a qualitative method, from in-depth collected interviewees of six family farms and one expert on sustainability, it was found that through cooperatives, flexibility and diversification of production family farms can influence the sustainability of the food industry. From analyzing the respondents answers this study was able to capture the essence of family farms existence in the current market, challenges they encountered and implication the Covid-19 pandemic has made on their operations. Lastly this study contributed to the current scarce knowledge available about family farms in Croatia.
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Introduction

In recent years there have been a lot of trends that have been circulating in the food industry. From organic food, to farm to table, to people transitioning from meat-eating to vegetarian or vegan lifestyles, it has pushed the food industry in a new direction. One of the concepts that has also been present is sustainable farming, sustainability in production, and that term has pulled many others around itself. Family farming has been present in the sustainability conversation for an extended period of time. The importance of family farms was stressed when 2014 was named as the ‘International Year of Family Farming’. Croatia is a land that has an abundance of natural resources present. Additionally it has a long tradition of farmers markets, as well as family farms in its history. In recent years there was a spike in the products in Croatia that were produced by family farms, with shops opening that carry exclusively their products (Journal.hr, 2021). The covid-19 pandemic and its lockdowns have seriously impacted all businesses, but especially the small ones such as family farms. Therefore the literature review revealed the extent of knowledge available on the topic of sustainability, and allowed me as a researcher to try to investigate the influence family farms have on sustainability. Since family farms are mostly small producers it was necessary to try to capture an in-depth insight into their perspective, to uncover the phenomenon. By trying to investigate family farms individually and in depth, this study intends to see the extent of their influence and how they can influence Croatia towards sustainability. The study investigated sustainability in general, but also in the food industry to establish the current trends and gaps in the knowledge of it.

After the research gap was established through the literature review, the study moves into the methodology section. In that section the research paradigm, methods, and design are
presented to the reader. Methodology is important, because it explains to the reader the skeleton of the study, and the subsequent analysis and discussion. The findings and discussion are based on the qualitative interviews that were collected. This process allowed me as a researcher to gain insight into the family farm's influence on the sustainability in Croatia.

Literature review

In this chapter of the study the relevant literature on the topic will be examined and critically reflected on to be able to determine the gaps present in this field. The literature will be used to determine what themes are present when investigating ‘How can family farms influence the sustainability of the food industry in Croatia?’ . To be able to fully understand the topics pertaining to this question, concepts and phenomena such as Sustainability, Sustainability in the food industry, Supply chain and Covid-19 will be discussed.

Sustainability

Sustainability as a concept has garnered a large attention in today's world, partly due to the large problems that are present in the world surrounding climate, social and economic areas. These problems can be attributed to the overconsumption and overuse of natural resources. This concept has been brought to the mainstream stage with the release of the Brundtland Report in 1987 (Brundtland, G.,1987). In the report the discussion on the future of sustainable development was started and was defined as ‘Meeting the needs of the present without compromising the ability of future generations to meet their own needs’. (Pirages, 1994). This would be defined as the classic definition of sustainability. At a basic level of a dictionary definition sustainable means ‘able to be used without being completely used up or destroyed (Merriem-Webster,2022). After this came the Rio conference in 1992, assembled by the United Nations, that was meant to bring sustainable development ideals to the key issues in the environment such as climate change, biodiversity and desertification. However, for organizations that have tried adopting sustainable development post this it was difficult to go
from theory to practice, to gain real results. (Scoones, 2007) The issue with sustainability one could argue is the number of interpretations and definitions that are out there. Other authors such as Thomas Gieryn (1999) have called sustainability as a ‘boundary term’, which is one where science meets politics and vice versa. According to Santillo (2007) there are around 300 definitions of sustainability and/or sustainable development. Without a clear understanding, sustainability becomes even more complex and ambiguous for organizations and people to understand. This is partly what happened after the Rio conference despite its ambition for change.

The conceptualisation of sustainability in the diagram that is most associated with it can be accredited to Barbier (1987). According to Barbier (1987) the process of sustainable development needs to be seen as an interrelationship between the three pillars: the biological, economic, and the social pillar. The goals for the biological pillar would be genetic diversity, resilience and biological productivity. The social pillar requires cultural diversity, institutional sustainability, social justice and participation. Lastly, the economic pillar requires satisfying basic needs (reducing poverty), equity enhancing and increasing useful goods and services.

Below we can see in the figure the visual representation of Barbier’s (1987) concept of sustainable development. From the figure we can see that sustainable development, unlike the other two forms of economics, is trying to maximize the goals of all three dimensions. This entails compromise between the three pillars, because not all the goals from all the three pillars are able to be fulfilled at the same time.
Hancock (1993) adds on to this conceptualisation, adding that there needs to be a shift from basic economic development to a “‘system of economic activity that enhances human development while being environmentally and socially sustainable’” (p.43). The economy as such should serve the environment and community. Altieri for example has discussed sustainability in terms of agriculture and concludes that “The requirements to develop sustainable agriculture clearly are not just biological or technical, but also social, economic, and political, and illustrate the requirements needed to create a sustainable society” (Altieri 1987, p.199).

Goodland and Daly (1996) in their paper *Environmental sustainability: universal and non-negotiable* define ‘environmental sustainability’ from social and economic sustainability. They do that by taking a systems-based approach to the environmental pillar, defining it in terms of input–output rule. This means to keep waste within what the environment can take, to harvest at the rate that resources can endure and substitute non-renewable resources with the rate at which renewables are developing. Additionally they are skeptical of ‘sustainability’ becoming a “‘landfill dump for everyone’s environmental and social wishlists’” (Goodland and Daly, 1996,p.1002). Other supporters of the systemic view on sustainability are Dunphy and Griffiths (1998) who have argued that the issues that are connected to the environmental pillar ‘largely arise from our failure to see our relationship with the environment as critical to our future survival and to view that relationship in systemic
terms. In taking the natural environment for granted, we assume it has a resilience that will absorb or intensify impact forever. (p.180-1)

Sustainability had a revival with the late 1990s and early 20000s, with controversies surrounding genetically modified crops, which started mainly in Europe, but had spread internationally. This resulted in the debate surrounding the sustainability of our farming systems, the future of food and its diversity, how food affects our health and ultimately the control that corporations have over the agri-food system (GEC Programme, 1999). With the climate change and risks that are carried by change in biodiversity, environments or the emergence of diseases, sustainability has a clear opportunity to be highlighted in policies and global agendas (Scoones, 2007).

When it comes to the interplay of sustainability and how it is connected to firms, a number of theories link them to one another. According to the paper by Changa et al. (2017) the main theories that have emerged are 1) Corporate Social Responsibility (CSR) 2) Stakeholder Theory 3) Corporate Sustainability and 4) Green Economics. To be able to contemplate future ventures that will happen in firms and their sustainability one must firstly understand how and are any of the theories interconnected. The way that we know CSR today is a lot different than what it was fifty or a hundred years ago. Today most firms have CSR mentioned in their reports or give back to the society, and it has become one of the essential parts of their goals as organizations.

Corporate Social Responsibility has been theorized by Howard Bowen in 1953 when he wrote *Social Responsibilities of the Businessman*, in which he mentions the obligations of the businessman to bridge the gap between economic and social goals, and let them compliment each other (Lee, 2008). This was further developed late in the 1970, when the Committee for Economic Development published a book that stressed the importance of society as a supporting structure of the firm, and that in long-term views the firms need to enhance the society not diminish it (Lee, 2008). Another perspective that was introduced in the 1970’s is the Stakeholder theory, this was done by Freeman (Linnenluecke, Griffiths, 2013) who argued that firms need to take into consideration non-traditional groups such as government,
environmentalist and that this would help manage the firms. We can argue that the main objective of the Stakeholder theory is to show that the firms are part of the social environment and should take into consideration their stakeholders as they have an influence on them.

Lozano (2012) defined Corporate Sustainability as “Corporate activities that proactively seek to contribute to sustainability equilibria, including the economic, environmental, and social dimensions of today, as well as their inter-relations within and throughout the time dimension while addressing the company’s system (including Operations and production, Management and strategy, Organizational systems, Procurement and marketing, and Assessment and communication); and its stakeholders”. The corporate context of sustainability has also emerged in part thanks to the release of the Brundtland report, and is today mostly initiated through the Triple Bottom Line (TBL). This concept was developed by Elkington (Linnenluecke, Griffiths, 2013) and the difference between this concept and the accounting concept known as ‘bottom line’ is the addition of social and environmental lines. This is coincidentally highlighted through the terms ‘people, planet, profit’ in order for firms to consider their long term decision making. While this concept has garnered attention from researchers, there are some that critique the TBL. Gray (2012) has argued that by simply measuring the firm's performance in these three areas, one cannot be certain that the firm is sustainable. Sustainability as such requires a holistic approach that takes into consideration the interplay of the three dimensions, not an individual approach to each dimension.

And lastly we have the Green economy that is more and more recognised in policy making, internationally and nationally. It brings to the forefront the notion that the environment and its conditions cannot be looked at separately from the economic growth (Changa et al., 2017). This is where policy making has a large role, as it can create a climate where investments for greener industries are more desirable than the ones harmful to the environment. But some authors such as Borel-saladin,Turok (2013) that have reviewed reports from leading global organizations suggest that the ‘green economy' represents mere ‘green-washing’ and not substantive change towards achieving sustainability’. In the comparison between Green Economics, Corporate Sustainability and Corporate Social Sustainability, the latter two do not put the focus on how to highlight sustainability in society (Changa et al., 2017).

Another concept that is promoted by the EU, government and companies is the circular economy. Korhonen, Honkasalo & Seppälä (2018) in their review of the concept suggest the
Circular economy is an economy constructed from societal production-consumption systems that maximizes the service produced from the linear nature-society-nature material and energy throughput flow. This is done by using cyclical materials flows, renewable energy sources and cascading-type energy flows. Successful circular economy contributes to all the three dimensions of sustainable development. Circular economy limits the throughput flow to a level that nature tolerates and utilizes ecosystem cycles in economic cycles by respecting their natural reproduction rates.” (p.39).

Circular economy is in stark contrast with the linear economy that we have today. It is in line with neoliberal capitalism which entails excessive and uncontrolled usage of natural resources, and using the resources through all economic processes, from production to disposal after use. As can be seen in the picture below we see that after completion of the use of goods within a linear economy, it usually remains residual in the shape of waste, such as packaging or worn-out goods such as old furniture, electrical appliances (figure 2).

Source: Phases of linear economy, Krišto, 2015, p.11

One of the main assumptions of a linear economy is that resources are abundant and available, and that they can be easily pumped and disposed of cheaply in the environment. (Drljača, 2015: 19) In search of new solutions to stimulate economic growth, the fact that there are significant constraints on the amount of resources, as well as the fact that environmental requirements are larger can no longer be ignored. According to Drljača (2015), the key assumption in the transformation of a linear into a circular economy is that the collected and recycled waste re-enter the production cycle as valuable raw material. A simple example of a circular economy, with which everyone is already familiar, is the use of glass, which is collected after use and then used as a raw material for production of other glass objects. This connection within the circular model is very important, if one of the elements
fails in the model the whole circle is negated. According to Braungart, McDonough (2002) the main point of the circular economy is to ultimately design things such as products, packaging and systems, with the notion that waste does not exist. They also stress that sustainability should be based on respecting diversity, in the biological and social pillar, and ultimately economic pillar, and realizing that sustainability is local.


Companies nowadays and with the emergence of theories mentioned above realise they cannot ignore sustainability as it is going to affect their competitiveness. Lubin, Etsy (2010) have characterized sustainability as a business megatrend and as such, can be partially predictable if previous megatrends such as globalization, rise of information society and the transition from hierarchical organizations to networks are analyzed. They have characterized it as a business megatrend because it created a shift in the way companies compete with each other. Additionally in their examination of previous megatrends they have found that companies who have managed to use them to become leaders have done that through the four principal stages of value creation. Firstly, we have the cutting of costs, risks and waste with delivery of value. Then they move to redesigning new products, processes or performance, meaning they do old things in new ways. Thirdly they try to integrate innovative approaches into their strategy and lastly, they use new business models to differentiate their value propositions to enhance the intangibles for competitive advantage. (Lubin, Etsy, 2010)
This model above is a byproduct of the companies using the sustainability trend to gain competitiveness, and due to that they will be placed in one of these four categories. Losers are companies that only put minimal effort such as reducing cost or risk, and due to that will have a hard time protecting their position in the market. An example of a company that would fall into that category would be Kodak, who didn’t foresee the impact digital technology would have on their market (Mui, 2012). Defenders are the companies that are taking a protective position, but this can heavily depend on the industry they are in. If other companies in the market are moving as slow, you will be able to uphold your position. Dreamers on the other end take too fast and big of a bite in the megatrend rise. Their execution is not in line with their want and ambition, which can result in failure. Winners are companies that are able to come out as a leader in the new market position by using sustainability to enhance their revenue. An example of this would be the company Clorox that with the acquisition of Burt’s Bees was able to create positive change in their value chain, R&D, sourcing and waste management. And possibly where they learned the most from the acquisition is in their supply chain management, as Burt’s Bees was one of the few companies that had maintained their sustainable supply chain regardless of their growth (Westaway, 2013).
In a survey done by MIT Sloan Management Review in partnership with the Boston Global Group (2012) around 4000 managers and executives were questioned on their views on sustainability and what companies that are profiting from sustainability are doing differently. They have found that most companies are struggling to define in what way sustainability is relevant to their business, however, about 31% of the companies surveyed claim they have managed to profit from sustainable business practices. The most important takeaway is that organizations that they refer to as harvesters differ on four points. Their organizational support, operations, collaboration and willingness to change the business model in a sustainable way. (Kiron et al., 2012)

**Sustainability in the food industry**

According to research the population of the globe is going to increase to a whopping 10 billion by 2050, which will consequently increase the need for food for more than 60% of what it is today (Consultative Group on International Agricultural Research [CGIAR] 2014). The book *The 10 Principles of Food Industry Sustainability* (Baldwin, 2015) fills the gap and need of providing a practical view of how to bring environmental and social considerations into the supply chain through business actors. In many cases the actions are more heavily weighted to companies further down the supply chain, such as manufacturers and retailers, but there are roles for each stage of the supply chain. In the figure below from the above-mentioned book we can see the framework that is meant to enhance the food sustainability of the world (Figure 5). This framework is based on the 10 principles that they discussed in the book to identify what are the key sustainability needs across the supply chain, and to transit from a system that depletes to a system that improves the industry. The principles are the following:

1. Safe and highly nutritious food is accessible and affordable to promote and support a healthy population.
2. Agricultural production beneficially contributes to the environment while efficiently using natural resources and maintaining a healthy climate, land, water, and biodiversity.
3. Use of animals, fish, and seafood in the food supply optimizes their well-being and adds to environmental health.
4. Producer equity and rural economy and development are strengthened with fair and responsible production and sourcing.

5. Safe and suitable working conditions are provided to support employees across the supply chain.

6. Food and ingredient processing generates resources and requires minimal additional inputs and outputs.

7. Packaging effectively protects food and supports the environment without damage and waste.

8. Food and ingredient waste and loss are prevented across the supply chain and what cannot be avoided is put to a positive use.

9. Food and ingredients are efficiently delivered across the supply chain and to the consumer.

10. The supply chain and consumers advance sustainable business and food consumption. (Baldwin, 2015, p.1)

These principles are made with the vision to explore practices and innovations that will move from just a need for just a sustainable food chain that feeds the population but one that benefits the three pillars. A large role in the food industry is not just played by the companies but also the consumers. The Shelton Group (2012) has found out that in the United States, approximately 70% of consumers are seeking out more sustainable products. The consumer's behavior and their diets are contributing to the move to a sustainable food system. What also
needs to be addressed is the consumption of food. According to the CBC (2013) the industrialized countries are consuming more calories than needed, which is in turn putting a higher demand on the food system. We as consumers today are used to getting any grocery we want and overbuying produce contrary to our needs. This reflects the phrase which could describe our economy and consumption, as “more is more”. To put this overconsumption into numbers Coley et al. (2014) have calculated that an average consumer takes 122 trips to the grocery store a year, this adds to 580km of driving for grocery per year per person. What could reduce this impact of delivering goods through online food orders to consumer’s homes which will be gentler for the environment, since it won’t require that many trips to the store. The mechanism for reaching the potential of sustainability for the farmers and people involved in the agribusiness requires collaboration across the supply chain, applying best practices possible and educating and connecting the consumer with the value of sustainable production and supply chain. However, it is not only them that need to take action for a sustainable food chain, but all members along the supply chain. (DEFRA, 2013) When it comes to farmers an important question to ask is about the system and their importance in it, how likely is it that there will always be a presence in the chain and at what capacity. Additionally, it is harder for farmers or consumers who are part of societies that are not committed to sustainability, therefore their individual effort is not enough to make a lasting difference. (Thompson, 2007) For companies the 10 principles could lead to cost savings, reduced risks, growth opportunities, and improved employee satisfaction and productivity. However, to be able to reach true advancement towards sustainability one cannot simply accomplish just one principle but focus on all of them combined. The ten principles can help companies plan agendas and long-term goals, but it is important to note that they still need to fulfill the last principle of being a sustainable business and that is economically viable. Not only could they plan long-term agendas, but could also use them as benchmarking tools to assess where on their path to sustainability they are. (Baldwin, 2015)

There are also a number of indicators in the literature that have tried to explain sustainability in agriculture and the food industry through the three pillars of sustainability. According to Latruffe et al. (2016) the environmental pillar has had the biggest explosion of indicators and a large area of themes covered within it in the literature. Bockstaller et al. (2008) claims that this is due to the large concern for environmental issues and sustainability as such. Economic and social indicators have been less focused on, with the latter proving to be the most challenging as it is often qualitative and hard to measure (Latruffe et al., 2016).
With sustainability in the food industry, measuring tools have come into play in tracking it. Caradonna (2014) summarizes these measuring tools into a table that explains what they are and their history. The important ones for the food sector are the certifications of ‘green’ products that have grown, also known as Ecolabels. They are a clear way to send a message to consumers on the origin and sustainability of the products. The ecolabels that are mentioned are Ecolabel: Ecologo, Ecolabel: Certified Organic, Ecolabel: Fair trade, Ecolabel: Food Miles, Ecolabel: Forest Stewardship Council and Ecolabel: Marine Stewardship Council and Ocean Wise. Additionally he mentions that ‘... the advent of ecolabeling (organics, EcoLogo, Fair Trade, and so on) reflects the Manichean approach to consumption that divides our society—a desire for green products and sustainable consumption, on the one hand, and the inertia of destructive consumption patterns, on the other. Awareness about food miles can change consumer behavior. Organic and “conventional” foods often sit side by side in the grocery market, forcing consumers to make stark choices between opposing agricultural systems.

With fair trade’s challenge to “free trade,” economic ideology seems to hang in the balance.’(Caradonna, 2014, p.190) In his paper on Sustainability in the food sector, Grunert (2011) discusses the six barriers that may prevent the labels to affect consumers in making the sustainable choice and consequently reward the sustainable choice in the market. The barriers largely point to a lack of clear communication from the labeling of eco products, and the need for clearer communication of sustainability to the consumer. However, he also points out that the consumer doesn’t want to offset the sustainable choice for other criteria in food choice, such as taste, convenience, healthiness and price.

Thompson (2007) points out a view of viewing our society as a system that is composed of many subsystems in terms of food production. Therefore, if we look at farmers and their rural or local communities as a subsystem, and their output is not profitable, that could put the entire sustainability of the system under threat. Another thing that is a risk for the stability of the subsystems (social, financial and renewable) is the current way of industrial agriculture. Some researchers have investigated how socio-economic or environmental variables affect the profitability of family farms or farmers. Piedra-Muñoz et al. (2016) have tested out different socio-economic and environmental variables and their relationship with profitability. They have found that profitability increases with the younger, higher educated and fewer family farmers, farmers who focus on organic production, with certificates and efficient marketing cooperatives. In their words, ‘... By blocks, the socio-economic variables explain 60% of
profitability and the environmental-innovation variables 40%. Therefore, these factors related to new environmental practices are a pivotal dimension of sustainability for improving farm profitability (Piedra-Muñoz et al., 2016,p.8).

The way that the European Union (EU) has tried to offset the issues farmers face is with the Common Agricultural Policy (CAP). The policy was put in place with a very large budget, due to the declining farm income, and to counter the price falls of the current overproduction (Webster, 1997). According to the new CAP for the period of 2023-2027 it claims to ‘‘It will seek to ensure a sustainable future for European farmers, provide more targeted support to smaller farms, and allow greater flexibility for EU countries to adapt measures to local conditions.’’ (European Commission, The new CAP, 2022) The policy will be focused on 9 key objectives that are focused on the three pillars of sustainability, economic, environmental and social. The objectives are the following: ensuring fair income to farmers; increasing competitiveness; rebalancing the power in the food chain; climate change action; environmental care; preserving landscapes and biodiversity; supporting generational renewal; vibrant rural areas; and protecting food and health quality (European commission, Key objectives, 2022). Each of these objectives are then further tailored to fit the narrative of the country where it will be applied. Another agenda that concerns sustainability in the food industry, is the 2030 Agenda for Sustainable Development that was composed by the United Nations in 2015 and that has 17 Sustainable Development Goals (SDGs) within it. It represents a call for action by developing and developed countries in a global partnership (United Nations, 2022). The specific goals that are centered about the food system are SDG 2, which is Zero Hunger, that calls for ending hunger, improving food security and promoting sustainable agriculture. The SDG 12 which calls to action for ensuring sustainable consumption and production patterns (United Nations, 2022).

On the other side of the food industry we have the large food retailers present in the market. They have also seen sustainability become a business issue for them. Claro et al. (2013) in their investigation of the drivers for sustainability for food retailers tested which drivers are present and how that affects their investment in sustainability. Since they are in direct contact with the end consumer and their large economic presence they could play a key role in sustainability. The drivers for retailers that had a correlation with their investments for sustainability are customers and communication with suppliers, but no correlation with external drivers such as economic instability or competition was found (Claro et al., 2013).
This could mean that retailers as such don’t share as much pressure from policies put in place, but it is rather customers who force their hand into sustainable practices. Grunert (2011) also states that retailers influence the range of products consumers can choose from, and from there inadvertently influence their choice of sustainable vs. conventional products.

**Family farms**

In recent years family farming has been in the spotlight in sustainable, political, food and rural discussions. In 2014 the United Nations named that year the “International Year Of Family Farming”. However, family farming isn’t a new concept; it has slowly been developing over decades if not centuries. Regardless of that, a singular definition of family farming does not exist (Niedermayr et al. 2015), partly due to the family farming manifesting itself in different shapes and sizes, and depending on their social, economic, cultural and natural situation (Garner, de la O Campos 2014). Family farming is under threat of industrial farming and as such should be protected “Because of their ecological and cultural significance and their wealth and breadth of accumulated knowledge and experience in the management and use of resources that these [traditional] systems represent, it is imperative that they be considered globally significant resources to be protected and conserved, as well as allowed to evolve.” (Koohafkan and Altieri, 2011,p. 15). Due to the a lack of a clear definition, Garner, de la O Campos (2014) in their paper suggests the following definition:

“Family Farming (also Family Agriculture) is a means of organizing agricultural, forestry, fisheries, pastoral and aquaculture production which is managed and operated by a family and predominantly reliant on family labor, both women’s and men’s. The family and the farm are linked, coevolve and combine economic, environmental, reproductive, social and cultural functions.” (p.17).

Some authors have viewed family labor on family farms as a negative reflection of their inability to hire paid labour for their production. (Angemi, 2002) Additionally, Niedermayr et al. (2015) define the concept of family farming on these criteria: labour force; type of tenure; decision-making; employment basis and family unit.
According to the EU Rural Review family farming (2013) has been a focus of the European Union, due to its significance to the agricultural sector. They also state that: ‘‘Regardless of the farm size, output or production methods used, family farming clearly exhibits certain distinct characteristics related to location, needs and priorities, and historical and cultural farming circumstances that should be maintained and promoted.’’(p. 2). The main challenges family farming is facing in terms of management, which are the need for innovation and modernisation, the provision of environmental services, the succession of the farm, developing economic flexibility via farm-centered diversification and pluriactivity. The European Union is trying to cater to the needs and highlight the different types of family farms, because of the citizens' demand for safety, quality, value, origin and diversity of food. 

According to Suess-Reyes, & Fuetsch, E. (2016) family farms have to adapt with innovative strategies in order to survive the rapidly changing environment they face. The most common way that the literature finds family farms can innovate is through diversification of products and service. In line with that Vik and McElwee (2011) have separated diversification into 6 different groups: 1) on farm and farm related only 2) off farm and farm related only 3) touristic 4) social and green farming 5) off farm and farm diverse and 6) portfolio diversification (more than one activity). There are some farms that choose to not diversify, but rather find an off farm income in order to avoid risks that are present due to environmental changes and price changes, however this can actually backfire and reduce the option of the farms survival in the long run (Barbieri et al., 2008). It seems that the success of the farm also depends on its openness to creating networks and learning from them, and are more likely to pursue diversification strategies (Suess-Reyes, & Fuetsch, 2016). Diversification such as touristic activities is a way in which international guests can connect with the farmers, and try the produce while directly seeing where they are produced (EU Rural Review, 2013).

Different models of family farming have managed to persist through the many changes they faced, but today they are faced with the increase of IT, and the fear that bigger retailers can grab that advantage quicker (EU Rural Review, 2013). However, this risk could be offset by the new EAFRD Regulation which has measures for strengthening of smaller family farms which include: support for: training and advice (e.g. knowledge transfer, farm management), economic improvements (e.g. physical investments, business development), cooperation to overcome small-scale disadvantages (e.g. setting up producer groups, jointly developing short supply chains, new technologies), and compensation for environmental restrictions (e.g. voluntarily improved environmental or organic farming standards).’’(page 10)(reference from eafrd)
Family farms in Croatia

The biggest change for Croatia happened after gaining independence as the Republic of Croatia and the adoption of the Constitution on 21 December 1990. Political and social relations changed radically, as did economic relations. New goals and values have been set, such as entrepreneurial and market freedom, private property and new democratic standards (Constitution of the Republic of Croatia, OG 85/2010). The goals were able to be fulfilled when all able-bodied members of the household were enabled to work on the family property and at the same time earn a decent income from that (Tratnik, 2007). The traditional form of peasant farms has existed in Croatia for a long time, but in the past thirty years change has happened due to the different factors. Gradually a modern agricultural economy is developed, capable of market competition and to some extent adapted to the European market. The emergence of family farms in Croatia is linked to the process of the abolition of feudalism in the mid-19th century. (Župančić. 2005)

According to the Family Farming Act (OG 29/2018) a family farm is the basis for the organization of agriculture in the Republic of Croatia providing a great contribution to the economy by ensuring the sustainable use of natural resources and preserving tradition, culture and identity. Family farming is more than just a business, they are a way of life. In article 4 of the Act of Family Farming it is also stated that the goals of sustainable development of family farms in Croatia is achieving food safety and conserving natural resources while increasing competitiveness of family farms and strengthening social, economic and environmental role of family farms.

According to the Ministry of Agriculture (2022) official page, ‘’family farm is defined as organizational form of economic entity of a farmer who independently and permanently performs agricultural activity and related ancillary activities in order to generate income, and is based on the use of own and / or leased production resources and work, knowledge and skills of family members’’. This means that a person does not necessarily need to own land, but can rent and grow agricultural products on it. If the family farm has a monetary value higher than 3000 euros, then they are subject to taxation and have to be registered in the Register of Family Farms (Ministry of agriculture, 2022). Family farms in the EU cover 69%
of agricultural land with an average area of 10 hectares, compared to corporate farms which are 15 times larger (150 hectares) (EU rural review, 2017). Therefore, family farms are usually perceived as small or micro companies. In Croatia 99% of agricultural holdings are family farms that cultivate 83.8% of the area. Agricultural policy, however, is aimed at those 1% of large business entities, which is most evident in the system of incentives where large business entities collect as much as 40% of total funds. The state does not control the agricultural market and import competition completely destroys domestic agricultural production and destroys family farms (Gospodarski list, 2014). Family farms are key to global food security and the conservation of natural resources. Family farms are important to Croatia because, they have a positive impact on overall food security; preserve agricultural biodiversity and sustainability of natural resources; preserve the rural area, strengthen the local economy, and employ people. (Horvat, 2014)

According to Franić et al. (2009) there was a fear of what entering the European Union was going to mean for the family farms in Croatia. In their research they have found that the advantages farmers mentioned of joining the Union: (1) more orderly business, ie compliance with business standards, contracts, better collection, etc., (2) market opening, i.e. more favorable opportunities for agricultural inputs and better marketing of their products and (3) success for larger economies and younger farmers (p.170). In 2021 according to the numbers collected by the Paying Agency for Agriculture, Fisheries and Rural Development (PAAFRD) (2021), there are 4,781 registered family farms in Croatia in the City of Zagreb, out of which 1875 are owned by females and 2906 are male owned family farms. Croatia also has a long tradition of Farming Cooperatives in Agriculture. The law on Cooperatives, that was published in 1995, states that “A cooperative is a voluntary, open, independent and autonomous society managed by its members, and through its work and other activities or use of its services, based on community and mutual assistance, achieve, promote and protect their individual and joint economic, economic, social, educational, cultural and other needs and interests and achieve the goals for which the cooperative was founded.’’(NN 34/2011).

According to (PAAFRD) in the year 2021 there were 12 registered farming cooperatives in Grad Zagreb. According to Tratnik et al. (2007) today the cooperatives are so small and scattered that they simply cannot integrate in the market and compete with retail companies. On the other hand, cooperatives could bring benefits and those are that Croatia already has a history of Cooperatives and it can bring upon entrepreneurial initiatives that smaller and less competitive farms could not achieve on their own (Tratnik et al., 2007). Another part of
family farming as it is stated in the Act (OG 29/2018) is the different ancillary activities the farms are allowed to perform, which include:
- production of agricultural and food products,
- production of non-food products and items of general use,
- provision of catering, tourist and other services,
- providing other content and activities

A family farm is allowed to perform more than one additional activity, as long as they register it and have the equipment for it. One of the most interesting additional activities is definitely tourist and other services as can be seen in a review of wine family farmers in Istria. Ilak and Težak (2011) have found that wine is an important agricultural product for a number of family farms. However, wine is also important in destination management of Istra, as more and more tourists orient themselves according to quality wines, and producers make wine based on tourist preference. This additional activity is not only a great way to boost sales, but also create a direct sales channel and lasting relationship with a consumer.

Supply chain

Although it would be logical that the origin of the term supply chain comes from the industrial and manufacturing environment, historical sources first mention it in military terms. In 1905, The Independent published an article in which the term "Supply Chain", described a war situation (Knego et al., 2013). The Supply Chain Management (SCM) model emerged in the 1980s in the United States as a result of the use of computers in business and networking (Segetlija et al., 2011). Very often the term supply chain is viewed as just logistics, nevertheless logistics is just one part of the supply chain (Horvat i Nedović Čabarkapa, 2008, str. 15.). Supply chain involves the efficient and effective integration of suppliers, manufacturers, warehouses, stores and carriers into a single flow in order to produce and distribute the product in the right quantity at the right location at the right time (Dunković, 2015). As mentioned above, there are several actors present in the supply chain, such as manufacturers/ producers, retailers, distributors and various service providers to ensure availability for consumers. In some cases the dominance of the retailers in
the supply chain due to their size, puts the producers in a position where they are forced to compete with each other and thus lowering the sales prices of their products (Lovreta, Stojković, 2012). Traditional supply chains consist of five parts: raw materials, industry, distribution, consumer and waste. Each of the parts, ie. links in the supply chain can be a reason for pollution, waste, and other environmental hazards. Due to this many companies nowadays are turning towards an environmentally sounder supply chain, the Green Supply Chain Management. Green Supply Chain (GSCM) is a process that involves the long-term connection of customers and suppliers with the adopted environmental criteria (Santiago et al., 2004). There are three approaches to the green supply chain: environment, strategy and logistics (Figure below). Working with the green supply chain means focusing on the environment, which is the main task of this strategy due to the approach to the use of materials, distribution, and storage.

Source: Santiago et al, 2004, Approaches of Green Supply Chain

These types of greening initiatives of the supply chain can provide benefits on an individual, as well as national level. Gilbert (2011) points out that Green Supply for individual firms can bring benefits of lower costs, greener products and better integration with suppliers, while on a national level can bring forth new markets for greener products or possibly stimulate small and medium sized enterprises to adopt better environmental practices. The United Nations has also mentioned the supply chain in their Sustainable goals, precisely number 12, subsection 12.3 which states: “By 2030, halve per capita global food waste at the retail and consumer
levels and reduce food losses along production and supply chains, including post-harvest losses” (United Nations, 2022). When it comes to the food industry and ‘‘greening of supply chains’’ it is believed that short supply chains (SSC) are a suitable way to trade products while maintaining sustainability and efficiency (Aiello et al., 2017). Short Food Supply Chains (SFFC) were conceptualized by Marsden et al. (2000) who claimed there to be three types of SFFCs, face-to-face, proximate, and spatially extended. The first one refers to direct sales between producer and consumer, the second to a FFSC where there are a few intermediaries, but it is locally produced and consumed, and lastly, proximate where there are a few intermediaries, you know the origin of the product and it can include export. The European Commission (2013) has adopted a definition of an SFFC as ‘‘a supply chain involving a limited number of economic operators, committed to co-operation, local economic development, and close geographical and social relations between producers, processors and consumers’’. Therefore, a short supply chain has to be spatially close and socially beneficial.

There are certain ways to measure sustainability in supply chains, indicators such as : Life-Cycle Accounting, carbon accounting, etc…, it is still quite difficult because they still cover only a small part of sustainability (Brunori et al., 2016). Some studies have found that SCCs are mostly used by small farms, and they are motivated to use them to increase their independence from retail, selling their products at a better price and selling directly to consumers (Chiffoleau, 2016). Short supply chains are also beneficial for the consumer because they become aware of where their food comes from, how it is produced and who produced it (Zhang et al., 2019). In their review of the SCC on Circular economy and Sustainability, Kiss, Ruszkai and Takács-György (2019) have found that ‘‘… supply chains generally can be brought into connection with sustainable production and consumption by the aspects of health, well-being, community, producers and consumer behavior, reduced waste and pollutant emission. Furthermore, the organization and efficiency of short chains can be fundamentally affected by governmental support or regulatory policies. According to the Strategy for Sustainable Development of the Republic of Croatia, one of the key areas in which long-term action is planned is promoting sustainable production and consumption, as well as protecting the environment and natural resources (NN, 2009). When it comes to market initiatives SCC have a wide variety, from on-farm direct sales, Community Supported Agriculture (CSA), farmer’s market, farmers shops, direct farmer-retailer, restaurant procurement schemes and finally digital platforms with farmers products (Chiffoleau, Dorian, 2020). Short supply chains are seen as a river of transition to sustainability in the food and
agricultural industry. In their research on the different market initiatives in Slovakia’s dairy industry, Horská et al. (2020) found that the most used one is where they sell directly to the consumer, and where they have a chance to build a relationship of trust.

**Sales channels**

In the previous sections we have discussed the economic pillar of sustainability, and its importance in capturing the holistic view of it. In order for organizations to capture that pillar, they have to sell their products and/or services. Sales channels and their strategy play a part in that, therefore they will be reviewed here.

Sales as a business function is a fundamental element of any profit-oriented organization and is most exposed to the market, and profitability and competitiveness of family farms depend on the choice of sales channel (Previšić and Ozretić Došen, 2004). Authors Panda and Sreekumar (2012) state that the choice of sales channel is influenced by institutional and technical factors. Sales channels can be direct and indirect, where a direct sales channel involves selling products to consumers without any intermediary, and is also called a zero-level channel (Panda and Sreekumar, 2012). In the case of an indirect sales channel, there is at least one intermediary between the manufacturer and the end customer, which is very common today because these intermediaries are trained and specialized in successful sales and distribution of products to the target market (Hånell et al., 2019). Their expertise and knowledge in sales and distribution makes it easier for the holder of the family farm to focus
on other, more important parts of the business in which he is specialized in (Hu and Shieh, 2015).

Figure 4 shows the different levels of sales channels according to Kotler and Keller (2007). Each sales channel chosen by the holder of the family farm contains a certain level of costs. Some of the costs may be employee labor costs. These include activities such as advertising, receiving orders, sales, packaging, delivery, and accounting (Kotler and Keller, 2007). Also, the choice of any sales channel includes the cost of transportation (own or someone else’s) and the cost of packaging and insurance of the product during its transport (Hu and Shieh, 2015).

A direct sales channel, or in other words a zero-level channel, means a case in which a family farm produces and sells a product directly to the end customer who uses that product for its personal consumption (Panda and Sreekumar, 2012).

The choice of any sales channel is influenced by a number of factors that may include the product category produced by the family, business strategy, goals, vision and mission, knowledge and expertise of the family holder or current market trends (Panda and Sreekumar, 2012).

Figure 5: Sales channel levels

Source: Kotler and Keller (2007)

Authors Vukić et al. (2020) state that the trend of digitalization has been present in the last few years, and defines digitalization as a change driven by the development, spread and growth of digital technologies that create, process and transmit information and knowledge. They also state that it is most often observed in the context of changing business models, creating new opportunities through the application of digital technologies and involves the
conversion of analog information into digital information. Authors Di Fatta, Patton and Viglia (2018) believe that technology is becoming increasingly important in people's lives and in the business of small, medium and large entrepreneurs, and that it enables more efficient production and sale of certain quantities at lower costs but with higher initial investment into certain resources. The Internet is widely recognized and accepted as an important element of effective sales and marketing and enables all entrepreneurs, whether small, medium or large, to operate globally and sell their products beyond their scope with reasonable costs and satisfactory profits (Di Fatta, Patton and Viglia, 2018). Demeterffy (2010) states that new circumstances require a long-term personalized relationship with the consumer based on constant interaction, while in the past entrepreneurs used only one-way communication to reach their target audience through TV, e-mail, Internet advertising and web pages where they did not ask for any feedback from them. In this case, the goal was to inform the target group about possible changes in business, new business processes or to acquaint them with the new range and price list (Brakus 2015). Over time, entrepreneurs have realized that they need to listen and receive feedback from their target audience to know how to create and offer adequate value to the customer. Today the key to successful business, in addition to one-way communication, is two-way Internet communication which gives them feedback on their target group, customer wishes and needs (Šimec, Milaković and Janeš, 2019). Today, two-way communication is most often achieved through social media, so in all activities, activity on social media is on the rise (Taimien and Karjaluoto, 2015).

Successful two-way communication can be achieved through a large number of world-famous social media such as forums, blogs, microblogs, social networks, online associations or social websites, and the constant creation of new social media extends this list (Demeterffy, 2010). Authors Cleave et al. (2017) believe that entrepreneurs through social media have a lower degree of control over communication. Every user of social media can publicly express their personal opinion, whether positive or negative, about a product or brand, and in some cases it may or may not be objective. Those opinions are usually only one side of the subjective story in which one part of the observer believes and spreads it further. This way of communicating about a product and ultimately about a company can have a very positive or negative impact on the business itself (Cleave et al, 2017). Positive comments will signal that the family business is operating successfully and should continue, and negative comments will help the holder of the family farm to think about what he could change and how to do it, and at very low cost allow him to understand the problems of his business (Lozančić, 2018). The target group present on the family's website on social media does not expect information on sales.
and business plans, but expects current information, offers and fast and efficient two-way communication with the person in charge of the family (Demeterffy, 2010). Recently, the sale of products on which some entrepreneurs base their business is taking place on social media, so Facebook also uses Facebook groups that unite people with common interests (Hansson, Wrangmo and Soilen, 2013). Šimec, Milaković and Janeš (2019) state that organizing an advertising campaign on Facebook is very simple and effective, and ultimately facilitated the operation of the farm and justified the time and money invested, while the authors Cleave et al. (2017) state that Twitter, Facebook and YouTube are the most popular for company brand development. They believe that users of these media can create their own story about the business, the idea and its origin, and they do this by publishing various videos, photos and text, which also means the most time invested in making it. They can also ask their target audience what they think about a particular product and get feedback very easily. All these elements and activities help with branding and create a certain perception of the company in the minds of consumers because the consumer notices that the company is transparent, happy to share its story and that its presentation on the Internet is really true (Cleave et al., 2017). Taiminen and Karjaluoto (2015) state that this way of communicating with the target group is considered a business strategy because it manages customer relationships and creates added value and perceives a responsible entrepreneur in the eyes of the customer, and ultimately indirectly influences the purchasing decisions of the consumer because the consumer will prefer to use the product from the manufacturer whose story he is familiar with.

Soegoto and Nugraha (2020) say that e-commerce is currently one of the technological advances in the world, and it includes all business processes and markets that are activated by using the Internet and websites. E-commerce, in addition to offering the entrepreneur global action, also offers elaborate systems organization, business and sales (Soegoto and Nugraha, 2020). Authors Tolstoy et al. (2021) believe that the e-commerce user interface is very logically organized and that e-commerce means a virtual warehouse where the entrepreneur can find out numerically how many products he has sold in a given time, and how many products are still in stock. Apart from entrepreneurs, e-commerce is also highly accepted by customers. He can see in real time if a certain product is available, and he can filter and rank products according to certain characteristics (according to price, name, etc.) in order to save time finding the product he needs (Tolstoy et al., 2021). Authors Isabirye et al. (2015) state that rural residents have limited knowledge related to information and communication technology and have a certain aversion to it, which is why there is a problem in accepting e-commerce as a sales channel for agricultural products in developing countries. According to
Isabirye et al. (2015) a higher level of education within the family farms helps to adapt their business to modern technology and facilitate the adoption of digitalization in business. The technology enables them lower transaction costs, specialized mediation services, easier access to customers in the local and wider area, faster receipt of orders and complaints, and ultimately higher final revenues and profits (Soegoto and Nugraha, 2020).

**Covid-19**

What we know today as Covid-19 pandemic, started out in late December 2019 in the town of Wuhan, Hubei Province, China. Already by January 30, 2020 the World Health Organization declared the outbreak as a Public Health Emergency of International Concern (Harapan et al. 2020). In the official records of the Croatian Institute of Public Health, the first case of a sick person in the Republic of Croatia appeared on 25 February 2020 (Croatian Institute of Public Health, 2020). In response to the crisis, the Government of the Republic of Croatia gradually adopted certain measures to protect the lives of citizens and the successful functioning of the economy, and these measures included restricting the movement of people, closing borders and restricting and closing certain businesses (Roška and Draganović, 2020). According to the Decision on the special mode of operation of farmers markets during the declared epidemic of the disease COVID-19 (NN / 2020), closed facilities were allowed to operate, but only those where entry and exit can be controlled. Also, work was allowed at so-called benches in physical markets, but only if the facility is closed or fenced (Decision on the special mode of operation of markets during the declared epidemic of the disease COVID-19, OG 43/2020). Measures adopted by the Government of the Republic of Croatia have forced society to adapt to the new situation, so that people's lives have become more digital than ever, and digital tools have partially overcome the physical limitations of human movement during the
measures and pandemic (Mozas-Moral et al., 2016). Authors Vukić et al. (2020) state that even before the crisis there was a significant increase in online shopping in all age groups, but food accounted for a smaller part of the consumer purchases, but with the crisis the situation changed significantly and online food shopping became an indispensable part of everyday activity in urban households. Authors Roška and Draganović (2020) state that the crisis caused by the SARS-CoV-2 virus has affected the whole world and has posed a great challenge to all institutions, international organizations, countries and entrepreneurs. They also state that it leaves deeper and deeper traces in both the private and business worlds, particularly in the domain of personal consumption of citizens. However, food is necessary for human survival so it cannot be simply put on lockdown. Galanakis (2020) has found that there are four major concerns that the food business and supply chain must overcome in the wake of the Covid-19 pandemic. Firstly, the need for healthier food options form consumers looking for better diets. Secondly, we have food safety as a means of limiting the transmission of the virus, which correlates with the third issue and that is food security since people were locked into their homes. Lastly, we have the need to look into the sustainability of the food sector which could prevent similar issues if another crisis presents itself.

For some family farms, measures to preserve citizens’ lives and the economy meant eliminating the major, and for some, the only, channel of their sales, meaning they lost their expected monthly income in a relatively short time while their products were stored in home warehouses. It was then that their adjustment to the market and reaction to the current situation came to the forefront (Vukić et al., 2020). Galanakis (2020) points this as an opportunity to use Industry 4.0 technology and practice to diminish the food waste and food loss. Some family farms sold their products using traditional sales channels such as SMS and telephone, while some turned to newer and more modern ways of selling through sales through certain applications and other opportunities on the Internet (Koch, Frommeyer and Schewe, 2020). In the research of Vukić et al. (2020) multiple research methods were used to find out how family farms adjusted their business during the pandemic. One method was to map the digitization of markets and support for this activity by local governments after the closure of physical markets, another was a survey conducted with a questionnaire as a research tool addressed to customers on Facebook groups, and the third method was interviews with family farm owners. As a conclusion of the research, it is stated that the digital way of selling and buying was suitable for family farms and customers due to
measures adopted by the Government of the Republic of Croatia and which were current at the time, but the popularity of digital ways of business is declining.

Every new situation, whether positive or negative for the entrepreneur, means the arrival of new opportunities and threats. Opportunities should be recognized and exploited by the entrepreneur, while the threat should be identified in time and its effect mitigated or eliminated completely (Gonan Božac, 2008). Authors Vukić et al. (2020) in their paper state that with the arrival of Covid-19, people have begun to pay more attention to their health. In addition, they turned to the consumption of healthier and home-grown foods. It can be concluded that this situation is an opportunity for family farms that sell local products such as home-grown fruits and vegetables, cheeses, meat and other products, and that in their advertising emphasize the quality and benefits of their products for human health.

As previously mentioned the adoption of the Decision on the special mode of operation of markets during the declared epidemic of the disease COVID-19 (OG 43/2020) allowed the operation of closed facilities within the physical market, but only those where you can easily control entry and exit. It can be concluded that the mentioned decision can represent an opportunity, but also a threat for some family farms. According to Hånell et al. (2019) by creating e-commerce, paying for ads and similar activities on the Internet, companies can reach a larger number of potential customers and can offer their products to customers who are spatially dislocated. This was not the case with selling in physical farmers markets, therefore it can present an opportunity for family farms whose sales have been restricted or temporarily banned in physical markets. At a time when physical markets were allowed to operate, some family farms were unfortunately still unable to sell their products through them due to new rules and measures that were prescribed and which sellers and buyers had to adhere to. The selling on benches in markets that are closed facilities or enclosed spaces and where the entry and exit from the market can be controlled was allowed, and included only sellers of fish, milk and dairy products and fruits and vegetables. (Decision on special mode of operation of markets during the declared epidemic of the disease COVID-19, NN 43/2020)

Since there was a limited distance the sellers and buyers had to adhere to, that limited the number of sellers allowed.

According to the authors Vukić et al. (2020) adaptation to the new situation consists of activities of two interest groups - producers and customers. Their self-organization through certain digital sales channels enabled them to fight the crisis and successfully solve the
problems that arose. Self-organization of producers and consumers included the use of traditional sales channels, the use of social media to connect each other (Facebook groups, pages and private profiles) and the sale of products through certain intermediaries (Vukić et al., 2020).

Social media offered producers to offer their products to the target group at very low or even no cost, and the costs arose in cases of advertising and promotion on social media, which was arbitrary, so only one part of producers opted for this activity (Lee and Cheung, 2004). Costs included the cost of product distribution, and intermediaries played a major role as they specialized in successful advertising, finding a customer, and other services necessary for Internet sales (Hansson, Wrangmo, & Soilen, 2013). Family groups on Facebook have also been organized, with the participation of both producers and consumers. Farmers could publish daily the products they offer, their price, the conditions under which they offer them and other important details. Conditions may include delivery that may be organized by the seller or buyer, payment methods, certain benefits such as quantity discounts or some other conditions and information related to the products offered (Vukić et al., 2020).

Conceptualisation

In the following section the conceptualisation of the study will be presented. Furthermore, an illustration of the conceptualisation will be presented and explained for a visual establishment of the study.
As previously stated, sustainability is a complex concept that requires a holistic approach. Due to this the term is difficult to measure and to implement for companies as well as policies. Out of the three pillars, the environmental pillar has received the largest number of interest, and subsequently the largest number of indicators. The European Union and United Nations have both put forth plans to move toward sustainability, and bring forth this concept as an answer to the current issues in the world. Food and its necessity for everybody is crucial, due to the increasing number of population, while there is a depletion of resources present. Consumers as well have highlighted this megatrend, due to their demand for healthier, nutritious and locally produced food. Sustainability has manifested itself in many aspects of operation, from how companies produce, package, sell and distribute their products or services. Family farms can be viewed as small or micro producers that have to become creative in order to stay competitive.

Source: Own creation

The figure above attempts to show this study’s conceptualisation map. As we can see, the three circles are presented in a loop, to signify a system approach that is needed to understand sustainability. Another reason is that the literature points out that sustainability is not an end goal, but a continual path. The sustainability circle is linked to the family farms circle, since the literature review points to family farms as a method of food production that could be sustainable in the long-term. However, we do not know what the family farms view on the topic therefore, that is what the study should investigate.

When investigating the current literature it became evident that there is limited knowledge on the context of the study, Croatia. That sparked a curiosity whether family farms in Croatia can emerge as representatives of sustainability, and how. Therefore Croatia is placed on the right
side of the loop and connected to family farms. However, it is found important to investigate in which ways family farms, in the context of Croatia and sustainability, have influenced or been influenced by the middle three components. This includes the supply chain, the sales channels and ultimately the Covid-19 pandemic. This conceptualisation presents a view of the different themes and their interactions found in the literature review.

**Research gap**

The literature review provides clarity on the research gap and where additional knowledge is needed. Sustainability is not a new concept, however, it has experienced an additional focus in politics and among researchers. The literature review provides an overview on themes such as sustainability, its relation to the food industry, family farms and its operations. However, sustainability has not been thoroughly investigated in the Croatian context in existing literature. Family farms are present in Croatia, but there needs to be an understanding of the circumstances they exist in and their role in sustainability. Furthermore, it is important to know the challenges they encountered due to the Covid-19 pandemic and the orientation to sustainability. This is necessary to investigate for understanding of their importance. It is of further relevance to see what is their view on the focus of certain policies on sustainability and how they have affected them. This would show the real picture of the connection between policy and reality. The context of this study, Croatia, is also important to study since there is a clear lack of relevant literature on the role family farms play in sustainability. This gap leads me to the following research question, and the additional sub questions.

**Research question**

How can family farms influence the sustainability of the food industry in Croatia?

In addition, I present the following sub questions:

a. Through which steps can they influence the sustainability of the food industry?
b. What challenges are present for family farms?

c. Can family farms internationalize?

d. How much has the Covid-19 pandemic affected family farms?

**Research purpose**

Sustainability and its pillars are present in many topics, industries, and policies that are connected to our everyday lives. Food is a fundamental thing all of us need and in order for other generations to be able to prosper we need a sustainable way of producing it and supplying it. Family farms have also been present in the food industry, and when connecting sustainability with the food industry it presents a disruption on the way we produce and supply our food.

With the magnitude of changes that the Covid-19 pandemic has brought upon the food industry and the supply and availability of food, it is important to ask questions to understand how we can better its sustainability. It is due to this that I ask the question of how family farms influence sustainability. With this study, I can contribute to the academia and policies on the questions surrounding family farms, but also provide information for other family farmers on how to turn towards sustainability or the challenges that arise. In order to accomplish this, the study will take a phenomenological paradigm, which will allow me as a researcher to understand the experience of each individual farmer through their operations and view of sustainability. The data for this study was gathered through 7 interviews, out of which 6 with family farmers and 1 with an expert on sustainability. The data that was extracted will be analyzed, and the findings will be discussed further in the study to meet the purpose of this study.

**Methodology**

The following section will present the underlying philosophical paradigm for the study, and reflect on the choice of research design, strategy and methods.
Paradigm

In this section, the underlying paradigm of the study will be presented. The paradigm chosen for this study is phenomenology, therefore the interpretation of it will be explained below.

The phenomenological paradigm was started by the German philosopher Edward Husserl at the beginning of the twentieth century. He is most commonly cited as the Father of phenomenology. In the following years, many other philosophers have built extensively on his work, such as Heidegger, Sartre, and Merleau-Ponty (Smith, 2018). Due to the extensive changes phenomenology has gone through it is important to show with what interpretation I as a researcher align with. Phenomenology is a portmanteau of the Greek words ‘Phainomenon’ and ‘logos’. The first word means ‘that which appears’, while the second refers to ‘study of’. From there one can conclude that phenomenology is the study of that which appears. According to Giorgi and Giorgi (2003) it is quite difficult to find a univocal interpretation of what phenomenology is. However, there is a general agreement between scholars that consciousness is crucial for phenomenology, as well as understanding subjective consciousness (Qutoshi, 2020).

Husserl found consciousness important and the condition for all experiences (Moran, 2000). The important thing that phenomenology claims about consciousness is that it is intentional, meaning that it is directed to things in the world. We experience things through concepts, images, and thoughts and they are distinct from the thing they refer to. Phenomenologists also want to know what the experience was like to live in, not just the human reaction to the experience (Munhall, 2007). Phenomenology encapsulates not only passive experience, such as hearing or seeing but active experience as well, such as walking or performing an activity. What is specific about the conscious experience is that we as humans get to live and perform them, unlike things that you can simply observe (Smith, 2018). For example, two people can live through the same experience, however, they will interpret it in entirely different ways, because they were partially shaped by their past experiences. Additionally, phenomenologists assert that people should be explored, because their previous and shared experiences can also be a reflection of the society they live in (Christensen, Brumfield, 2010).
There are several key terms I as a researcher have to mention in line with phenomenology. One of those is the *life-world*, which refers to the individual's combination of emotions, thoughts that they experience. In order to understand the individual and its views, we as researchers have to enter their world to gain an understanding of it (Christensen, Brumfield, 2010). Another term relevant for phenomenology is *epoche* or *bracketing*. This term refers to the need of the researcher to extract themselves from the phenomena they investigate, in order to capture its meaning. This means removing any biases and preconceived notions the researcher may have on the phenomena (Christensen, Brumfield, 2010). Only when a researcher puts aside its ideas of the phenomena can he see it through the eyes of someone who experienced it. Lastly, what is important in phenomenology is the *essence* of the phenomena, which means capturing what are the core elements that are associated with the phenomena in question. As previously stated, phenomenology looks for individual experiences of individuals, however, there are some commonalities that connect this experience. This commonality can be referred to as essence of the studied phenomena (Christensen, Brumfield, 2010). If we take an example of a baby being born, experiences will differ, but the common element will be joy and happiness from that occasion.

Phenomenological purpose is to study phenomena closely and to explore the world of the actors who have a lived in experience in the phenomena and by default their point of view (Qutoshi, 2020). Ultimately phenomenology allows researchers to understand phenomena at a level of subjective reality.

**Ontology**

The following section will give you an idea of the ontological stance and viewpoint that this research is taking. When one understands the ontological viewpoint it is easier to understand the methodological applications.

Ontology can be defined as the nature of reality. It is concerned with uncovering the nature of existence of the phenomenon we are investigating. We as researchers need to assert our position on how we view things really are and how things work, in order words *what is* (Scotland, 2012). Every paradigm is based upon different ontological and epistemological assumptions. Therefore, in line with the paradigm chosen, phenomenology, the ontological
and epistemological considerations were chosen accordingly. In other words the ontological
standpoint I take, is interpretivism which is aligned with the paradigm chosen and
subsequently the methods and methodology. Accordingly, the ontological position is that of
relativism, meaning that my view on the world is subjective. His work is closely related with
phenomenology due to the fact that consciousness is of importance, and that reality happens
when consciousness interacts with objects (Scotland, 2012). What is also in line with this
position is the notion that realities are as endless, as there are individuals who construct them.
This ontological position takes these realities into account by claiming that humans cannot be
explored in the same way as physical objects, since they provide a depth of meaning
(Alharhasheh, Pius, 2020). This provides a richness insight, which can be crucial when
investigating phenomena such as sustainability, that is complex and frequently misunderstood
(reference from lit review). Some authors argue that this position to reality can lead to a lack
of generalisation from research (Saunders et al., 2012) However, this approach can lead to a
in depth understanding of the phenomena, and conclusions that may differ with high validity
since they are based on personal experience of the individuals consciousness.

**Epistemology**

In this section the study’s chosen epistemological position will be explained.

While ontology refers to the nature of reality, epistemology refers to how reality is known by
the researcher (Alharahsheh, Pius, 2020). The word itself is made up of the word *episteme*,
coming from the Greek word which means knowledge and logy. In other words, epistemology
tries to uncover how do we know what we know, what constitutes knowledge for us as
researchers. The epistemological standpoint that this study is leaning towards is subjectivism.
Subjectivism is set on a belief that reality exists within a subject, and this subject imposes
meaning on a phenomena (Moon and Blackman, 2014). What we can a tree today is named
that by us, given meaning and attributes from our imposed meaning. In subjectivism there is a
belief that knowledge is “always filtered through the lenses of language, gender, social class,
race, and ethnicity” (Levers, 2013; Denzin & Lincoln, 2005, p. 21). Subjectivism doesn’t deny
that external reality exists, but that it is shaped by the person perceiving, there is no right or
wrong knowledge, just understanding. The subject and its consciousness, experience of the
phenomena is the key to understand the reality, since it doesn’t exist separately from the individual (Scotland, 2012). This is in line with the chosen paradigm, phenomenology and with the ontology of this study. This approach to epistemology also allows me as a researcher to stay open to new knowledge throughout the study, and understand and interpret it.

Research design and methods

Research design is important to point out to the reader, in order for him to understand the overall structure of the study. Furthermore, it highlights the thought process of the researcher, and gives clarity on the methods and tools used in the study.

The overall research approach of this study can be seen as an exploratory research. This type of research is used on topics that are not clearly defined, and are still evolving, which in this case is sustainability. This type of research approach allows me as a researcher a high level of flexibility, and adaptability to the new knowledge that can arise throughout this study (Questionpro, 2022). Exploratory study is beneficial because unlike conclusive design it allows for different causes and options to arise for the chosen problem (Dudovskiy, 2022). With the explorative approach this study aims to understand “How can family farms influence the sustainability of the food industry in Croatia”. The data that comes out of the topic of this study will provide, with the exploratory approach, an opportunity for other researchers to build further on it.

In line with the exploratory the study will be collecting primary data, which is beneficial when investigating an issue with little research behind it. The primary data will be collected through in-depth interviews to obtain the knowledge needed, and grasp a deeper understanding of the problem. The interviews themselves will be semi-structured which allows the respondents more freedom in expressing themselves, and potentially arriving at a side of the experience we as researchers would think of. The questions themselves will be based on the conceptualisation of this study, and follow the map that is adjacent to it. The literature review, that the conceptualisation is based on, has consequently provided the data needed to shape the questions. In addition to primary data, some secondary data will be used in the analysis to further enrich the data pool. Therefore the study will be based on the data
collected through the literature review, primary data from interviews and secondary data that is deemed satisfactory.

**Qualitative research**

In line with the paradigm and research design presented above, a qualitative research approach has been chosen. In phenomenological research the qualitative research is aligned because it allows to gain an exploratory capability for their study (Alase, 2017). This is necessary to be able to collect the data and analyse it to answer the given research question. The data in qualitative research allows for emotions, experiences, opinions and relationships to be revealed which is not the case with quantitative research (Dudovskiy, 2022). Qualitative research is often credited as “qualitative methods are often regarded as providing rich data about real life people and situations and being more able to make sense of behaviour and to understand behaviour within its wider context.”(Vaus, 2002,p.5). While the benefits of qualitative research is its rich data and in-depth understanding, as with any research there are some disadvantages. According to Albery and Munafo (2008) some of these disadvantages include poor internal reliability, weak decisiveness, and poor generalizability, and seems to easy (p.34). The poor internal reliability can be offset with a homogeneous sample, that holds the experience of the phenomena, therefore there will potentially be some correlation. In terms of the generalizability of the data, this type of data isn’t necessary meant for providing a general picture, since it is happening in a specific context, that is subjective. Therefore it may not be the most generalisable research but it provides’’ a meaningful picture without compromise to richness and dimensionality.’”(Leung, 2015, p.1). With qualitative research you are not measuring data, but trying to gain understanding to answer questions ‘’how, where, when, who and why’’.

**The interviews**

In line with a qualitative approach to this study, interviews have been chosen as the main collection method. Interviews is a research tool used in qualitative research which can be described as “conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program or situation.”(Boyce, Neale, 2006,p.3). Part of the reason on the choice of interviews is the detailed information they can
provide unlike survey, and flexibility. It also allows for a more relaxed approach, where respondents can open up more to the researcher unlike surveys (Boyce, Neale, 2006). The questions that were asked in the interview have come out of the literature review and the conceptualisation. This is not necessarily considered being influenced by the prior knowledge and preconceptions, but rather a guide on what questions to ask.

The conceptualisation is structured around the three spheres, sustainability, family farms and Croatia, therefore those were the main themes the questions revolved around. Additional questions have been asked about the three terms that were positioned in the circle between the three main spheres. With this semi-structured interviews were conducted on the participants that were selected. Semi-structured interviews were selected because they allow space for the experience and perception of the respondents to be explored, and allow me as a researcher to probe deeper into their experience and for clarification (Barriball et al., 1994). This gives the illusion of controlling the conversation to the participants. The questions were mostly open ended, with some such as the initial demographic question being closed-ended. Below the themes and question samples for each theme will be presented. Because of the limited time for the data collection, only in-depth interviews were conducted on 7 participants. With each interview questions were revised and improved if necessary, for clearer understanding. All the interviews were conducted one-on-one, through different mediums and in line with the epidemiological measures. Some interviews were conducted in physical meetings, but for some participants that wasn’t possible, Zoom or telephone interviews were conducted. The benefit of being a single researcher allowed me to create a comfortable atmosphere, and a conversation in which a person can freely express their opinion. It was important to constantly be actively listening to be able to ask for clarification and follow-up questions. The tool used in semi-structured interviews, probing is beneficial because it can be used for delving into sensitive topics, collecting complete information and helping the respondent in recalling answers for questions involving memory (Barriball et al., 1994).

The interview and its questions were previously tested on family, friends, and colleagues in order to review the question from another point of view. This can be considered as a pilot interview before the real data collection, and to establish an interview protocol (Boyce, Neale, 2006). Before the start of the interview, the participants were asked if they agree to the interview being recorded, this allows for a better transcription and to uncover segments.
initially overlooked. The set questions were the guide for the interviews, but if the conversation naturally led into a theme placed further in the interview, the question was skipped and returned to later. The interviews were conducted in Croatian, due to the context of the study and the limited knowledge of English among the respondents. This opens up the potential for losing some of the essence, however that was offset by making conversion decisions when translating the text. However, due to the report being written and submitted in English it was an essential part of the research method. According to Halai (2007) this is not a simple process, but with set rules on certain words and meanings it is possible. When translating interviews it is necessary to make sure that these three things are satisfied, the text makes sense, that it conveys the spirit of the original and has an easy form of expression (Halai, 2007).

The interviewees

This section will give a brief account of the participants in interviews, but their profiles will be presented in the analysis of research findings below. The number of respondents recommended for qualitative research varies, but there isn’t a recommended number, rather a range. According to Alase (2017), this range can go from 2 to 25 participants. What is important when selecting the participants is that there is homogeneity in their experience, meaning that they all went through the experience, and we can gain a deeper understanding (Alase, 2017). Since this study is investigating the sustainability of family farms and their manifestation in Croatia, it was important that the sample included owners of family farms that reside in Croatia. The demographics didn’t necessarily influence the choice of the sample, but rather their proximity to Zagreb, since it is the capital, and therefore a large market for family farms. To gain deeper understanding, family farms from different agricultural cultures were chosen. In order to find the respondents, online family farms sites were visited, as well as family markets and through word of mouth, where one respondent could recommend the next, this is sometimes referred to as snowball sampling. This has ensured a colorful array of family farm owners. In addition to family farms, an expert that runs an NGO specializing in sustainability and works with family farms was interviewed to gain his perspective and deeper understanding of the topic. And a family farm that has decided to discontinue their operation was also interviewed.
The transcription

This represents presenting an experience that was collected orally into written data that can be analyzed. In this study, the process of transcribing was done shortly after conducting the interview. This was done because the memory of the interview was still new, therefore the interviewees' words and experiences could be remembered as well as any comments or observations the researcher has (Christensen, Brumfield, 2010). Transcribing isn't necessarily an easy process, as it consists of a complex process in order to ensure that the essence of the experience is not lost. As a researcher, we must decide whether or not to omit certain words that don’t add to the essence of the phenomena, while simultaneously making sure that the emotion and feeling of the interview are kept for the reader.

The collected data

The qualitative data that was collected through the interviews will be used for analysis in the findings and the discussion of this study. The analysis will be based on the transcribed words and experiences of the respondents. As previously mentioned, this study will be based on the primary data collected through the interviews and compare them to the literature found in the review in order to complete the discussion.

In line with the chosen paradigm, there are several steps the researcher needs to take when it comes to data collection. Firstly there is the aforementioned bracketing, which helps the researcher to avoid bias and take his/hers preconceptions into the collected data. Additionally, it is important to not group experiences into a box, but rather create “meaningful units” that can be later transformed into themes. And with the emergence of themes and ultimately the essence of the experience (Christensen, Brumfield, 2010). Therefore this study will try to contain the essence of the 7 interviewees. This will be presented in the analysis in text, and direct quotations to present the data as intended, in accordance with the themes that might emerge. With the creation of meaningful units, we can see if there is some commonality.

Inductive approach
The study was initiated through the research question that was based on the literature and themes that emerged from it. By doing a literature review, the study was able to explore themes, such as sustainability and family farms, and from there form a conceptualisation and the gap that exists in the chosen field. In an inductive approach it is allowed for the researcher to use the existing theory to develop the questions it intends to ask (Dudovskiy, 2022). However, this approach aims at finding meaning from the data collection, in this case the interviews. Inductive reasoning is based on learning from experience, in my case the experience of family farms in sustainability in the context of Croatia. In order to ensure this the research was conducted through semi-structured interviews and through that collected qualitative data that provides the essence of experience, patterns and relationships. In other words, inductive reasoning often uses the “bottom up” approach which is beneficial when uncovering a phenomenon which hasn't been uncovered in depth. Therefore that reasoning was thought of as beneficial to this study.

Analysis of Research Findings

The analysis will be presented under the themes that were found during analysis of the findings. Each theme will try to present the understanding of the respondents' reality. The themes were developed from the meaningful units captured among the respondents. The interviews were carefully read through, and important points and quotes were used to capture the essence of the family farms and their influence in sustainability. The first part of the analysis consists of the respondents profiles, which is in line with the phenomenological paradigm, to try to capture the participant's unique characteristics to the reader (Christensen, Brumfield, 2010). While the second consists of the important findings from the interviews.

Respondents Profile

Interviewee one

The first person that was interviewed was part of an organization that is called ZMAG (Zelena Mreža Aktivističkih Grupa), or as it would be called in English, Green Network of Activist
Groups. He considers himself an activist for social change and a good economy activist. Today he coordinates the Centres for Knowledge and the European Network for Solidarity Economy. He teaches about sustainable development, and its practical applications. The Network was founded 20 years ago, while they were still students, and has since grown into a recycled estate that offers educational services, and brings together people who want to develop themselves in sustainable living. Their organization has been known as an incubator for the implementation of sustainability, therefore his perspective seemed interesting for me as a researcher. Their goal is to “develop and promote permaculture, ecological knowledge and skills, applicable models and technologies, important for sustainable living and improvement of the overall quality of life.” (ZMAG, 2022). He says that establishing this organization has actually enabled them the tool for achieving that goal. Some of their more notable projects include the one started six years ago, the Cooperative for Solidarity Short Supply Chains, as well as their Bank of Seed.

Interviewee two

The second interviewee is a family farm that is stationed, outside of Zagreb, that was founded in 1998. This family farm is under the name of the father of the family, who was born in 1971, and consists of a total of 8 family members that operate the farm. He has a degree in higher education and the farm operates in vegetable, fruit growing as well as farming, meaning producing crops such as wheat and corn. The size of the farm is 75 ha, which is quite large for family farm standards.

Interviewee three

The third interviewee is the youngest out of all respondents, he was born in 1992. He has a high school level of education, and operates the farm with his 4 family members. In addition to that, he employs 8 other seasonal workers, since his farming season lasts 280 days out of the year. The family farm was opened in 2012, and has been steadily growing since then. The activities the farm is involved in include fruit growing, viticulture, vegetable growing, production of wine, juices, and food for the winter. The size of the OPG is around 10 hectares of land for vegetables and fruit, and additional 3 ha for vineyards. The annual amount he produces is roughly around 140 tons of vegetables and fruits. This was his dream, and he quit
his stable job in the education department to start this business, he wanted to be an entrepreneur. At the start he had only about 2 ha of land, and further down the line he acquired more, and now his whole family moved there to run this business with him.

**Interviewee four**

This interviewee is the only that is involved in the production of raw materials, without growing it themselves. He is the owner of the family farm, and the operation was started in 1994, with wine. They are located in Jastrebarsko, which is located in Zagreb county. Subsequently in 2004 they moved from wine production to hard liqueur and brandy production. The farm is operated by his family of 4, which includes the two students that are his children. He holds a secondary professional qualification and was born in 1973, which puts him at 49 years old. Even though they don’t produce their raw material, they own 1 hectare of vineyards, which is usable for production, but isn’t enough for their demand. For their operations they have even won awards, as the champions in the liqueur category, for their Teranino liqueur in 2021.

**Interviewee five**

This interviewee is one of the two women with which an interview was conducted. She was born in 1956, which puts her in the category of over 65 years of age. The family farm was established in 1995, and currently has 5 family members, who operate and carry out activities on the farm. The farm is located in Kupinečki Kraljevec which is a settlement that is part of the city of Zagreb. She was and still is a housewife, she just has a basic level of education finished. The family farm is engaged in the activity of farming, meaning producing food for the animals, such as wheat, corn and other wheat. In addition to that they have a livestock production, they have cows from which they extract milk and make cheese. The family farm consists of 10 hectares and was owned entirely by the family from the beginning.

**Interviewee six**

This family farm is the second one, owned by a female. The farm is located in Pavlovčani, Jastrebarsko, which is part of Zagreb county. The owner was born in 1973, which today
makes her 49 years old, and she holds a university degree. Currently on the family farm 3 people that are family members are working. The family farm was established in 2007, and has a primary activity of viticulture. However, the wine business has been part of the family for around 200 hundred years. The family farm is sized at 20 hectares, making it the second largest farm among the respondents. They have a yearly production of around 50 tons of grapes, which is then produced into wine. As part of their farm in 2004 they have acquired an antique house that dates back to the 19th century, in which they offer different gastro experiences, and have a capacity of six double rooms.

**Interviewee seven**

The last interviewee is the only one that had a family farm opened, but has decided to close it. His experience was interesting due to that fact. He opened the family farm in 2012, after inheriting the land from his parents, along with his younger brother. He was born in 1959, and holds a high school diploma. He and his brother were the only two people that were physically working on the farm during its operations. The family farm was involved in fruit production, exclusively in blackberries. From that raw material they have then produced blackberry wine. The family farm is the smallest out of the respondents, at ⅓ of a hectare. The family farm was situated in Ivanić, which is part of Zagreb county, around 40 km from the capital. From their operation they were able to annually produce around 800 kilograms of blackberries. The family farm was closed in 2018, after 6 years of operations.

**Findings**

**Sustainability**

The first thing to point out from the findings is the fact that all the respondents had an opinion on sustainability. For interviewee one as an educator and a person who studies sustainability, he defined it as "sustainability means living within what is called the carrying capacity of our Eco-System or what is today called biocapacity or what is called planetary constraints today after research from the Stockholm Resilience Center. So anything that actually crosses those boundaries of our planet we can’t really consider sustainable. And if we extend this definition to some social and economic topics, the situation is more complex, because then we need to
include a fair transition, solidarity, and responsibility towards those most vulnerable ions who are least responsible for the poor state of sustainability’’. Interviewee four agrees with this notion of sustainability and adds that for him it is very important in today's world that they are sustainable, and that it comes from all aspects. He says, ‘’For example financially if we are not sustainable then we fail. Environmental sustainability and this circle of sustainability motivates us completely, the situation with these climate changes. We try to be as environmentally conscious as possible. So there's some viable circle if that's what you mean ‘’’. While for others it held a more operational meaning, rather than holistic. Interviewee two says that sustainability is the constant work and effort you have to put in the business which will then lead to sustainability. For interviewee three sustainability means that he is in charge of the whole process of operations. That you are able to reach your customer without any interference, that it is a closed circle. Interviewee five says that for family farms sustainability is simply a way of life, “they have no need for waste management, because everything is circularly used on the farm. If something remains of the product it goes to the household, and as for the waste that was mainly given to animals as food”. Lastly, interviewee seven says that it is a combination of the three pillars, environmental, social and economic. That you maintain yourself as a producer while doing good things for the planet and people. This shows that family farms now matter how small they are, cannot overlook sustainability and the benefit that term brings to their business. They are still considered as small producers therefore, they have to consider sustainability in their operations.

When asked if they would consider their family farms a sustainable business, they all claimed yes. But due to the different opinions for what sustainability stands for, one cannot claim to extract a conclusion from it. Interviewee one says that family farms are just one part of the solution towards sustainability, but there needs to be more support for them. All interviewees also claim that economically they also managed to become sustainable. For interviewee six this and sustainability of the farm in general came with great difficulty, while interviewee three says that in reality it took him 5 to 7 years to really see if this business is sustainable, and profitable, and that came after a lot of hard work. From this we can see that sustainability is not something that is easily achieved, it takes effort and planning on executing it. While sustainability can also lead to some new ways of producing as was the case in interviewees four operations, he says ‘’This usability and circular production itself led us to the work which we are doing today, because we started producing wine. Brandy was essentially a by-product of wine, so after pressing the grapes we got pomace and from that pomace we first started producing brandy. It wasn’t the first product, actually another extra product of wine
itself, and it's part of that story about the maximum usability of everything. So from the waste, we made a complete new production so that in the end we gave up the main production (wine) and dedicated ourselves only to this other, meaning brandy’’.

**Challenges**

The reasons for opening the family farms differ between the respondents, but the overall idea was they were already living in rural areas and needed to make a living. While for interviewee three the entrepreneurial lifestyle was something he always wanted to achieve, interviewee four says that the incentive that came with opening a family farm was a big reason for opening it. For interviewees two, five, six and seven, who already had land in their possession it was a way to ensure survival in the rural area or simply make additional income since they already own the land. It was a way to keep the tradition of that small type of business alive, help the rural areas and make something that would keep their children and other younger people in the area. This is crucial, says interviewee one, because this type of production can keep these areas alive. According to him Croatia is ‘’not using our resources in a sustainable way and in a way that increases the quality of life of the local population. That should be the goal. Realistically the most natural resources, the highest degree of biodiversity and the greatest opportunities for organic food production are in the areas from which people are fleeing, from which we have the largest emigration. Who will deal with these resources if all people leave?’’.

Almost all interviewees stressed that they had no problems when opening their family farms, and for the most part it was an easy and quick process. This process is especially easy if you are already the owner of the land, interviewee seven and five attested to that. Later in the process is when the issues arise. Interviewee six says that they had issues with resolving administrative requests from the ministry, while interviewee three says that finding the incentives that are available for you proved to be a bigger problem than the opening.

Interviewee two says that finding the right people to work in the starting time of your business can be a real challenge, due to a lack of trust and relationship between you and them, as well as dealing with the depreciation on the assets you acquire.
When it comes to running the business itself is when most family farms encounter challenges. Interviewee two stresses that climate changes, and distribution of goods seem to be the biggest problem, while interviewee three adds that sale, production, and capital are his top three main challenges. He, as well as, interviewees seven and five say that the lack of free time and performing multiple duties at once is also a big challenge. It is not just a job, but a way of life. While interviewee six claims the survival of the farm is the biggest challenge in of itself, to be able to make a living out of your family's work. Lastly interviewee four is fighting with the large amount of administration that he has to file. From this we can see that the challenges family farms face are quite diverse, while the opening of the family farms are fairly simple, running it as a business is a completely different story. Interviewee four encountered some unforeseen challenges associated with producing and selling on a small scale, ‘’...it was our first retail chain and then suddenly problems started to appear like there were no more of those bottles that we use for packaging, which I didn't expect. Because I thought it would be a problem to get into the chain, and get used to their system because it was different than I imagined, but over time we learned and now it works well ’’. For their survival they constantly have to reinvest in the business, from opening new facilities, buying machinery, growing new vineyards, to switching to an eco production in your whole property. If they don't invest and grow, they say then they are in trouble. ‘’In a market like it is today, either you're growing or you're going to fail, you have to invest all the time’’(Interviewee three).

**Flexibility**

A part that was mentioned by all of them is flexibility, as small producers they are inclined to have more of it. Interviewee one says that ‘’The small producers, they have to be flexible because otherwise, they can’t survive. And this situation with the Covid-19 forced them to be even more flexible, to deliver home, to the doorstep. So they have that flexibility, that is, the so-called resilience that actually allows them to survive’’. In line with that, interviewees five and six, add that the way the market is set up, the weather conditions they depend on, all influence them to be more flexible, since they cannot control those aspects. The pandemic especially oriented them towards new ways of distribution and sales. Interviewees four, three and two also claim they are very flexible in their businesses, with interviewee three saying that they were the first one to start delivering their products on peoples’ doorsteps during the
pandemic. With the smaller number of people working for the family farms, and mostly it being family it is easier for them to reorganize according to new conditions. However, Interviewee four sees it not only as a positive thing, but claims there is a negative side, ‘’We are quite flexible, since we are not some bigger entrepreneurs but rather a smaller one, we are very flexible. So pretty much the customer determines the bulk and shape of the packaging and all the things together, so I would say we are flexible to the maximum. Sometimes it's an advantage and sometimes it's a disadvantage. Customers know how to take advantage of that, both small and large, it makes no difference if you work with a big chain and it uses that flexibility of yours very much, to set unrealistic conditions’’. Because they are small producers, bigger retail chains can set some conditions for them that are not attainable, because they have that advantage of size compared to them. Interviewee four is also the only one out of the respondents that family farming is the only source of income. For everyone else, that flexibility they claim to have in their business, stems also from the fact that their income is diversified. From owning cafes, to houses where they can accommodate people, and having family members that work on the farm hold jobs outside of the farm for more security. As interviewee seven says ‘’since we didn’t enter into this with a serious attitude, we were able to allow ourselves some flexibility. It wasn’t our only source of income which helped to retain that flexibility’’.

Products

A positive aspect of family farms is the range of products they carry. Out of the six respondents, only one sells exclusively raw materials, such as vegetables and fruits. Other respondents have all decided to continue producing other products from the raw materials. From oils, juices, wine, brandy to winter food, ajvar, sauces. There is a large variety of products that they offer, and part of that is the possibility of a larger profit that can be made from these products. According to interviewee three, ‘’if I try to sell some kind of raw material, let’s say peppers, I can sell it at 10kn/kg, and if I process the same into ajvar, I can sell it at 80kn/kg, and it has a longer standing period. So I’m already earning more with it. Another reason is because we’re independent of no one, so everything we produce and do. In addition, there is no waste in this way of processing and production, as everything is processed or if any residues remain after the products are used as fertilizer’’. This way of producing ensures not only greater profit but also, creates more opportunities and ensures that the waste that would be left is sustainably used on the farm itself. When asked about what
makes their products stand out, quality was the most common answer. They all try to ensure the highest quality of their products because that is what their customers appreciate and why they return. Another point of difference is that all of those products are domestic, meaning they are of local variety and are ensuring those varieties that are indigenous to the area to survive. All of the producers, when deciding on the products they will carry, have done market research to decide where there is a demand. While for some it was also a part of the tradition, such as for interviewee six, she says: “Our products are dictated by the culture we have, and our culture is dictated by the location of the family farm.” Out of all of the respondents only one has decided to switch to organic production, and that is interviewee six, to attract more customers and become more sustainable. For a lot of them organic certificates and acquiring labels is very expensive, and for some just not profitable. Others have thought of that, but then it was left as only an idea. Some just don’t trust in this system, as interviewee three states: “What actually is organic production? So it’s very important what eco-production means, someone who eats eco may eat greenhouse grown tomatoes in January when they’re not even in season. And now I wonder if it’s even realistic. I know a man who’s been certified for organic garlic production, and his field is right next to the busiest road in the region, I’m not really okay with that.”

Social pillar

Part of the sustainable circle is the social aspect as well, therefore it is critical that the family farms are upholding the community, and doing good for it as well. As previously stated, for some that was part of the reason for opening the family farm. When asked if they cooperate with other family farms and in what capacity, there were a majority of them that said yes. Interviewee three cooperates on procurement of raw materials and machinery, interviewee four depends completely on other family farms since their own production of raw materials is not enough for their production. While interviewee six actually sell their raw material (grapes) to other family farms for production, while buying products they do not produce from them. Interviewee two is the only one that doesn’t cooperate with anyone, and that is mostly because of the level of distrust. This is a positive trend, in supporting one another, as small producers. However, since it was found that they cooperate with surrounding farms, they were asked if they would ever enter cooperatives, and the answer to that was mostly no. According to interviewee four, he would enter a cooperative but, “our people don’t have an awareness of what the cooperative carries yet, and it can’t pass in our country. Here’s my assessment,
maybe I'm wrong, but that's what I think. People needlessly associate it with another system (the old Croatian one, Yugoslavia). Cooperatives exist, for example there are a lot of cooperatives in Italy, but I don't believe it would work for us’’. As an educator interviewee one has this to say on this theme: ‘‘Unfortunately, the big problem with us is that we have destroyed our tradition of cooperatives. Because we connected it with the former system (Yugoslavia) even though we had the largest number of cooperatives between the two world wars. So before the government that ruled in this whole area after 1945. In our country, too, it is very difficult for people to decide to cooperate. And again, we come to the conclusion that the bigger problem is in the level of trust in that circle of society, the social circle, and not in the circle of the environment. So we have small producers who will fail 100%, that happened to us with milk, with everything. The only way they can survive is to somehow unite, but they don’t unite. That's the catch 22 for this area of ours. How to educate and make people aware that they have to work together and that it is actually in the interest of all of them, and the whole local community. And that in societies that we consider very selfish, and individualistic, there are people who cooperate in this way through production cooperatives because they realize they will not actually survive otherwise. The family farms in Croatia are simply too small to carry and to cope with this whole giant food system that will always have cheaper goods than them and will come on the shelves sooner’’. From this we can see that family farms as small producers simply will not be able to survive on their own, cooperation between them is great, but cooperatives would be even better. They could serve a larger market, because with the variety of products, they would be able to satisfy an even larger number of consumers. Food and its production for the local community, that is surrounding the family farm, is very important. The respondents all recognize the importance of family farms, as incubators of the rural area, that bring employment, provide healthy and fresh food for the consumers. However, this is not developed and protected enough in the Croatian context. Interviewee seven states that she has read of examples from other EU countries that have protected their local communities better, she says:’’ For example, the Italians in the Piedmont region managed to protect themselves from the Chinese who immigrated, and began selling Chinese vegetables that are not indigenous on farmers markets. This has become a problem because they have taken over most of their fields, and that is all fine, but they have put a clause in which there is a number of quantities that they must not exceed. That there are no more of their products than domestic ones. These plantation contracts are limited in time, and thus protect their area. The French protect their areas as well, where there are special chickens, ducks, so that these small estates do not go out of business. This protects national
products, and these countries are working on that. We just had to rewrite that example to our country, and we couldn’t do that either.”

**Institutional involvement**

When it comes to Croatia and its institutional involvement for family farms it seems it is very minimal. Interviewee seven that has closed the family farms has said he was scared to apply for incentives, to not encounter problems further down the line. There is a distrust present in the government, and the required ministry to regulate the market, and protect the family farms. Out of the other respondents, only interviewees three, five and six have said they received incentives for their development. Interviewee three used those incentives to expand its business, with two projects from which one is still only submitted, not accepted. Interviewee six says that with the incentive they were able to expand their vineyards, and consequently their production. On the other hand, interviewee five bring an interesting perspective in which she says that without the incentives they would not be able to operate. To quote her: “If we did not have them, I do not know if any of this would work, and it would be unsustainable, unprofitable, because the price of input is much higher than the price of output. So the prices of the additional raw materials they use have gone up, for example fuel from 3 to 8 kn, and the price of the cheese they sell has not gone up. Although they have preferential prices for fuel through the family farm card this price is still high. But for me that is a real shame, I think that family farms should be able to survive solely from the profit they make from selling their products, not depend on incentives.”. Interviewee four adds to this theme by saying that they, as spirit producers, are not in consideration for incentives, due to the alcohol percentage, but they also produce traditional products, so it is not exactly a fair position for them. When asked for their opinion of the Croatian involvement to help develop family farms, they all agree that it is lacking, and that is only partially done. Family farms have no help in finding the incentives for their particular sector, some find out about them through secondary sources (interviewee five), while some hire outside firms that moniton when some incentive is opened for applications (interviewee three). When it comes to EU schemes for farmers, only interviewee six has heard about them, such as support for young farmers or rural development measures. This shows the lack of communication that is present between the ministry and the family farmers. As interviewee three stated:” I’m still young, and it’s hard for me to keep up with all of it, so I don’t even want to know what it’s like for older family farm owners. I have se understanding of it, and it's still hard to keep up.”
majority of respondents in this study are not anymore considered as young farmers, therefore they cannot receive incentive for that, and some of them, such as interviewee five's mother-in-law are not versed in technology use. The respondents all claim that family farms are important for Croatia, for customers who are leaning towards healthier food options, and as keepers of tradition. However, they do not feel important in the market, and are faced with challenges such as penetration from foreign markets, which leads to the Croatian market being made up of only 20% of Croatian products, says interviewee three. He says: ‘‘Honestly, I think that if Croatia stopped importing food I think that we would last only three months with what we produce, and we have so much fertile land, you just have to work and have the will to develop it.’’, while interviewee one adds to this that, ‘‘Countries that depend on food imports are extremely vulnerable countries and these are actually countries that are not free. Where the ratio of locally produced food to that imported is very poor.’’

Sales and channels

As with any business sale is very important, and through which channels you reach your customers can determine your success. For the smaller producers within our respondents, such as interviewee five, six and seven selling their products on their ‘‘doorstep’’ is their channel of sale. They do not use any intermediaries when selling their products, meaning they are in direct contact with their consumer. Interviewee two sells exclusively through wholesale and retail, which could be why he claims it was extremely difficult to enter the market, and such a high level of competition. Due to this they are also the only ones that sometimes use an intermediary for their sales. Interviewee three has a large range of sales channels, from his own stalls, to caterers, two farmers markets and elementary schools in the area. While interviewee four is the only one that depends on the tourist season. When asked if any of them considered selling in local stores such as Mrkvica, or Grga Ćvarak that carry exclusively family farm products, the answer was no. A lot of them do not have the quantities to sell beyond what they are selling now, and some, like interviewee three, are opposed to having intermediaries involved. All of the respondents, beside seven which have closed their business, and five where the owners are older, and don’t have an heir to continue the business, are saying that their size impacts their business. As previously stated in the flexibility theme, they all plan to expand, because there is a demand for their products, but they do not have enough quantities to quench that demand. This small scale production is what limited interviewee two and six from expanding into foreign markets. There was a will to expand, but
they currently do not have the resources or capacities to enter those markets as well. Interviewee four tried expanding to foreign markets due to the demand from foreign tourists who tried his product, but ultimately gave up. He says: ‘So we had cases where people contacted us when they bought and tried our products as tourists and wanted to buy it through the web shop. However, since our product is an excise product and it carries this excise duty in itself and in Europe, we are not allowed to sell in Europe. So we would have to have a representative in Germany, for example, who would take over the excise duty, and that complicated things for us and we gave it up. I don't know what amount of sales would make it profitable, because we didn't go through with it in the end, but it's not as easy as we imagined it to solve this excise duty from Croatia. So if someone from Austria ordered it, then the excise duty had to be paid to Austria, if someone ordered it in Poland, they would have to pay it in Poland and for us it's just too much of a problem that is not worth it. Again we are a small manufacturer, not a large one so it will be a couple of hundred or a thousand liters so that it does become profitable.’ The pandemic mostly affected the producers that sold on the farmers market, or stalls positioned indoors due to lockdowns. Interviewee three says that: ‘So when the corona started, a large number of goods started to pile up and so I put a purchase orders paper on our Facebook page for people to fill out and then we delivered goods to them in the area of Zagreb and Samobor. After that, HRT (National Television) filmed us for this, they posted the video and then other websites started to sell in this way, and that progressed from there. We had all together 18 people, with nine vans taking orders, remember we were the first to start doing it.’’ Interviewee five says that the Online marketplace that was created for family farms to advertise their products, was very easy for them to use and provided a security of sales because there were orders placed before deliveries. For the family farms that exclusively work with retail and wholesale, there wasn’t any significant difference, because supermarkets were the only ones not put under restrictions.

**Customers**

In terms of consumers, interviewee two says that the pandemic has an influence on them, where they are more oriented towards domestic products. On the other hand, interviewee three says that customers who bought family farm products, still buy them, and not many new ones joined them. This is supported by interviewee seven who says: ‘The story was, when the pandemic came, now we will be self-sufficient, absolutely nothing has changed(...)(...)This
pandemic did not make us aware that something should be done urgently, if you want something, I do not believe that there would be no family farms that would not want to be provided with something. To make it easier for them to market their products, to shorten their procedure and bureaucracy, but then they also cannot cheat in any way. And that’s why I think it’s a lie when they say, we got started, we did something. Look at the shops, look at the farmers market, you will see that it is an absolute lie, that what they do as individuals will change something, and only that.’’. For interviewee five it was an opportunity, because through the online marketplace that was established, more people found out about their products and decided to try them. This is supported by interviewee six who says that customers in the pandemic turned towards online shops, because there weren’t any other options for them to buy these products. That can partially also tell us what type of demand there is for family farm products. This trend is growing more and more among consumers. According to interviewee one, he says: ‘‘We have had a positive situation where food has become a hit topic today. Food was not a hit topic 10 years ago, today everyone is crazy about food, both negatively and positively. Today we are so obsessed with food, what we eat, how we eat, where it comes from. Today, we are all chefs at once, we exchange recipes, all of a sudden it's food, cooking, dealing with food is cool. And it’s a positive situation, a positive trend that we should take advantage of. Even among young people, those who are not interested in food or it does not negatively affect their health with regard to what they eat, but even they are more interested in this topic. So food is a really cool topic today and we should really use it to increase the amount of food produced that is ecological, and healthy and then those who produce it to be at a well-deserved level of value in society. and they should be very highly valued because they bring people what we need next to air and water the most, and that is food. And every person who produces food should be able to have a dignified life from it. A country that does not care about that, in my opinion, is not really a real country.’’ When it comes to the importance of origin of food to consumers, interviewee two says that to those who care about their food, it is important that it is domestic. While interviewee three stresses that it is very important, and that it is one of the main reasons that customers come to him. He says that, ‘‘With me, prices are always higher than in supermarkets, if they want something cheap which will be substandard, they can always go there. When they buy from me they know that there is a higher price but they also know that they are getting quality products and that this is part of the price. So if something in Konzum (a Croatian supermarket) costs 4 kuna a kilo, with me it will be 9 kn a kilogram, but customers know that they get a homemade product and where it was grown and everything, what was used on it and so on.’’ Interviewee
four that is in the spirit business says he wishes more consumers cared about the origin of the product, because they try to stress that it is all domestically sourced raw material. And interviewees five and six say that people do care, and that is why they visit them on their family farms, where they can see how and where everything is processed, and how fresh everything is. We can see from this that consumers are orienting towards healthier, and locally sourced products, and they want to support the rural communities.

Discussion

In this section I will reflect on the findings that were elaborated in the analysis and try to juxtapose the findings from my study with the findings from the literature review.

The literature points to the term of sustainability as a very complex and ambiguous term for companies, people, and policies to grasp (Scoones, 2007; Santillo 2007). While all the respondents had sustainability on their agenda, their understanding of the term differed. However, I have found that sustainability is not overlooked by the small producers but it is rather put as a focal point of their sales strategy and a way in which they attract their consumers. With sustainability, they are aware of the implications it has, but this way of producing without any waste, helping the local community, and making a profit out of it, makes family farms incrementally sustainable. In their operation, family farms try to take care of the environment by producing seasonal plants, by producing products that are local to the area, and that will contribute to the environmental pillar. As mentioned in the analysis they do depend on the climate, and any changes that occur in the climate affect their operations. They influence the social pillar by keeping the rural communities alive, and trying to create an environment where there is development and business. Lastly, the main point for family farms is that they are able to make a living out of their work and products. They are inherently providing good products and services, and thus maximizing the economic pillar of sustainability. They are a link between moving from sustainability as a term, and applying it
in real life examples. As the literature pointed out agriculture is a gatekeeper to creating a sustainable society (Altieri, 1987). If we look at family farms as small or micro organizations, we can see that when applying measuring tools such as the Triple bottom line, they would satisfy all three in their performance. Even though they would satisfy all three pillars of sustainability, it seems they are too small to face the market on their own. As can be seen from the analysis, they found entering the markets very hard due to a lot of competition, and the influx of foreign products and imports present. Since they are that small they cannot become a winner in this megatrend, but rather try to survive with ingenuity in the current market.

This lower level of power in the market, could clearly be offset by the ability to form cooperatives. The literature points out that there is a strong tradition of cooperatives that was present in Croatia (Tratnik, 2007). However, the findings point out that the family farms in Croatia are lacking in the organization of such cooperatives that are present in other European countries. There is a level of distrust that these types of cooperatives would work in the current system. And some people are still connecting this type of organization of family farmers with the former system. For some of the respondents there is a want in being in a cooperative, however, they do not see that happening in the near future. They are cooperating among themselves, but not forming cooperatives. Another step through which family farms are influencing sustainability is in their way of sales and distribution of products. For most of them, the sale of their doorstep is the primary tool of sales. This is part of a face-to-face relationship with the consumer, which is the shortest way a supply chain can be. This is crucial for the consumer, as well as the family farmer, because they can build a relationship of trust, and the consumer is aware of where his food is coming from. This is enhancing their sustainability, in all three pillars. They are reducing the distribution time and transportation of goods needed to the consumer, and they are selling local products within a range where it is produced. The literature points out the benefits of the short supply chain, such as spatial closeness and social benefit (European Commission, 2013). The findings build on this by claiming that consumers actually prefer this type of supply, because they can visit the farmer, and see where their food is made. The products themselves are a large step in agricultural sustainability. Most of the respondents try to produce seasonal products, and offer a wide range to their customers. This is not only a way to ensure competitiveness, but a way to orientate the customer to products that are locally and seasonally available. Their product range is clearly influenced by the customers as well, because all the respondents have done
some form of market research before delving into the business. They are constantly trying to diversify their production, and all have plans to grow their business. The only family farm that isn’t expecting to grow their business, is the one where the owners are older and have been doing this their whole life. Their flexibility at times can be a great advantage, in terms of unexpected situations, such as Covid-19, but also a disadvantage. Their flexibility in business is what allows them to progress to sustainability, and survive in the market fight against larger players. They have found retaining this flexibility very important. While this is great for the consumers that are buying from family farms, retailers that are involved in a sales relationship with them can take advantage of this flexibility. This could again be offset by joining a cooperative, where they could set boundaries and claim a safer market position.

As a business they face quite a large number of challenges in their operations. Institutional regulation and support that they are offered is limited, and mostly nominal it seems. While they mention countries in the west that we’re able to protect their family farms as beacons of tradition and sustainability, Croatia is not doing enough. The support that they receive is mostly in monetary incentive, but even getting them seems to be a challenge. They have to monitor the incentives when applications are opened, while also dealing with a farm on which work is never done. When combining that with the notion that some of these farms have diversified their production, and offer tourist accommodation or sell on multiple locations, the possibility of tracking the incentives becomes even lower. For some, even though they consider themselves as a business that tries to maintain tradition, tax regulation and lack of incentives provides an extra hurdle they need to cross. The same climate change that they are trying to offset with their sustainability, is also proving to be a challenge for them. They depend on them, and they influence their harvest and quantity of production. The inability to leave the farm is also a challenge. Family farming as a business is not a 9 to 5 desk job, but a job where you have to be constantly present. For some such as interviewee seven, that was part of the reason why they decided to close their family farm. For others, this is the only income they don't have that luxury and have to face the challenges they are presented with head on. Surviving as a family farm in of itself have proven to also be a challenge for them, due to a large competition, and the small quantities you can produce. Ultimately, family farmers don’t necessarily want incentives, but are forced to obtain them, because the levels of input vs the output are at a disadvantage. If they could make an honest earning just out of their products, the incentives would be a necessity. Challenges are present in the digital readiness of certain family farmers. While the younger farmer, such as interviewee three is more than
ready to deal with the challenge online sales can bring, older family farmers that fall under the over 65 category would find it a challenge.

Even though these are all small producers, they all are thinking about their future, and planning strategies accordingly. Surprisingly, there was a respondent that has managed to export its products to the foreign markets. However, even compared to the relative small sample of family farms in this study, that is very low. It seems that selling their products to the foreign markets at this point in time seems like a high impossibility. This is mostly due to their size and their level of production. The surplus that they have from their production is either sold locally, or they use it on their farm for the family. Therefore there isn’t even anything left to export. Another point is that logistically, and with the low number of members family farms have, organizing such an operation would be a very difficult thing. For those family farms, such as spirit producers, who have tried entering foreign markets, because of a demand present on them, legislation has prevented them. None of the family farmers, with the challenges that are already present in this context of Croatia, can look into a serious business venture such as internationalization. The limited number of people employed in family farms, with some of them working other jobs, to diversify the income, puts a serious barrier to that step.

If we look at the respondents of this study it seems that Covid-19 and the subsequent pandemic has proven to be more of an opportunity, than a hindrance. Some managed to respond to it very quickly, due to the fear of merchandise going bad, and organize themselves. This is again the point which shows how flexible family farms really are, because of the familiar relationship, they can act quickly, and there isn’t a hierarchy for decision. For two of the family farms the pandemic had no influence on the sales, but those two are the ones that are selling to retailers. The one that the pandemic has affected are the ones that sell on their doorstep, or more importantly on the farmers market. As we know from the literature, there were serious restrictions placed on the farmers markets and in which conditions they can operate. For the family farms that have reacted in time, and used tools such as Online Marketplaces, they were able to retain their customers, but also acquire new ones. The part where family farms have noticed the most effect of the pandemic is the customers themselves. The pandemic has shown that there is a demand among the customers in Croatia to buy domestic, local, healthy and fresh products. According to one of the respondents the
customers turned to online shopping, because there was no other way to acquire family farm products otherwise. For the respondent number four which produces spirits, the pandemic has a negative initial effect, but no long-term consequences as such. In general, family farms sense that there is a level of caring and importance to the consumers where their food is coming from, and this pandemic has brought that to the forefront. This is the answer to how family farms can continue to survive, even after the pandemic, the more awareness there is about them the more they can grow and be appreciated.

To summarize there is a link between sustainability and family farms. Their way of life, production, distribution, sales, supply is what the parameters of the literature would consider sustainable. Therefore if we look at the conceptual map, there is a link between sustainability and family farms (Appendix, figure 8 ). However, the relationship between family farms and Croatia is quite unsatisfactory. There isn’t enough support, other than monetary incentives from Croatia’s institutional actors, therefore the link between those two cannot be considered strong. Due to the lack of support given to family farms, and inability the import level rises which limits the market of family farms even more. Which can lead to lessening their sustainability. Therefore the link between family farms and Croatia is not considered complete, since there is a large amount of challenges and progress that need to be made for it to be complete. In line with that the circle cannot be complete, therefore Croatia and its food industry cannot be considered sustainable.
Conclusion

To conclude, this project has tried to explore the question of “How can family farms influence the sustainability of the food industry in Croatia?”. In order to uncover that additional sub-questions were asked.

Family farms are vital in the sustainability of the food industry. There are certain key steps that family farms can take to enhance their influence. The findings point to the formation of cooperatives, it is a crucial aspect of capturing a larger portion of the market, and strengthening their position. Their use of their flexibility in operation and business is an additional step, this provides them a leeway into servicing customers across many areas, while maintaining a short supply chain that is beneficial for the sustainable food industry. Diversifying their production, and maintaining different on and off farm income increases their flexibility and influence as well.

The challenges for family farms are diverse, but could potentially be offset by the increase in support from the institutional actors present in Croatia. If there was more support in terms of regulation and simplifying procedures, family farms could actually focus on their core operations, and diversifying them, not on administration and incentive application. Internationalization for family farms in Croatia is currently not a strategy they can take, since the challenge of survival in the domestic market is already high. They do not carry the operational capacity or resources to try to get involved in a complex process such as that. Subsequently family farms are mostly small to micro producers, who simply don’t have enough surplus of products they could export. It is important to firstly reclaim the domestic market, and make Croatia's food industry sustainable. Lastly the Covid-19 pandemic affected
the family farm producers, but not necessarily negatively. Some have thrived through
different sales channels, they discovered the high level of interest and demand of consumers
for domestic and local products, and were able to showcase their flexibility as a strategy for
survival, which even some large companies weren’t able to. To conclude, family farms can
influence the sustainability of the food industry in Croatia through the qualities mentioned
above, however there will need to be more progress for a real change to be seen.

**Limitations**

The study has taken a phenomenological approach to the research, with a qualitative data
collection, that has tried to understand each participant's essence and perspective. Due to the
nature of this approach this study may not be most applicable to generalization. However, by
taking an inductive approach that takes specific examples and tries to uncover the phenomena
in depth and try to uncover the influence family farms have on the sustainability of the food
industry in Croatia. The findings of this study open up the possibility of other researchers
trying to uncover additional influence and how other smaller producers in different industries
can influence sustainability with the same steps.

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Appendix

Figures

Figure 1

Figure 2

Figure 3
Figure 4

VALUE CREATION FROM PRODUCT AND BUSINESS MODEL TRANSFORMATION

DREAMERS

WINNERS

VALUE CREATION FROM WASTE, COST, AND RISK REDUCTION

LOSES

DEFENDERS

Figure 5
Figure 1.1  Aim for a sustainable food system.

Figure 6

Figure 7

Figure 8
Interview transcripts

Interview 1

Questions for ZMAG

Name: Dražen Šimleša

Your occupation: Sociologist and volunteer for the Green Network of Activist Group.

SUSTAINABILITY

1. What does sustainability mean to you? 2. What would be your definition of sustainability?

So for me, sustainability means living within what is called the carrying capacity of our Eco-System or what is today called biocapacity or what is called planetary constraints today after research from the Stockholm Resilience Center. So anything that actually crosses those boundaries of our planet we can’t really consider sustainable. And if we extend this definition to some social and economic topics, the situation is more complex, because then we need to include a fair transition, solidarity, and responsibility towards those most vulnerable ions who are least responsible for the poor state of sustainability. Which leads us to the crucial questions what we will do with today’s economy without whose change I think we cannot talk about sustainability because it is designed and created to function according to completely opposite rules and values. If our GDP is not growing today in a certain sense, in a certain process, our economies are having a crisis, and then our societies and that actually tells us that we have to change it fundamentally because nothing on our planet grows indefinitely and the question is actually how much growth, how much economic growth our Planet can handle.

3. Do you think that people focus too much on only one pillar of sustainability (this is economic, and not so much on social and environmental)?
Unfortunately yes, I say that both as a practitioner and as a teacher and as a person living in nature surrounded by forest. Unfortunately people are mostly focused on this circle that we usually associate with sustainability it's this circle of environment not realizing that it is a consequence of the state of society and the economy. So we expect something to happen at the climate summit in Glasgow or wherever we talk about climate and quotas instead of organizing a conference on a sustainable economy where the situation with those quotas and climate would not say they would disappear, but it would be much milder. Unfortunately we, especially environmentalists and people who claim that they care about sustainable development, we deal with the consequences, we clean the terrain, clean rivers, plant trees and all these are ok actions, but in fact until we change the cause we will always have that feeling step back and forth. We will always have the feeling that we are doing everything well and things are not changing. Precisely because we are not dealing with the cause of the problem.

4. What would you say that the biggest challenges are to the transition to a sustainable lifestyle?

Mentality is one level, but it’s not enough because we know a lot of things happen at the business level, meaning at the industry level. But also at the level of public policies. I usually like when I teach about food, to ask people if they have heard of the fire in the Amazon which two years ago was an environmental main topic. Then everyone says they heard, then we talk about the reasons why these fires occur at all. Then we start digging the story, so we return to the topic of what is the cause and what is the consequence of something. So until public policies, such as green public procurement in the field of food, are adopted, there is no sustainable local food system that does not include public procurement for public institutions. In some countries, it is very developed and well developed such as the Scandinavian countries, France, Italy and so on. In Croatia, it is very bad. So when you have one such decision it has a much bigger impact than for example what we do through our cooperative where we feed some 50 people every week through our solidarity short supply chain. It’s great but it’s also healthy and mature to know what the pros and cons of each of our decisions are, and even less impact if we only do something as individuals. So we can have great awareness but if we do this as isolated individuals our impact will be very small not to say negligible. People in the West have been working on this personal and ethical spending since the 1970s. Ecological footprint is growing in almost all countries, especially in food. So I always say that personal mention is a great first step, but it should by no means be the last. We should also be aware that these are some bigger examples, we will not come to them only by some of our consumer choices, no matter how ethical it may be, but in cooperation with other people. So I usually teach people that if they are frustrated that some things are not happening fast enough which in our region is often the case. People need to be aware that public policies always come as a result of collective action. When a sufficient amount of positive collective action is accumulated, then it begins to have the capacity to direct public policies. That there is more organic production, that people are starting to wonder how we can bring this organic food to kindergartens, schools, retirement homes, hospitals, and so on.
Rarely, everything I’ve researched especially across Europe, have a few examples of exceptions, but mostly public policies rarely come of their own accord.

5. How big a role do you think the food industry plays in sustainability?

Well very much, I think it is a taboo topic of our civilization because we have raised our diet to some level of obscure, a level of our human personal rights. So people want to talk about recycling, they want to talk about electric cars, they want to talk about more greenery. But when you mention diet and food to them, it’s almost forbidden. Like you won't tell me how to eat. Perhaps the best example is how much this topic is underestimated and how much of an impact it has on the state of sustainability and climate change that this topic was completely ignored at the last climate summit. So there was no talk at all about agriculture as a problem and as a possible solution. So here's what's really fascinating is that investing in a more sustainable diet and production would require a lot less money than, say, the total hype about electrifying transport. But there's less talk about it because it requires a change in our way of thinking and changing our lifestyles. It also the democratization of the entire food system, meaning that it is much more in favor of small producers and in favor of local food production where automatically then the monopoly on food production is reduced.

6. When did you encounter the concept of permaculture? What drew you to it?

When we were kids, students permaculture were a great thing because it was pretty activist-oriented. Which suited us then, because we were all part of the activist scene in Zagreb. We liked that it doesn’t focus on just one area of sustainable development or living. So it has a great base on food and design but permaculture is everything, and economics and politics and interpersonal relationships and the houses we live in so it’s pretty broad. We liked that, her holistic approach to not just dealing with super gardens. No matter how much food always comes to mind, because we eat it several times a day, its not just based on that. Well, somehow a large number of people start dealing with food because somehow it is always among the top three most interesting areas. But permaculture is actually of interest to us precisely because that social story is not just ecological. And so we started dealing with it, we started educating ourselves and today we are trying to promote permaculture in actually all these areas that I mentioned to you, not just in gardening or food production. We are now actually not inheriting just some philosophy and way of life, but a movement that has been present in the West since the 1970s. In fact, if you look at places where there are positive stories, good stories, it is easy for people to start with their initiative, they have something to stick to, do they have a place to network. Here in the Balkans, especially when we started, it was not at those levels, so at the beginning, it was quite difficult, quite demanding.

CROATIA

7. Do you think that Croatia is taking the necessary steps to move towards sustainability?

Well, given our potentials, given that the bio-capacity of Croatia is very large in our small territory and small population, given our potentials that we have in natural resources and in soil and biodiversity, very little is being done, not enough. You can track this from the amount of organic food produced, the use of renewable energy sources, sustainable mobility, and so
on. What is great is that things are changing quite quickly, so now at the local level, we have more and more positive examples of good practice that also build on some good examples from Europe, so it's easier for them. So it awakens some good feeling that in the future there will be more and more such local communities, cities that apply sustainable development, but at the level of the whole country, we can say that we are not at the top of Europe. I say it saves us that we have crazy nature, that we have crazy resources, a relatively preserved environment, so when it is brought in proportion to our consumption, it seems that we do not influence some negative phenomena too much on a global level. But I say that we are not using our resources in a sustainable way and in a way that increases the quality of life of the local population. That should be the goal. Realistically the most natural resources, the highest degree of biodiversity and the greatest opportunities for organic food production are in the areas from which people are fleeing, from which we have the largest emigration. Who will deal with these resources if all people leave? And then that abandoned land will probably go into the concessions that some big companies will use. It's actually preparing the ground for them, first, you actually move people from an area and then in the end you will have that logical business way of thinking. It's a shame that it's empty, let's use it and make some money from it, but I say there is no local community. There are no people there, someone will own hundreds and hundreds of thousands of hectares, they will produce some food on such large areas, mostly not ecological and unsustainable, and they will have hired workers. They will collect or sort it or do something that technology will not be able to do for them. It is important that as long as there is no investment in actually small producers, the family farms that actually live there won't then remain living in that area. In our country we have a mantra that everything has to be big, that the land needs to be consolidated, and then you go to Austria, Switzerland, parts of Italy where you see that people live normally with I don't know two or three cows and that they are all networked in some clusters, cooperatives, some kind of association. And then you wonder who is crazy here, how it's not a problem that they are fragmented and small. So it's more a matter of organization and whether you want to keep people somewhere or not.

Unfortunately, the big problem with us is that we have destroyed our tradition of cooperatives. Because we connected it with the former system (Yugoslavia) even though we had the largest number of cooperatives between the two world wars. So before the government that ruled in this whole area after 1945. In our country, too, it is very difficult for people to decide to cooperate. And again, we come to the conclusion that the bigger problem is in the level of trust in that circle of society, the social circle, and not in the circle of the environment. So we have small producers who will fail 100%, that happened to us with milk, with everything. The only way they can survive is to somehow unite, but they don't unite. That's the catch 22 for this area of ours. How to educate and make people aware that they have to work together and that it is actually in the interest of all of them, and the whole local community. And that in societies that we consider very selfish, and individualistic, there are people who cooperate in this way through production cooperatives because they realise they will not actually survive otherwise. The family farms in Croatia are simply too small to carry and to cope with this whole giant food system that will always have cheaper goods than them and will come on the shelves sooner.
8. Croatia receives large funds from the EU for rural development, do you think it uses them wisely?

I don't know the numbers by heart now, I don't have them in front of me, but they don't even matter. Incredible amounts of money have been invested in agriculture or so-called agriculture in Croatia. And Croatia has less production of its agricultural products than before joining the European Union. This is best evidenced by the amount of money that is being used in a meaningful way. So that money is going somewhere, it's not that there is no money, but we haven't done anything positive there. And even in some other Eastern European countries like Slovenia or Poland that have really invested in their local production, while in Croatia people are leaving agriculturally oriented areas speaks volumes about how much is being invested. If they can not work there, what will they do, enjoy nature? That they can do anywhere. It is a pity really because we have huge potentials, we have people who know how to work, who know how to produce. We have had a positive situation that food has become a hit topic today. Food was not a hit topic 10 years ago, today everyone is crazy about food, both negatively and positively. Today we are so obsessed with food, what we eat, how we eat, where it comes from. Today, we are all chefs at once, we exchange recipes, all of a sudden it's food, cooking, dealing with food is cool. And it's a positive situation, a positive trend that we should take advantage of. Even among young people, those who are not interested in food or it does not negatively affect their health with regard to what they eat, but even they are more interested in this topic. So food is a really cool topic today and we should really use it to increase the amount of food produced that is ecological, and healthy and then those who produce it to be at a well-deserved level of value in society. and they should be very highly valued because they bring people what we need next to air and water he most, and that is food. And every person who produces food should be able to have a dignified life from it. A country that does not care about that, in my opinion, is not really a real state.

When you travel and see villages that are alive, these people don’t even want to live in the city. I met a lot of people in Austria, Switzerland, Spain, France who left big cities to become farmers in the middle of their lives because they saw the need. They weren’t on the fringes of society, they left a lot of good paid jobs in the cities. They liked a quieter life, safer for the child, blah blah and there are many reasons, but the point is that they could come to fertile ground. I do not mean fertile only in terms of ecological, biological but fertile socio-economic soil that allowed them to live from his job. And these are crazy trends when you see there is a map of Europe that shows the relationship between suburban and rural areas, cities, immigration, and emigration. When you see that some regions, I shouldn’t say the whole country, because it is different in each, the number of people in the area is not declining precisely because people can live very well in them. For us people are moving out of rural areas, and that is not European Unions fault, or some other conspiracy theory. But realistically no one is to blame for that because we ourselves directed that money the way we directed it.

9. Do you think that it is necessary to reduce food imports outside Croatia, and focus on the resources present in Croatia?
Food imports are a consequence, you have to feed people. If there is no local food, you will import food. If you are not aware of the need to encourage local food production, then you will import even food that you can produce. Croatia imports apples from Poland, because Poland has invested in its apple production. We have incredible amounts of potential and for apple production, we do not have enough of our apples. So I'm not explicitly against imports, it's really a consequence of a certain policy. We also had a big dilemma in our cooperative, as we are part of a global urgency network that brings together solidarity short supply chains.

We knew that Covid and the whole situation affected small producers from all over the world. And then a year ago we started to include in our retail chain products from all over the world, such as Fair Trade coffee, but we had the condition that we do not take products that are already produced in Croatia. We did not take products for which we had a local alternative. We only took products that cannot and are not produced in Croatia, meaning coffee, soya sauce, rice and so on. And we also checked from whom we take it, so that the money goes to some cooperatives that support the local community, but we introduced that for example. Now it is no longer considered local food. We can now discuss whether it is necessary to drink coffee, eat rice, and all these other products at all, but most people do it and then we concluded that it is better that we participate in this process also in an ethical and fair way.

You know, I’m going to sell people local food, and they're going to go to the supermarket for everything else they need. Countries that depend on food imports are extremely vulnerable countries and these are actually countries that are not free. Where the ratio of locally produced food to that imported is very poor.

Family farms

10. Do you think that family farms are the sustainability solution for food industry in Croatia?

Well, they are certainly one of the solutions, they don't have to be the only ones. The production of local food can be regulated through some other forms of cooperation, not just family farms. In our country it is quite regulated legally. Meaning there is a relatively good legal framework for them, so a lot of people use that form, let's say the legal framework (of family farms) for food production. Where there are not enough diverse family farms involved in food production, we also cannot talk about a great quality of life. This can be seen in the areas where a lot of food is produced, where different foods are produced, that these people, no matter how challenging and difficult that job is, in my experience, these people love their job. They actually love their job and if they get that feedback that they are valued, that they are respected for their work they have no thoughts about anything else. We even did some research on Croatian family farms and most of those who found their niche, who have secured customers, who found some of their own sales chains, they mostly answered that in the next 5 years they do not intend to change their lifestyle.

11. Do you think it is easier for smaller producers to turn to sustainability?

The small producers, they have to be flexible because otherwise, they can’t survive. And this situation with the Covid-19 forced them to be even more flexible, to deliver home, to the doorstep. So they have that flexibility, that is, the so-called resilience that actually allows them to survive.
12. What is your opinion about short supply chains? What are the benefits of short supply chains?

This is certainly one of the stages towards sustainability because, for example, local food is mostly in system where there are not many intermediaries. There is at most one intermediary, for example in our solidarity short supply chains it is the obligation to give the manufacturer 85% of the final price. Otherwise, if you want to be in the fairtrade system, you have to give 30 to 40%, and we give 85%, so twice as much. It’s a huge security and respect for the manufacturer so it’s their big advantage to actually bypass this whole sales system which is really relentless and where the price goes down so much. So food is so underrated today that these people can’t really live with dignity from their work. In this way, short supply chains actually fill that gap until the state does enough to preserve local production. Best when we have both. It is best when we have functional short supply chains for citizens, but also very good public policies for a sustainable food system.

13. Do family farm owners and small farmers come to you for training?

Yes they come for education more and more recently. They try to implement the principles of regenerative agriculture or combine biodynamics with some new knowledge of designing and creating their entire production space full of more sustainable. So that number is also growing, I think that number would be much higher if we were just dealing with that. It’s just that we deal with a really wide range of topics. So in that topic we are one of the actors in the field, but I can tell by what I see from the growing number of producers that they are not thinking only about food, as may have been the case 15 or 20 years ago, but also about himself and his family. they see food as part of a broader story.

14. Do you think that e-commerce has opened the door to smaller and sustainable producers to reach their customers?

These are not short supply chains, these are online stores. And OK for you as a customer it is very user friendly, you sit at home and click, but it has nothing to do with this real and long-term support of local food production which I said is our main goal. So our main goal is not to sell food, our main goal is for people who produce food to have a dignified life and that through our food we actually build that one spirit of solidarity, the spirit of the local community. The Internet and the whole story about food, food delivery, is actually making it harder and harder for you to figure out today who really sells local food, what kind of relationship it has with its producer. So there is also a need for a lot of information from the citizens themselves, customers. Because now there is everything because some people have also seen that food is not a thing people save money on, that people even in the midst of a crisis like the one we had to find ways to get local food, and that local food is increasingly valued. So I say that in my opinion, this topic will need additional education and research from people who really support sustainability and solidarity, and not just the sale of food on the Internet. Which is OK, let people do whatever they want, but then it should be called that.

It is also part of the adaptation to some new habits of customers, to all this change brought by lockdowns and partly by the earthquakes in Croatia and around Zagreb. So many manufacturers find some very good solutions to bring their products even closer to the end user. There are actually a lot of apps, delivery methods, ways to distribute that food, all of
which are to be welcomed. In my opinion, the ultimate goal is to throw away less and less local food, and whatever tools you use for that, all is good.

15. Do you think that taxes on companies on unsustainable business should be introduced?

Well, I don't think it would work in our country, although I really don't know whether to call it taxation, but in reality, the largest economic companies that are the richest today from the way out economy works today, don’t pay the full price for their products. It is paid for by society and local communities that live close to the source of their funding or future generation, and that is completely unfair, so I am in favor of that. Simply some products that we take for granted are actually luxury products considering when they would have the right price and it should simply be put in one box because it is not fair that someone else pays the cost of our consumption of anything, it is not sustainable.

CHANGES IN PEOPLE

16. Have you noticed changes in people's habits, that desire to know where the things they buy come from? Changes in people, customers who are more aware of where their food, clothes, and other products come from?

This is definitely a trend. We are now implementing our Food web, which deals with the relationship between climate and food, intended for young people between the ages of 15 and 35, and realistically this interest is too great for our capacities. There should be more educators who have the support to educate, I think they would have someone to educate. That the number of people who want change in their lives is growing. The problem is if people have nothing to stick to their desire, if there is no example of good practice, then their desire either turns in some direction or simply remains a mere desire or is satisfied in a rather shallow way and that is a normal thing. So as long as we do not have a sufficient amount of examples of good practices that inspire people, that offer people something better, something different, we will have nowhere to manifest this strong desire for change in people. Now that this pandemic has started, people thought, now people will understand what is important, how important we are to each other, that this can no longer happen like that, etc. And I say that a good part of people have understood that, but you understand if their daily life is still ironed out according to some of the same principles as before, change won’t come. So until we build new rails that strong desire can run on, people will behave the same, because those rails have nowhere to go. It will not be tangible, it will be seen, we will be able to communicate about it, but it will not turn into practice.

17. What does the term good food mean to you?

We used the concept of a good economy before, so we wanted to promote an economy that is good for people and the environment, for employees, and for the local community. And then our good food is somehow a logical consequence of that because we actually think that without a good economy there is no good food. There can be no sustainable food system if a just and solidary social economy is not attached to it. So it's a play on words, some people told me that it wouldn't work in English, but from an early age, they teach us to be good so that word fits us.
18. How did you decide to establish your Green Network of Activist Groups?

So we are celebrating 20 years of existence this year, so we were founded in 2002. Otherwise, the property started earlier, the property is older. Because at that time we didn’t want to deal with bureaucracy and organization, it was more about the company of a bunch of young activists. So ZMAG came actually as a result of our experience that we still can’t build such a big thing as one huge education center on an informal initiative. So ZMAG, as an association, has actually become a tool for us to better achieve our goal. Especially in terms of educating other people, as we founded the Cooperative for Solidarity Short Supply Chain six years ago because we also saw a hole that exists for local food to reach customers faster and better and on fair principles as a result of our experience. That is why ZMAG was created and has been managing property recycling for 20 years now.

19. What are some of your most successful projects?

The biggest success is that we built that property at all, because we were kids and students with no money and mostly from the social sciences. So the very idea that we do something together, that we answer that magical question of a different world is possible and whether it is possible and whether we can build it. We had no money, we had no knowledge, no one knew how to hold a hammer in their hands, let alone anything else. Every two months we went through trauma due to some injury so when you put it all together our journey was very slow and that is our biggest success. The property was badly damaged by the earthquake that hit Banija and it shook us up a lot. This was exactly the resilience in practice, because it affected us differently. Some people decided to retire then, it was a huge shock to them. So we had that human earthquake and this real one, the property was closed for half a year until we rebuilt it the same with the help of volunteers and a lot of other people. So we said the same thing if we survived this, we will survive anything. Then all these other stories are followed by the highly developed education system we have, food cooperatives and we work very hard with construction. We teach people to build natural houses, we also taught that to ourselves, and today four people live from it. You understand professionally and can make a living from that job. If we had four more they too could make a living from that job, that’s what the demand is like. These are all some small successes that make us happy, and the fact that a story like this, where we are not related but we are friends and we work through the association has survived for 20 years is actually my greatest success.

20. Have you felt any changes in sustainability in the last 20 years of your group?

We who have been here for a long time see that things are changing in society. Sometimes they don’t change as fast as we would like, but a lot of things we do for future generations that they don’t have to start from scratch. To make it easier for them, because one day they will continue this story of ours, we will leave and I hope that they will build something even better and create something even better. Especially since it won’t start from scratch so life has taught me to work more and better and connect and network with other people the whole sustainability story is growing.

21. In what ways is your community trying to encourage sustainable living in Croatia?
We are often an inspiration and the beautiful situation happens to us that the student has surpassed the teacher. So a lot of people who we taught about some topics, from natural cosmetics, gardening, construction, surpass us which is actually wonderful. They have specialized in an area, many of them live from it now and they have surpassed us and to me, it is actually beautiful.

22. How do you measure the degree of sustainability of your property?

We measure our sustainability, and our social impact is measured because we act as a center of knowledge and this document will be published soon. Which I think is fine because we spend public money and it's okay to know how we spend it. Because it is a good tool where your social contribution to the common good is really measured. So not how much you earned, how much richer you got from it, who you damaged during that, but it really measures how you contribute to the common good with your actions, activities, and even business. So this tool is very great for us, it is quite well aligned with the goals of sustainable development, which is the current topic, so we learn to use it.

23. What do you do with the raw materials you produce on your property?

What we feed comes from small producers, what we produce here is not for the market but for our seed bank. On which we managed to make one small, decent seed bank. So we collect seeds and spread it, and for us there because we have a lot of public events and there are a lot of us. It is not likely that we will work for the market because there are just a lot of us and great, but again it would be great to have our food for us or some public events, it would be a nice change that we strive for. That seed bank, it's actually like a seed library, people borrow that seed, use it and return part of it to someone else, that's the point.

Interview 2

Interview questions

Introductory questions:

Name of the family farm: OPG Vizec Maksimilijan

Owner: Maksimilijan Vizec

Year of birth: 1971

Number of people on the farm: 8

Level of education: Higher education


Activities of the family farm: a) vegetable growing

b) fruit growing

c) viticulture

d) farming
e) livestock production (milk, meat or table eggs, other)

Size of the family farm: 75 ha

General information about the family farm

1. What are your motives for opening a family farm?
   We opened the family farms so that we can produce food and make some money from it.

2. What would you say are the biggest challenges in running a family farm?
   Fighting the weather and distributing goods are our biggest problems at the moment.

3. What would you say are the biggest challenges in opening a family farm?
   Acquisition of property if you do not already have it, finding the right people to run the business and cooperate and figuring out the purchase depreciation related to property and equipment.

4. Are you investing in the further development of your family farm (machinery, employment of people…)
   Yes, we are trying to continue investing to improve our business.

5. How flexible would you say you are in your business? Very flexible.

6. Is this your only source of income? No.

Sustainability

7. What is your opinion on sustainability? What does sustainability mean to you?
   Constant effort and work that must be invested in the business leads to the sustainability of the business. Constant attention to work is needed.

8. Would you say that your family farm is sustainable? Yes.

9. Are you financially viable (have you been able to make a living from selling family farms)? Yes.

Products

10. What kind of products and products do you have?
    Apples, cherries, corn, wheat, oilseed rape, strawberries, lettuce, watermelon, Christmas trees…

11. How are your products different from other people's products?
    They differ in that they are 100% domestic.
12. Are you trying to diversify your production and bring new species into your economy (organic production, permaculture)?

So far, we are only importing different varieties of existing products.

13. If you process your raw materials, why did you decide to process them? We do not process.

14. How did you decide which products you would have on the farm?

We focused on the demand that was present in the market.

Social aspect

15. Do you cooperate with the surrounding family farms and in what capacity?

We do not cooperate with anyone.

16. Would you ever enter into cooperatives with surrounding producers? No. it is simply not so easy to create trust among people and we believe in ourselves rather than depend on someone else.

17. How much do you think family farms affect the community in which they are located? Do they improve the quality of life? In the current state of the country, family farms are having a positive impact because there are fewer and fewer domestic producers, thus they are improving the quality of life because people eat Croatian products.

The role of public institutions

18. How and have the incentives from the EU enabled you to progress and innovate in family farms? We haven't had an incentive yet.

19. How important do you think family farms are in food production in Croatia?

Strong because there are fewer and fewer of them and there is less and less quality food.

20. Would you say that Croatia helps you in the sustainability of your economy?

Very little, it is not anything tangible that they are providing, we think they could do more.

21. Have you heard of any EU schemes to help family farms?

To a very small extent, not enough to want to be involved in any of them.

22. Does the state give you guidelines on how to take advantage of incentives? No.

Sales channels and sales

23. How do you sell your products? We sell are products through wholesale and retail.
24. Do you use a sales agent? Sometimes in retail, when we need extra help to find the right customer.

25. Have you thought about selling in some of the local, neighborhood stores (Grga Čvarak, Mrkvica)? No.

26. Did the pandemic lead you to other ways of selling? No.

27. How much does your size affect your sales, do you plan to expand?
   It affects a lot and we plan to expand because at the moment we can’t even sell anymore given the amount we produce.

28. Have you thought of selling your products outside of Croatia? Yes. But it has stayed only as a thought, because of our size.

29. Have you heard of sites like Finoteka.com or Burza hrane.hr? No.

30. How easy or difficult was it for you to enter the market? It was very difficult to break through due to a lot of competition.

Customers

31. How much do you think the pandemic affected customers and their way of buying food? The pandemic had a lot of influence.

32. Have you felt any changes from customers (focus on healthier foods, where they buy their groceries)? Yes, in the pandemic, to a lesser extent, they started buying more domestic products.

33. How important is it to your customers to know where food comes from?
   It doesn't matter to most, but to those who do, it is important to them that they are of domestic origin because they are healthier.

Do you sell your products: a) to a known customer (contracted production)

b) on the free market? Both.

 Interview 3

Interview questions

Introductory questions

Family farm name: OPG Filip Hlebić

Owner: Filip Hlebić

Year of birth : 1992

Number of people on the economy: 4.8 seasonal more workers, have a season of 280 days
Level of education: High school

Year of opening of the family farm: 2012.

Activities That the family farm engages in: a) vegetable gardening
b) fruit growing
c) viticulture
d) farming
e) livestock production (milk, meat or consumer eggs, other)
f) beverage production, spirit drink
g) production of wine, juices and winter products

Opg size: 10 ha vegetables, 3ha vineyards

Location: Jastrebarsko

Amount of annual production (indicative figures are fine): 140 tons of vegetables

About family farm in general

1. What are your motives for opening a family farm?

I quit my job at a middle school, I was a teacher of music there because I wanted to be an entrepreneur. So the desire for entrepreneurialism. I had some land around 2 ha, and I kept buying as I expanded. Now my whole family's with me on the property and that's what we do.

2. What would you say are the biggest challenges when running a family farm?

So simply as with everyone, production and sale, finding enough capital. You have to do everything together, produce products and be the manager, the sales, you have to do all the jobs all at once.

3. What would you say are the biggest challenges when opening a family farm?

EU funds are a problem, to even find out all the incentives that exist, to find out how and when to apply. The opening itself is not a problem, the whole set to open the family farm takes maybe half an hour and that's it you have an open family farm.

4. Do you invest in further development of your family farm (machinery, human employment...)

In a market like it is today, either you're growing or you're going to fail, you have to invest all the time, I'm constantly investing something, I still want to produce more products and grow my business.

5. How flexible would you say you are in your business?
Quite flexible, you could see it at the time of the pandemic, we were the first in Croatia that started making deliveries, so even before some sites appeared, we were already doing it.

6. Is this your only source of income?

No, I do a lot of things. I have a café in front of which I sell my products, so catering and playing in a music bend are my other two sources of income.

**Sustainability**

7. What is your opinion on sustainability? What does sustainability mean to you?

To be able to reach the final customer without a manager and a percentage, therefore perform everything alone without any intermediaries, from start to finish that closed circuit.

8. Would you say your family farm is sustainable?

Of course.

9. Are you financially viable (have you been able to live on the sale of family products)?

We are now financially sustainable. I think it took me somewhere from 5 to 7 years, within which I was actually seeing if it was all profitable and definitely now it is. It’s just that it wasn't easy to get there, it took a lot of work to get to that point.

**Produces**

10. What type of products and products do you have?

We have everything from winter food, salsa, ajvar, jams, pumpkin oil, and a large variety of vegetables, and fruits

11. How do your products differ from other people's products?

Our products differ in the varieties themselves, which are domestic and with this region, they are indigenous to the area. Next we have recipes for jams and salsas, and for ajvar which are old traditional recipes. That's what I say all the domestic stuff, local stuff, and it needs to be appreciated. And that of course these products are fresh, and all the products made from our raw material are good, and they bring more profit for us.

12. Are you trying to diversify your production and bring new species into your economy (organic production, permaculture)?

What actually is organic production? So it's very important what eco-production means, someone who eats eco, may eat greenhouse grown tomatoes in January when they're not even
in season. And now I wonder if it's even realistic. I know a man who's been certified for organic garlic production, and his field is right next to the busiest road in the region, I'm not really okay with that. But as far as processing goes, we plan to do it, have eco-products, and get certificates for them that will be part of the packaging.

13. If you process your raw materials, why did you decide to process it?

Because there's more profit, so if I try to sell some kind of raw material, lets say peppers, I can sell it at 10kn/kg, and if I process the same into ajvar, I can sell it at 80kn/kg, and it has a longer standing period. So I'm already earning more with it. Another reason is because we're independent of no one, so everything we produce and do. In addition, there is no waste in this way of processing and production, as everything is processed or if any residues of residues remain after the products are used as fertilizer.

14. How did you decide which products to have on the farm?

According to market demand, we looked at what was required and we produce what is missing, which can be seen from our large range of products.

Social aspect

15. Do you cooperate with the surrounding family farms and in what capacity?

Yes, we cooperate as much as we can in the procurement of raw materials and machines, if we don't have to do something separately and we can both use why not.

16. Would they ever enter cooperatives with surrounding manufacturers?

No, maybe later in the future, but at the moment no.

17. How much do you think the family farm affects the community in which they are located? Do they improve quality of life?

Well, look, I employ 12 people, so that's 12 people who take that money home to a family, that's 12 families who are fed and funded so to speak. So you'd say it's a positive effect because people have something to live on.

The role of public institutions

18. How and have EU incentives enabled you to thrive and innovate in the family farm?

So we were able to develop with these incentives, because we submitted projects. Currently, 2 projects have come to fruition and two are still on hold. One of the projects now is for further development in making jams, where the production and capacity of it needs to be increased again, and that's where incentives as such come in great.
19. How important do you think family farms are in food production in Hr?

Unfortunately, I would say that only 20% of Croatian food that is on the market comes from domestic production, so at the moment I would not say that they are too important which is regrettable. Honestly, I think that if Croatia stopped importing food I think that we would last only three months with what we produce, and we have so much fertile land, you just have to work and have the will to develop it.

20. Would you say that Croatia helps you in sustaining your family farm?

It's very poorly done, if we don't take care of the market ourselves, so we find some of our customers, neither will the state.

21. Have you heard of any schemes by the EU to help family farms?

Yes, I heard something. But I can't do anything about it, because you can't follow the funds and the schemes yourself, and write plans for it while you're still running the family farm, so I'm paying two firms that follow my different funds and incentives that come out so I could apply for them. I'm still young, and it's hard for me to keep up with all of it, so I don't even want to know what it's like for older family farm owners. I have an understanding of it, and it's still hard to keep up.

22. Does the state give you guidance on how to take advantage of incentives?

So guidelines are given on how everyone benefits both the state and the intermediaries, and that helps us manufacturers the least.

Sales channels and sales

23. How do you sell your products?

We primarily sell at four stalls, separately from that we sell on the farmers markets in Zagreb and Karlovac. After that, we have deliveries for caterers in the area and in the elementary schools of Zagreb County with whom we have been working for many years.

24. Are you using an intermediary involved in sales?

We do everything ourselves anywhere, we have a pretty big team and we're all involved so we get can get everything done. But it never stops, so it's done from morning till night, that's the only downside. There is always something to do on a family farm.

25. Have you considered selling in some of the local, neighborhood stores (Griga Čvarak, Carrots)?

No, so again, I like to do everything without an intermediary, if I can do the job alone and find customers, why would I pay someone else for it.

26. Has the pandemic led you to other ways of selling?

So when the corona started, a large number of goods started to pile up and so I put a purchase orders paper on our Facebook page for people to fill out and then we delivered goods to them.
in the area of Zagreb and Samobor. After that, HRT (National Television) filmed us for this, they posted the video and then other websites started to sell in this way, and that progressed from there. We had all together 18 people, with nine vans taking orders, remember we were the first to start doing it. Now we don't do it anymore, the problem was also from drivers who didn't pay attention to what that delivery stuff looked like and then maybe some of them complained and spoiled your reputation, and it's not really your fault. When you are the owner you are more attentive to details like that, and a person who delivers has only one job and he thinks he did it, regardless of what the vegetable looks like upon arrival.

27. How does your size affect your sales, are you planning to expand?

We would like to expand even more than now, as I said before, the ultimate goal is to progress as much as possible, that was my wish that's why I started doing this business.

28. Have you considered selling your products outside Croatia?

So I'm currently exporting out to Italia, people who then resell that raw material further. So they resell it further to the Italian market or where there is demand.

29. Have you heard of sites like Finoteka.com or Burzahrane.hr?

They called me from such sites when they started them but I gave it up, because they don’t work for the manufacturer but for their benefit, they care about lowering the price as much as possible and not about the quality. And from now on I decided to do everything myself, I plan to open my own page through which customers will be able to order products.

30. How easy or difficult was it for you to enter the market?

It was very hard, the market prices of products are low and quantity of supermarkets is large, and to enter the market in that condition and find your customers is very difficult too.

Covid-19

31. How much do you think the pandemic has affected customers and their way of buying food?

It didn't affect the customers, the people who shopped at family markets or OPGs still shopped there when the pandemic started, I didn't feel any change. To those people family farms who have managed to continue their sales during the pandemic, there was a difference. So to me who's younger and who's been able to handle technology, but not family farms that are over 65 and onwards. They struggled during the pandemic.

32. Have you felt any changes from customers (focus on healthier foods, where they buy their groceries)?

Let's say that our country has become stupid in some sense, people are uneducated in terms of how seasonal food is eaten, what products can grow into which season. They want cherries or
tomatoes when it is not at all possible for them to grow, in the middle of winter for example, and they think they are eating healthy.

33. How important is it for your customers to know where the food comes from?

It’s important, that’s why they come to me. With me, prices are always higher than in supermarkets, if they want something cheap which will be substandard, they can always go there. When they buy from me they know that there is a higher price but they also know that they are getting quality products and that this is part of the price. So if something in Konzum (a Croatian supermarket) costs 4 kuna a kilo, with me it will be 9 kn a kilogram, but customers know that they get a homemade product and where it was grown and everything, what was used on it and so on.

Do you sell your products: a) to a known customer (contracted production)
b) on the free market?

Interview questions

Family farm name: OPG Patrik
Owner: Patrik Sračić
Year of birth: 1973
Number of people on the farm: 4 adults, with two students
Level of education: secondary professional qualifications
Activities That the family farm engages in: a) vegetable gardening
b) fruit growing
c) viticulture
d) farming
e) livestock production (milk, meat or consumer eggs, other)

f) beverage production, spirit drink

Size of family farm: 1 hectare of vineyards, usable for the production of brandies, do not have their own land, but buy raw material

Location: Jastrebarsko

Yearly production: around 20,000 litres of various alcoholic beverages

About family farm in general

1. What are your motives for opening a family farm?

Incentives were part of the reason for the opening of the family farm. We opened the company itself for business, it is the only part of our income and we decided to engage in entrepreneurship.

4. What would you say are the biggest challenges when running a family farm?

So the biggest problem would be the state administration, its quantity and the management and filing of all these papers.

5. What would you say are the biggest challenges when opening a family farm?

At the very opening, there were not too many challenges, the opening itself is over quickly.

25. Do you invest in further development of your family farm (machinery, human employment...)

Yes, so practically from day one most of the profits go to that, and every year at least one machine is purchased or here, for example, last year was a distillation boiler, so always something. Now we are in an investment, we are making new office space to facilitate logistics, and that distillates can stay along so I say yes always to the investment, and more or less the largest part goes to investments.

27. How flexible would you say you are in your business?

We are quite flexible, since we are not some bigger entrepreneurs but rather a smaller one, we are very flexible. So pretty much the customer determines the bulk and shape of the packaging and all the things together, so I would say we are flexible to the maximum. Sometimes it's an advantage and sometimes it's a disadvantage. Customers know how to take advantage of that, both small and large, it makes no difference if you work with a big chain and it uses that flexibility of yours very much, to set unrealistic conditions.

28. Is this your only source of income?

That's the only way we make our income, that's all we do.

Sustainability

21. What is your opinion on sustainability? What does sustainability mean to you?
Sustainability is very, very important. And sustainability in all aspects. For example financially if we are not sustainable then we fail. Environmental sustainability and this circle of sustainability motivates us completely, the situation with these climate changes. We try to be as environmentally conscious as possible. So there's some viable circle if that's what you mean. This usability and circular production itself led us to the work which we are doing today, because we started producing wine. Brandy was essentially a by-product of wine, so after pressing the grapes we got pomace and from that pomace we first started producing brandy. It wasn’t the first product, actually another extra product of wine itself, and it's part of that story about the maximum usability of everything. So from the waste, we made a complete new production so that in the end we gave up the main production (wine) and dedicated ourselves only to this other, meaning brandy.

22. Would you say your family farm is viable?
I do.

30. Are you financially viable (have you been able to live on the sale of family products)?
And we're financially viable, too, we've been able to feed three kids through it, so.

Products

23. What type of products and processed products do you have?

Only brandy and liqueurs, currently there are 14 varieties. In our assortment we currently have brandies Viljamovka, Sljiva brandy, Komovica and Travarica. Also liqueurs made of honey, blueberry, cherry, walnut, orange, lemon. As novelties, I want to highlight our Gin and our champion liqueur Teranino.

24. How do your products differ from other people's products?

Our production is some kind of boutique production, so we're not industrial producers. We produce smaller quantities, and I believe that these are even better than of these industrial large producers and that's some kind of difference. We're trying to be of maximum quality.

8. If you process your raw materials, why did you decide to process it?

Because of the waste that was left over from the wine, we decided to do the processing and that is how we started distilling brandy.

29. How did you decide which products to have on the farm?

We do our market research and we actually follow trends and what is required in the market, and we try to adapt with that. Each product goes through some developmental phase of its own after which we decide if we are capable of doing it well or not. Sometimes it turns out that we are all satisfied, we as producers, and our customers who try it, after we do some
tasting tests, and sometimes we give it all up. We've had cases like that and we weren't happy with the quality and we just gave up on the product.

Social aspect

2. Do you cooperate with the surrounding family farms and in what capacity?

We cooperate, so we buy raw materials mainly from them. Since we do not have a satisfactory production of the fruit that we need for processing on our own. Let's say we need plums as a fruit for brandy, since we don't have plums we buy from family farms that have surpluses to sell. So we buy on the territory of the whole country. We buy wherever it is available, from Slavonia to even Hvar (island on the coast of Croatia) we buy some things from there, practically the whole country. We have a partnership with them.

3. Would you ever enter cooperatives with surrounding manufacturers?

It wouldn't be bad, but our people don't have an awareness of what the cooperative carries yet, and it can't pass in our country. Here's my assessment, maybe I'm wrong, but that's what I think. People needlessly associate it with another system (the old Croatian one, Yugoslavia). Cooperatives exist, for example there are a lot of cooperatives in Italy, but I don't believe it would work for us.

3. How much do you think the family farm affects the community in which they are located? Do they improve quality of life?

Yes, they have a positive impact. They can keep the local community alive and viable.

The role of public institutions

6. How and have EU incentives enabled you to thrive and innovate in the family farm?

We didn't have any incentives, no. Primarily as producers of spirits, we are mostly blacklisted in terms of incentives and pretty much all these actions that come, pass us as producers. Because it's alcoholic beverages, whenever some kind of proposal comes in, some kind of loan, or some kind of subsidized means it doesn't apply to producers of spirits. As much as we don't get, that amount winemakers get, it really means who's into winemaking if they complain about government subsidies or any subsidies I don't think is okay. Because the state has really invested a lot, and every year there are wine envelopes, incentives for planting vineyards, for the reconstruction of vineyards. There's really a lot of incentive for them. But we distillers, on the contrary, have almost nothing. Brandy is also a traditional product, it should be considered as such. Here I have to admit through the '90s, brandy was considered not very popular, but it is now recently experiencing some kind of boom, a gateway to the market, and to me more people respond positively to brandy, from catering to commerce, it is
part of the tradition, but we are overlooked as guardians of this tradition. Sometimes we jokingly about waiting for a minister, which is going to finally invest in a distillery

30. Would you say that Croatia helps you in the sustainability of your family farm?

Why as far as we're concerned in producing spirits, I'd say no. On the contrary, we are the first on the impact when excise duties are raised, we are quite, we are not very encouraged to develop. So we also get a higher tax, a special tax on alcoholic drinks. So we pay excise duty, i.e. tax on alcoholic beverages, we pay according to the share of alcohol in each drink. For example, one herbal brandy which has 40% alcohol, excise duty on it, at 1 liter is 24 kunas that I have to pay. I have 30 days where I have to pay for it, whether I sell it or not. And in the price structure, it means my manufacturer price +excise duty+VAT. We are heavily burdened, with VAT also being calculated on the amount of excise duty. A large part of the prices of alcoholic beverages themselves go to payments to the state, even in some cases 50% of the sale price on the shelf. We are already quite tense because the prices of all inputs, from packaging, to the most basic energy products important in production, are rising. The raw material is also likely to grow, we will know about that when the second harvest comes, we do not know yet how it will be, because all inputs in fruit products are also growing.

Do you currently hold any labels for Eco labels?

We don't have any Eco labels at the moment, because we don't produce most of it ourselves, so most of our processing is taken to the raw material we buy. And it is quite difficult to find organic goods because the producers of the fruit itself are not licensed, it is a great expense and people fail to charge for it more later, so the cost of the label outways the profit they can make because of it. At one point we were negotiating, we were going to order from an organic producer of grapes, and we would then continue to process it, distill that pomace into an ecological distillation but it didn't happen.

31. Have you heard of which schemes by the EU to help family farms?

No

32. Does the state give you guidance on how to take advantage of incentives?

They do not, as I said earlier, some incentives don’t even involve us, they mostly bypass us as liqueur producers.

Sales channels and sales

11. How do you sell your products?

We have been operating for quite a long time and initially we used an intermediary, this was our main sales system. In the meantime, we have managed to fight and we are trying still to grab a larger part of the market. We sell through big supermarket chains, Spar and Plodine, big chains, and we are here in direct sales and contact with them. They take more than half our production, we sell the rest through some small trading on the coast, so in the tourist season we sell this second part left of our production. And we sell something directly ourselves in Horeca, a chain of hotels and restaurants. The customers don’t come to us physically, but with this new facility that we are planning, we are hoping for it. We planned to
join the wine road that has been developed with us in Jaska and Plješivica area, so we have an idea to get involved with our distillery. I think it's slowly going to work, some good manufacturers have crystallized here and we're going to try and join the sales system on our doorstep. This would reduce our cost and achieve a better price for the product. We're heading in that direction.

12. Are you using an intermediary involved in sales?
No, as I said we used it at first when we started the company, but now we do everything by ourselves in terms of sales.

14. Has the pandemic led you to other ways of selling?
No, nothing's changed for us. We did try setting up a web shop in the past, but that was before the pandemic. However, we realised we do not need a web shop for Croatia. With the notion that we are in the supermarkets and that customers can more or less get to our products through those channels. And the very idea of the web shop was to cover Europe as a market for us. So we had cases where people contacted us when they bought and tried our products as tourists and wanted to buy it through the web shop. However, since our product is an excise product and it carries this excise duty in itself and in Europe, we are not allowed to sell in Europe. So we would have to have an representative in Germany, for example, who would take over the excise duty, and that complicated things for us and we gave it up. I don't know what amount of sales would make it profitable, because we didn't go through with it in the end, but it's not as easy as we imagined it to solve this excise duty from Croatia. So if someone from Austria ordered it, then the excise duty had to be paid to Austria, if someone ordered it in Poland, they would have to pay it in Poland and for us it's just too much of a problem that is not worth it. Again we are a small manufacturer, not a large one so it will be a couple of hundred or a thousand liters so that it does become profitable. The best-selling product depends on the season, but anything from plum brandy, to honey liquor. Last year we started making gin whose sales are going good, terranino as well, herbal brandy when it's tourist season, we don't have just one product that is the main, pretty much everyone is on an equal level.

17. How much of your size affects your sales, are you going to expand?
We have offers for more and there is a demand, however again it is not like me to hastily do an expansion, it does not seem good to me if it happens too fast, but we are expanding slowly from year to year, but not too abruptly. But that there is room to increase production and sales, there certainly is.

19. Have you heard of sites like Finoteka.com or the Burzahrane.hr?
Not I haven't heard of those webpages, but look, I've been looking at these other webshops, but I've never met anyone who knows a lot just about selling strong drinks. All those shops are more or less based on wine sale, there is practically zero excise duty on wine, and wine is relatively easily sold within the EU. We sell products within Croatia relatively easy, so I didn't have that much need for webshops while selling in Croatia. But if there was a good
partner who took care of that part himself, I wouldn't mind getting involved in it. I have no problem with anyone sharing that profit, but then it's legally well done, and all areas of that type of sales are covered.

26. How easy or difficult was it for you to enter the market?

I must admit that it was not too difficult at the beginning, just finding customers was not as difficult as the logistical problems that I never expected to become problems. For example, packaging and stuff like that, just positioning myself on the market, maybe I got lucky, it wasn't that much of a problem. It used to happen to me, when we entered into a relationship with Spar, it was our first retail chain and then suddenly problems started to appear like there were no more of those bottles that we use for packaging, which I didn't expect. Because I thought it would be a problem to get into the chain, and get used to their system because it was different than I imagined, but over time we learned and now it works well. I mean problems that when you are a small producer we didn't know about. That when you got into a serious system, you had to have an insured amount, we struggled a little bit but we got through it. We work directly with Spar, deliver it to their central warehouse from which they distribute it to their supermarkets. Same system with Plodine (other supermarket). We worked with Konzum for a while, but there was no central warehouse with them, they asked us to make deliveries to their stores and we couldn't do that. We succeeded for about two years, but they didn't pay on time, and that's why it failed, it demoralized us, we couldn’t wait for the contract to expire. Even though it's a great chain, sales were going well, goods were turning fast, but I say everything else was bad.

**Covid-19**

15. How much do you think the pandemic has affected customers and their way of buying food?

At first it definitely did, we've had a drop in sales, obviously some fear was present with buyers. You need to know that our products are a luxury. So you can eat lunch without drinking brandy, it's important that you have bread and essentials. We were having a drop in sales due to the bars being closed, which have not been opened during lockdown. However, within about a half-year delay it has returned to normal, we have not noticed any further changes. Even with the tourist season, it turned out it was quite a good one, so no losses there as well. The tourist season is important to us, that first 2020 was slightly worse, but still not scandalous, 2021 was good, one of the better ones at the level of 2019 which is great, in terms of sales. We sell something in the season as souvenirs, and something just to drink. We also sell more to restaurants on the Adriatic coast and restaurant around Zagreb, not so much to hotels.

20. How important is it for your customers to know where the food/products come from?

I would honestly like it to be more important to them, because we try to describe in our product where everything comes from. If its a herbal brandy, we will try to write where they picked the grass that goes into it. Some come from the island of Krk, some are harvested on Hvar and so on. I'd like a little more of that to come from the customer, that ther interested in
the origin of the raw material, but that hasn’t happened yet. They care that it is a Croatian product and I am glad for that, but it would be better if they went into the origin in more detail. For example, with this new product Terranino, with which we are champions now in an exhibition that was in the organization of the Economic Journal and the Faculty of Agriculture, I described the whole process, to the last stage of the manufacturer, from the one who grows the Teran variety. I described the village from which it comes from, so that those details can be appreciated and possibly raise the value of the product. We're negotiating with Spar currently actually on the sales of Terranino, it's hard for us to do meetings. That's some problem with the epidemic, they haven't had meetings in a year, they’re afraid of infection and stuff. I've been trying to get to the meeting for a year now because you can't present a drink through the e-mail. That's one problem the pandemic has brought us.

Do you sell your products: a) to a known customer (contracted production)  
b) on the free market ?

Interview 5

Interview questions

Introductory questions

Family farm name: OPG Maretić
Owner: Dragica Maretić - Dečina
   Age : 1956.
Number of people on the farm: 5 who work and carry out activities on the estate
Level of education: Housewife
Year of opening of the family farm: 1995.
Activities That the family farm engages in: a) vegetable gardening  
b) fruit growing  
c) viticulture  
d) farming = production of feed for cows (not sales, alone for food)  
e) livestock production (milk, meat or consumer eggs, other) = cheese And cream (otherwise it must be opened with cheese)
Family farm size: up to 10 ha
Location: Kupinečki Kraljevec
About family farm in general

1. What are your motives for opening a family farm?

My mother-in-law opened it up to survive, there was a need because there were costs - and they had the initial resources - meaning land and land processing capital. They were forced to because they were in a rural area if they didn't use it, they would be able to make a living.

4. What would you say are the biggest challenges when running a family farm?

Well, I'd say inability to take time off, so working hard. They're there 24 hours a day and they can't leave. In the summer as the days are longer, then the working day is longer. This actually reduces their ability to go to some further educations because they are tied to their land. And because of your age and because you are engaged in physical work there is no time to go through educations, to make labels, and documentation. So the documentation should be filled out online, watched if any tenders have been published and they just don't have time to do it. Under incentives they have additional bureaucracy, there are files for cows as if you are at a doctor's office, with whom the cow was fertilized, when was she born, how many times she was inseminaed, etc.

5. What would you say are the biggest challenges when opening a family farm?

They had no exaggerated obstacles, because they had conditions met before opening, previously mentioned resources such as the country and that initial capital. The big problem was actually the infrastructure in the place that was not organised at all, so the issue of sewage, gas and heating was not solved, while in fact they dug and financed the plumbing pipes themselves.

25. Do you invest in further development of your family farm (machinery, human employment...)

They do everything themselves, without buying new machines and without hiring people who do not live on this farm and are not family, that is why there is a limited number that they can produce because they do not want to bring anyone in further.

27. How flexible would you say you are in your business?

We are not that flexible because they must be constantly on that property, in that sense. But for example, it was easy for us to turn to orders from people on the Internet during pandemics, because there are few of us and we can organize more easily.

28. Is this your only source of income?

So the owner's husband, my father-in-law had another source of income, he was driving trucks and buses. But that's all my mother-in-law did, she was a housewife and worked on the economy. While everyone else living on the property, except children of course, are having secondary jobs that they do, and jumping in as needed to help on the farm.

Sustainability
21. What is your opinion on sustainability? What does sustainability mean to you?

So I think sustainability is simply a way of life for family farmers, they have no need for waste management, because everything is circularly used on the farm. If something remains of the product it goes to the household, and as for the waste that was mainly given to animals as food.

22. Would you say your family farm is sustainable?

Everything is actually used, food is thrown back to the pig, as a biowaste, and as for the paper it is actually burned because they use a burning furnace to heat them self. Cleanliness as a government service does not come to them at all because everything is usable and they live and work with what they have on the property. So yes I would say they are sustainable.

30. Are you financially sustainable (have you been able to live on the sale of family products)?

So they meet their needs by selling their products, which they all manage to sell.

Produces

23. What type of products and products do you have?

They have milk from which cheese and cream are then obtained by processing or pickling, which are recorded as the primary activities of the family farm.

24. How do your products differ from other people's products?

Now I think the answer to that is freshness. People like to see this fresh product because people like to come to their doorstep and collect their products, and make a trip out of that shopping. To see what the farm looks like and how. They also sell on the farmers market in Zagreb, where we go once a week.

28. Are you trying to diversify your production and bring new species into your economy (organic production, permaculture)?

No, because they are already people of age and they simply work the way they work. Their production is eco but it is not worth taking some labels (EKO; let's buy Croatian) because those labels all need to be invested in, and for the amount they produce it is not profitable for them to try to obtain them.

8. If you process your raw materials, why did you decide to process it?

When they opened the OPG, it was written down as cheese and cream sales, and for further development, as just selling milk they would have to invest extra, and open the cheese factory according to the regulation with all the instruments and conditions necessary for it.

29. How did you decide which products to have on the farm?
Since the 1980s they had cows for their own purposes, meaning one to two cows, and then they realized that they were left with a surplus as the number of cows grew. Then they realized that they could sell excess, they went further with the purchase of milkings and the simplifying of the process of milking cows, so they moved on. So in that sense they actually did invest in the production.

**Social aspect**

2. Do you cooperate with the surrounding family farms and in what capacity?

   Grandpa buys from other family farms young cows, insubordinates through an epreuvete, he does it all himself, and when he needs the help of a veterinary man then he jumps in.

3. Would you ever enter into cooperatives with surrounding manufacturers?

   There’s no mention of anything, and there’s nothing going on about it, they know how to make arrangements but informally. They were planning to buy some expensive machines together, however when they all needed it at the same time it could hardly be shared, so they gave up. It depends a lot on the weather so they can’t even plan in advance when they’re going to do what, and when they would need the machinery. Its very hard to plan, because you depend on weather conditions a lot.

3. How much do you think the family farm affects the community in which they are located? Do they improve quality of life?

   It affects them because they receive money and additional income from incentives so they can survive in the local community, but some additional activities and cooperatives do not exist.

**The role of public institutions**

6. How and have EU incentives enabled you to thrive and innovate in the family farm?

   If we did not have them, I do not know if any of this would work, and it would be unsustainable, unprofitable, because the price of input is much higher than the price of output. So the prices of the additional raw materials they use have gone up, for example fuel from 3 to 8 kn, and the price of the cheese they sell has not gone up. Although they have preferential prices for fuel through the family farm card this price is still high. But for me that is a real shame, I think that family farms should be able to survive solely from the profit they make from selling their products, not depend on incentives. The conditions that are under incentive must be met, each cow has a number under which it is regulated, so that if ever someone comes to check, everything is in writing.

10. How important do you think family farms are in food production in Hr?

   I would say they do not even have importance, because the penetration from the outside is too great. I think we should develop homemade food that naturally grows in the area for the sake of people, because people would then eat what they were meant for in the area and appreciate
more what is produced. A man works 24 hours a day, and he can't live like a normal man, nor make an honest pay from his work, because it is not appreciated.

30. Would you say that Croatia helps the sustainability of your family farm?

No, except with incentives, no other education or additional help is offered. However I think that in fact the incentives are in some way unnecessary, it would be better if one could live only on what is produced and sold, but because of these penetrations, the prices are so lowered that it is now impossible.

32. Does the state give you guidance on how to take advantage of incentives?

Nothing happens about it, it would be great if there was some kind of information desk, or people who would come to local places and explain the process, as I said it's a 24-hour-a-day job and they don't have time to look around the ministry's website to apply for something and see if some new competition opened up. A man comes who does milk control, so they get some sources of information from him about new incentives, however this is all secondary information and is not a real example of how the family farm should get information.

Sales channels and sales


We sell everything themselves, before she got sick my mother-in-law went to the farmers market once or twice a week to sell, and the rest are sold on the doorstep, so people call or come to collect the cheese and/or cream they wanted.

13. Have you considered selling in some of the local, neighborhood stores (Grga Čvarak, Carrots)?

I've heard of them as shops, but we've never worked with anyone, it's a small family farm, so very little is relatively produced, and what is left as a surplus it's consumed in the household. There's not too much leftover of products.

14. Has the pandemic led you to other ways of selling?

The pandemic led to the online marketplace of the City of Zagreb, the husband and I ran it, because grandparents are not so informatically ready, and they did not even know how they could run it with orders. We would put the photos of products up, the customers would choose what they want. We really liked this way of sales, however grandma and grandpa on their own wouldn’t be able to do this. For us it was an opportunity because then people who did not even know about us started using their products, because they heard about it through the online marketplace. During the pandemics in the online marketplace, we would get orders for online with addresses, orders would placed two days before and on the third day delivery would be made, I liked that very much, what you loaded, you would sell it, you were insured that everything would be delivered and sold, as opposed to when you sell at the farmers market where you can happen to be left with surpluses.

17. How much of your size affects your sales, are you going to expand?
No, it is what it is and will remain so, we are selling within our production capacities, how much they make of cheese and cream that's what they sell. The grandparents are older now and we're not sure if we want to continue the family business after them.

18. Have you considered selling your products outside Croatia?

No, because we don't have that amounts to do that. As I said we are quite a small family farm.

19. Have you heard of sites like Finoteka.com or the hrane.hr Exchange?

I've heard of them, but we don't have enough merchandise to market. From the farmers market sales and the sales on the doorstep we get rid of everything, sometimes there's even a shortage of goods.

20. How easy or difficult was it for you to enter the market?

So doorstep buyers have been customers for a long time who would find our products on the farmers market, then they take our number and call us if they are in the vicinity. They ask if we are home, and they would say that they are close by our family farm and it's easier for them to come by. Which is also a problem because we are not free at all times of the day, sometimes they are with cows, so I can't just go out and prepare the product for the customer.

Covid-19

15. How much do you think the pandemic has affected customers and their way of buying food?

It made no difference for us, even the market expanded for us because more people heard about us across the online marketplace. It was the simplest thing for customers to come to us, not to have to spend on transportation, where the customer can stop at the farm and drink coffee, tour the barns where the cows are and try other products that are present on the estate and are not for sale because they are not in the family farm system.

16. Have you felt any changes from customers?

There is a growing awareness of food, which is due to various emulsifiers and allergies that are increasingly occurring. So it's more important to the people that the food is homemade, so it's important to everyone where their food comes from.

20. How important is it for your customers to know where the food comes from?

It's important for them to know where the food comes from, it's cool for them to see where the animals come from, sometimes when they take their children with them, they actually make a
trip from the day on our farm. So even the kids can see animals for the first time, and see how things are made.

Do you sell your products: a) to a known customer (contracted production)
b) on the free market?
sales on doorstep and on the farmers market

**Interview 6**

**Interview questions**

https://www.tzgj.hr/hr/sto_kusati/plesivicki_vinari/8-opg_ciban.html

**Introductory questions**

Name of the family farm: OPG CIBAN
Owner: Irena Funčić
Year: 1973
Number of people on the farm: 3
Level of education: university: 2007
Activities of the family farm: a) vegetable growing b) fruit growing
c) viticulture YES
d) farming
e) livestock production (milk, meat or table eggs, other)
f) production of beverages, spirits
Size of family farm: 20 ha
Place: Pavlovčani, Jastrebarsko
Quantity of annual production (approximate figures are in order): grapes 50 tons
General information about family farms

1. What are your motives for opening a family farm?
Survival of the village and agriculture, keeping the son in the rural area, tradition.

4. What would you say are the biggest challenges in running a family farm?
Survival of the family farm, ie survival. Making a living out of what you do.

5. What would you say are the biggest challenges in opening a family farm?
Resolving administrative requests of the ministry in charge of opening family farms.

25. Do you invest in the further development of your family farm (machinery, employment of people…)
Yes, we follow tenders and measures, we have switched to an ecological way of production. So we try to always invest in order to insure our survival.

27. How flexible would you say you are in your business?
We are as flexible as we have to be because we depend on the weather, the desires of the market, and new challenges like the corona pandemic and its lockdowns.

28. Is this your only source of income?
No. We also own an estate in which we provide tourist services, and tastings of the wine we produce. We bought it in 2004, and from there renovated it in 2009. So we try to make sure that we don’t just have one source of income.

Sustainability

21. What is your opinion on sustainability? What does sustainability mean to you?
Sustainability is that all the conditions are met as in the EU, ie if the owner of a similar family farm in Austria can function and work normally with the support of the state, then according to sustainability we believe that we in Croatia should be able to survive.

22. Would you say that your family farm is sustainable?
Yes, with great effort. But we are able to be sustainable, it is a lot of hard work to make that happen,

30. Are you financially viable (have you been able to make a living from selling family farms)?
Yes, but again with difficulty.
Products

23. What kind of products and products do you have?

Grapes and wine that we produce from them. We have many different varieties of wine, and different varieties of grape that are local to our region.

24. How do your products differ from other people's products?

Quality. That is the number one thing we try to orientate ourselves towards, that everything we produce, whether wine, grapes or we have people who are staying with us, that they fill satisfied with the quality of their stay after that.

28. Are you trying to diversify your production and bring new species into your economy (organic production, permaculture)?

Yes, we switched to eco-production. Because we thought in that way we can attract even more customers, and it is more and more appreciated within the wine industry, and more sustainable.

8. If you process your raw materials, why did you decide to process them?

We get a better price with wine, that was the reason we decided to produce it. And also our family has been native to this area for a long time, so its part of our tradition to produce wine.

29. How did you decide which products you would have on the farm?

Our products are dictated by the culture we have, and our culture is dictated by the location of the family farm.

Social aspect

2. Do you cooperate with the surrounding family farms and in what capacity?

We cooperate, we sell grapes to other family farms, and we buy cheese and similar domestic products from local family farms. In this way we get something from them, and they get something for us, its important that we as family farms support one another, with what we produce.

3. Would you ever enter into cooperatives with surrounding producers?

In cooperation yes, in cooperative no.

3. How much do you think family farms affect the community in which they are located? Do they improve the quality of life?

Yes, because of the turnover of goods and money. There is some business that is then present in the area, which leads to more people being employed.

The role of public institutions
6. How and have the incentives from the EU enabled you to progress and innovate in family farms?

Yes, with the incentive we were able to plant new vineyards, it was financed by 30%. That helped a lot for that.

10. How important do you think family farms are in food production in Croatia?

They are important, due to the growth of the attitude from people and consumer to eat locally, healthily, etc.

30. Would you say that Croatia helps you in the sustainability of your economy?

Partially. With the incentives they helped us to grow our business. But otherwise I can’t think of anything.

31. Have you heard of any EU schemes to help family farms?

Yes, rural development measures, assistance to young farmers, land consolidation.

32. Does the state give you guidelines on how to take advantage of incentives?

In part, we mostly manage on our own. A lot of it you have to do yourself, you have to be versed in a lot of different things, which is sometimes hard, while you are also trying to run a farm.

Sales channels and sales

11. How do you sell your products?

On the doorstep and in a couple of bars.

12. Do you use a sales agent?

No, we do everything ourselves.

13. Have you thought about selling in some of the local, neighborhood stores (Grga Ćvarak, Mrkvica)?

Yes, but everything was left on just a thought.

14. Did the pandemic lead you to other ways of selling?

No, the ways of selling are the same as before the pandemic. It didn’t create any change for us in terms of sale.

17. How much does your size affect your sales, do you plan to expand?

Yes, we are planting new vineyards. We are looking to expand, to grow more grapes and make more wine for our consumers.

18. Have you thought of selling your products outside of Croatia?

No, we do not have the capacity or logistics for such a thing.
19. Have you heard of sites like Finoteka.com or Burzahrane.hr?
Yes. But we have never personally used them. We like to do things on our own, and we don't have the capacity to also be able to juggle sales on websites as well.

26. How easy or difficult was it for you to enter the market?
It was very hard, the competition is fierce. Especially in the wine sector, there are a lot of good wine producers in Croatia, and in our area.

Customers

15. How much do you think the pandemic affected customers and their way of buying food?
Yes, customers have turned to online shopping. But that is because there was no other options, since everything was closed.

16. Have you felt any changes from customers (focus on healthier foods, where they buy their groceries)?
No, our regular customers are still present.

20. How important is it to your customers to know where food comes from?
Since this is specific to wine, our customers know that grape wine is from our vineyard, and they are free to walk through the vineyards at any time. They can see exactly how, why and where we produce our wine and then taste it in the same day. So it is important and they can see it whenever they come to visit.

Do you sell your products: a) to a known customer (contracted production) YES
b) on the free market?

Interview 7

Introductory questions

Family name: OPG Mladen
Owner: Mladen Leskovec
Year of birth: 1959
Number of people on the farm: 2 (he and his brother)
Education level: high school
Year of opening the family farm: 2012,
Year of closing the family farm: 2018
Activities of the family farm: a) vegetable growing b) fruit growing - production of blackberries and blackberry wine
c) viticulture
d) farming
e) livestock production (milk, meat or table eggs, other)
f) production of beverages, spirits
Size of the family farm: 1/3 hectare
Place: Ivanić, municipality Bešlinec
Quantity of annual production (approximate figures are in order): 800 kg blackberries

**Generally about family farms**

1. What are your motives for opening a family farm?

Making blackberry wine and making extra money, there was not much berries present on the market. We inherited the land and decided to use it. It used to be a vineyard, which our parents no longer wanted to deal with.

4. What would you say are the biggest challenges in running a family farm?

Irrigation and harvesting lasts 3 months, the blackberries never ripen all at once, but from June until the middle of October. So in those three, three and half months you have to come there all the time, and since we didn’t live there, there was a 40km distance from the land. We had to go there all the time, it was very tiring and we had to spend money on fuel and the road to get there, it was tiring for our lives. And that was not my main job but an additional one.

5. What would you say are the biggest challenges in opening a family farm?

That is resolved quickly, I am the owner of the land. Our parents gave it to us, we were the owners, there were no additional administrations for that. I opened a family farm in my name and that’s why it went very fast.

25. Did you investing in the further development of your family farm (machinery, employment of people...)

First we had to make an area, clear the vineyard, plant one thousand two hundred seedlings. When they start growing, they need to be renewed in a year or two. A seedling that grows this year will bear fruit next year. And it’s constantly perpetuum mobile because you have to constantly watch and cut, change and move them. So we constantly had to invest something.
27. How flexible would you say you were in your business?

Once you arrange it, you only have to worry about hoeing, mowing the grass, connecting, you have nothing more to do when you organize irrigation, spend money, because it is a plant that needs water. Irrigation is key, taking care of the area where it is. As much as I wanted, I left it high, up to 7 meters, and it bears fruit up to two meters. And since we didn’t enter into this with a serious attitude, we were able to allow ourselves some flexibility. It wasn’t our only source of income which helped to retain that flexibility.

28. Is this your only source of income?

No, we also did our daily work. It was an idea for us to make it additional income.

His wife joins in the conversation:

24 What product did you have? How do your products differ from other people's products? If you process your raw materials, why did you decide to process them? How did you decide which products you would have on the farm?

We had a plan and before we went into it, I was watching agricultural shows. At the time, the media was talking about blueberries, and there were interviews with people who dealt with blackberries, and they all showed good earnings, no one had huge amounts, everyone said they educated children, accommodation and put earnings aside. So they made money from it. And the people who did the market research said that there were not a lot of Croatian grown berries in our market. And for comparison, there was Serbia, which at that time was at the very top of the world in the production of raspberries. Then as I followed it, I thought to myself, we don’t need to produce wine, but just grow berries and sell them as such. Then I called the company Fragaria and asked them what the purchase price is for 1kg of blackberries, but it was such a small amount that you have to have a large amount of land and production, people, then it is a serious business and work process. Then he can't do his daily job and go to that ranch and pick blackberries. Another thing we got out of our minds, we didn’t realize that all the people interviewed, in these shows I watched, lived next to the property, and didn’t have the factor of coming and going from there. So mileage, petrol, not sleeping at night and now you dig, pluck and plant. That redemption price was small, and it was unprofitable. For us, the production of blackberry wine was interesting and profitable, and our parents had an old, excellent recipe for blackberry wine, and that attracted us. And when we decided to do it, we said it would be eco-friendly, meaning no preservatives, no additives. I also tasted blackberry wines on the market, they all tasted sour and were quite liquid, and they didn’t have the full flavor that those wines should have. We achieved that taste, that whoever tasted our wine was thrilled, women who had problems with anemia or some disease had better blood results from it. The wine was really top notch.

The sale was great, whoever tried it didn't stay on one bottle, everyone wanted to continue ordering and taking, we really had a circle of clients who ordered it regularly, from 3 to 4 l onwards. It was all word of mouth, since we got into it a little unprepared, we did it that way. And we could set ourselves up like that because we didn’t have the input cost of buying the land. For us, the input cost was seedlings, irrigation, barrels, and bottles. The price was 70 kuna per liter, and it all sold out. But we later lowered the price to 50 kuna. We did not enter
the VAT system, because we were dealing with this sale on the doorstep. We didn't want to enter the VAT system, you can still solve the accounting, but I was worried about the situation in Croatia, so that it wouldn't be difficult for us to leave the system if we decide to close it. Because it is unregulated in this regard, we did not trust the Croatian bureaucracy and system. And the financial amount you didn't have to enter the system was, if I remember correctly, 100,000 kuna, which we did not reach. It was important for us to get something out of this little story, but when we stopped living life, just digging, plucking and planting, we stopped liking it. We thought of making some extra money, but it didn't work that way. All in all, it was a good product, even now after we closed it people still ask us why we stopped producing because it was really good.

Why did you decide to close the family farm?

We closed because simply with all that work, and a day job you don't have time for that. Life turns on its head, I work 4 days a week, then 4 days I work when picking, from spring to late autumn. So actually 9 months of the year you're hired, and the cost of getting there once is 100 kunas, so if I go twice a week, the cost of travel is huge. And the profit on that was not so great that it all paid off. We couldn't go to the sea together as a family, that part screwed us up, we weren't together as a family. And we realized that we don't need it, because nothing will change drastically for us. And we both have a private life, friends, so when you add it all up, we didn't like it. We were not financially constrained, that it was our only source of income, so that it was necessary for us.

Sustainability

21. What is your opinion on sustainability? What does sustainability mean to you?

Well, they would say that it is a combination of these three things, ecological, economic and social structures. That you can maintain yourself and do good things. What would be sustainable is if different types of these family farms would combine their products, so that they can offer quantities in one offer and different types of products. From meat products, fruits and vegetables, and that it is a little stronger and their cooperative that would unite from local areas, to reduce delivery prices. Because the larger the quantity, the less the price of transportation costs. A certain quality product must have a certain quantity, in order to be profitable, to reduce costs. And when you go alone as a small producer, you can't say I have a quality product, someone orders and you don't have the quantity someone needs. A man who is engaged in the production of chips in Croatia cannot get the amount he needs from our producers and then he has to import potatoes from abroad.

Do you think people lost the part where they eat according to what is in season?

Of course, because there are shopping malls, where you can eat raspberries and strawberries at any time of the year because they came from the greenhouse. We do not have that culture and tradition that we preserve our indigenous products, and an example of this is where the Ministry of Agriculture plans to introduce something where people will have to report their seeds, where they will then review if it is profitable or not. Where it will be so conditioned, that it will further continue to bury our indigenous species and products, making things even more difficult for them. Especially to small producers, who may not be able to obtain that certificate. For example, the Italians in Piedmont managed to protect themselves from the Chinese who immigrated, and began selling Chinese vegetables that are not indigenous on
farmers markets. This has become a problem because they have taken over most of their fields, and that is all fine, but they have put a clause in which there is a number of quantity that they must not exceed. That there are no more of their products than domestic ones. These plantation contracts are limited in time, and thus protect their area. The French protect their areas as well, where there are special chickens, ducks, so that these small estates do not go out of business. This protects national products, and these countries are working on that. We just had to rewrite that example to our country, and we couldn’t do that either.

30. Were you financially viable (have you been able to make a living from selling family farms)?

We were able to make a living from our primary jobs, we were able to make some additional income from family farming, but at a personal cost that came from that, we realized that type of life was not for us.

Social aspect

3. What is your opinion on farming cooperatives?

He: In my opinion, it's a fantasy.

She: in my opinion, it's great, but the only question is how much the bureaucracy and taxes and benefits will cut them off from opening them. Because the tax price on our products is unbearable. For example, in Konzum you had a tomato from Macedonia, second class, one kuna each. So we import what they throw away. And our tomato is not even on the shelves, and it could be. There was also an example of a man near Škabrnja who had an entire peach plantation that he cut down because he could not sell those peaches. And the only thing that some OPGs have come up with is apples, and opening their farms for people to come pick it themselves. Those people are happy because they eat home-grown apples, but it can't be the only way for them to sell and support themselves financially. That is not sustainable.

The role of public institutions

6. How and have the incentives from the EU enabled you to progress and innovate in family farms?

We didn't take it at all, we didn't want to mess with the state and incentives, so that we wouldn't have problems later. These small producers suffer the most in the end.

10. How important do you think family farms are in food production in Croatia?
Well, that is crucial, it was already invented by the Austrians, the Italians, that system. Here is an example, a top restaurant in Switzerland, in a rural area, they write on their menu, for each product, statements from which family farm are carrots, fruits, vegetables, milk and he has rounded off the whole story. This is Switzerland, and similar thing is done so by the Italians, and the Austrians. We had a chance when the pandemic came, everyone was saying now we will have our fruits, vegetables, our meat and none of that has changed. You go to the store today, there are some products from our family farms, but why is the food in Lidl, Spar so much cheaper (vegetables and fruits), because it comes from imports, from Spain, who grow everything in greenhouses, and because they have cheaper workforce. And they are one of the biggest producers of this style of fruits and vegetables and that is why this food is so much cheaper than the one we buy from a woman from the farmers market who grows it in her field. The story was, when the pandemic came, now we will be self-sufficient, absolutely nothing has changed. Even the hotels on the coast held by foreign investors, who put imported products in their hotel. It is not clear to me why it was not put in their contract that they must have domestic products represented in their hotels. Only when it is represented, then we will be able to move forward, and there is no such thing. The stories they show us about some successful family farms are some random examples, and there is a generally rounded story. For example, in Austria and Italy, family farms have family estates, with additional workers, and children who go to larger cities, and are educated according to what the family does and return to their property to work there. So they invest in their knowledge, and their work, they develop and do not want to leave their country, and everyone lives decently. Furthermore, the purchasing power is at a decent level. Family farms in Vienna have contracts with citizens, who deliver to them what is in the season they deliver to the city, from their family or from a neighboring one, and thus support family farms that are extremely important, and for GDP. Because in that way one area is not dying out, but is still developing, on those local products and in that way those countries are thinking. We don't have that, let's say it's the pandemic now, some farmers started to advertise on Facebook. Today I saw an ad for lemons and olive oil in Spar, where a man wrote that it can be ordered. Because now can you imagine what a disorganization of the state it is when a man has to leave an ad to sell his products, and you can see how much Croatia doesn't care about that. For example, the pigs we import, we don't even have that, when it comes to meat. So there is absolutely nothing. This pandemic did not make us aware that something should be done urgently, if you want something, I do not believe that there would be no family farms that would not want to be provided with something. To make it easier for them to market their products, to shorten their procedure and bureaucracy, but then they also cannot cheat in any way. And that's why I think it's a lie when they say, we got started, we did something. Look at the shops, look at the farmers market, you will see that it is an absolute lie, that what they do as individuals will change something, and only that.

30. Would you say that Croatia helps you in the sustainability of family farms? In bringing incentive, or investments in family farms?

Absolutely not.

It seems to me that the situation is a little different today than when we started, the beginning of the incentive for a hectare of land you did not have to have anything, you could be the owner, report something and get 1500 to 2000 kuna a year, and you can earn extra money.
You have an incentive if you have ownership, and now I think it’s a little different. I think today family farmers have a lot more incentive today.

Sales channels and sales

11. How do you sell your products?

We have sold through word of mouth, selling on the doorstep is what is called. We didn’t go into any elaborate selling schemes, we realized we are not business people.

13. Have you thought about selling in some of the local, neighborhood stores (Grga Čvarak, Mrkvica)?

I used to shop in such stores, I didn't really look at the prices, I'm the type of person that says you can't save on food. What I need to buy is important to me, and I'm going to buy it. So I came, I was going to buy cheese, they had homemade cheese from some family farms and I took vacuum-cured cheese and some sausage and I bought it, and the woman says the price, which seemed like a lot to me. I paid for it and it turned out that the cheese was 180 kuna and the sausage 150 kuna. It was a lot too much, I am for the locals and their production, I am for the family farm, but I can't afford this, this is just too much, too expensive.

Do you believe in labels, eco-labels and let's buy Croatian?

I still cling to it, when I see it, but sometimes the amount they produce, I don't think we have it in Croatia. And then I go something about this here doesn’t add up. But I like to buy a product that says you are buying Croatian. I love when I see its our homemade product, because I don’t think we’ve gotten so much industrialized yet, so I feel better about it.

And what do you think about Croatia joining the EU, did it provide some benefits to small producers?

I am for the EU, but I think we entered too early and unprepared. What was negotiated was done by ignorant people, for agriculture, for fishing. We entered impoverished and disordered society. We could still wait to be better off, at least in those key segments, agriculture and fisheries. It has brought us that those who are big, enter easier, take part of the market, and with less bureaucracy and problems. We did not protect smaller producers.

Customers

15. How much do you think the pandemic affected customers and their way of buying food? Have you felt any changes from customers (focus on healthier foods, where they buy their groceries)? How important is it to your customers to know where food comes from?
Only a part of the citizens turned to healthier food. I see from my workplace, people are so impoverished, a man who has a salary of 4,500 kuna, it is absolutely impossible that he can afford to buy a lemon from Vis, from Dubrovnik. He’s just going to Spar and Lidl, and he’s going to buy that lemon sprayed with chemicals from Spain, which is cheap. People would like to, but they just can’t afford to buy more expensive food or homemade products. When you don't have money, any food is better than no food. And there are a lot of people who have lower salaries. People would, but they can’t afford it, that's a common case. When you hear that in reality, you become aware of those situations, before that you can’t really imagine it. They look after every penny.