

**Masaryk University
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**The Final Essay for the Course
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**“Organic Wine Production in Czech Republic: A Proposal of
a New NGO”**

Students:

Pavel Bláha UČO 382923

Inna Bell, UČO 452085

Marina Tokar UČO 452416

Sylvelin Foldøy, UČO 452166

Lecturer: Jan Haverkamp

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What is ecological winemaking?

The main aim of growing organic grapevines is to create a product, which would be acceptable for clients with regard to their taste as well as biological qualities, i.e. the lack of health-threatening chemicals (Vinohradnictví 2014, 21). This branch of environmentally friendly farming produces grapes both for consumption (so-called table grapes) and vinification (wine grapes).

The key to producing “green” grapes is adopting new methods of cultivating grapes and, what is most important, to use environmentally-friendly and safe substances against pests (Vinohradnictví 2014, 21). In other words, organic vines are grown without “chemical fertilizers, pesticides, fungicides and herbicides” (Morganstern 2008). Famous Czech selectioner prof. Kraus argued that one of the effective ways of organic grape production is cultivation of special fungi- and disease-resistant varieties of vines (Ibidem), to selection of which he dedicated his whole life (Humpolíková 2009).

Organic wine is also sulphite-free, though this issue is debatable and some organic wine makers allow small amounts of this conservator in wines (Morganstern 2008). The most crucial purpose of sulphur dioxide is to prevent wine oxidation and spoilage by bacteria. And as the compound acts as a powerful antioxidant, it facilitates wine freshness; without it wines would only last for a limited period of some months. At the same time, despite being an important preservative component in wine-making, sulphur dioxide is not indispensable. Recent research methods allowed to test a new 100 % organic agent capable of preserving the wines while also maintaining wine aroma (Salaha et al 2008).

However, the organic winemaking is more than just an absence of chemicals in the preparation of barrels and protection of vines. The production of natural wine is also closely connected with the concept of terroir. It stands for preservation of wine originality, i.e. not trying to make the quality of wine uniformly by equalising the harvests of different years (for example, through irrigation) (Vinohradnictví 2008, 2). In other words, terroir are the objective, i.e. natural, conditions for growing vines, such as soil, climate, terrain, which make wines authentic. While organic wine production presupposes human intervention into or influence on cultivation of vines, it also aims to make the most of the natural specificity of the region it operated within.

Why is it important to switch to organic wine making?

Viticulture is recognized as one of the land uses causing most intense deterioration of soil. This is because the management methods does not only comprise digging and tillage which strips the soil of plain cover for most of the year, but also for the excessive use of fungicides (Miguens, et. al., 2007). The main disadvantage and danger of traditional wine making is the use of chemicals in cultivation of vines and vinification. Pesticides and fungicides are by definition toxic chemical

agents (Zacharia, 2011). These chemicals are usually capable of harming all forms of life other than the targeted plants. Pesticides sprayed on to vines can move through the air and end up in other parts of the environment such as water and soil (Zacharia, 2011). Copper based (Cu-based) fungicides have been used in Europe since the end of the 19th century to control vine fungal diseases such as downy mildew and are still allowed to use in organic vineyards at limited doses as they are regarded indispensable for the cultivation process (Komarec, et. al., 2009). The excessive use of these and other chemicals on agricultural soil presents a major toxicological concern.

Results from a review article on the contamination of vineyard soils with fungicides shows that the concentrations of Cu in soils exceed the legislative limits valid in the EU in the vast majority of the studied vineyards (Komarec, et. al., 2009). Pesticides enter the soil as a result of wash-off from vine-leaves and accidental spills. It stays in the soil because these chemicals have low mobility. Therefore there is a correlation between the concentrations of Cu in vineyard soils and the amount of time the soils have been used for viticulture. Other synthetic organic fungicides are made from various chemical substances and their degree of toxicity and mobility varies. Furthermore, the properties of the soil influence the behaviour of these chemicals. Natural processes in the soil are negatively influenced by the reduction of microorganism activity and changes in microbial populations. Due to the long-term use of organic and non-organic fungicides in vineyards, these soils are usually highly degraded in terms of biochemical properties (Miguens, et. al., 2007), which again makes vineyards more susceptible to contamination. Concentrations of residues from pesticides high enough to pose a risk for environment and human health have been found in surface waters (Komarec, et. al., 2009).

Vineyards occupy large areas of land and consist of agro-ecosystems with small and large organisms living on it. In fact, farmland is the most extensive habitat for animal species and wild plants in Europe covering approximately 43% of the members states' surface area (Geiger, et. al., 2010). It is obvious that the use of toxic agents in a habitat will influence its biodiversity. Species such as earthworms, butterflies and honeybees are very sensitive to pesticides. The use of pesticides presents one of the key anthropogenic causes of the current decrease of bees (Brown & Paxton, 2009). Also, birds can be affected by the toxic chemicals (Geiger, et. al., 2010). From micro to macro level, pesticides disturb the delicate balance between species in a well functioning ecosystem. Biodiversity in traditionally run farmland is threatened, and it takes years to restore the ecosystem through organic farming (Geiger. et. al., 2010).

Different countries have deviating regulations when it comes to the usage of pesticides. Even within the EU, there are local policies on viticulture. In France, the agricultural regulations force grape farmers to apply pesticides, because of the fear of "golden rot" spreading from vineyard

to vineyard (Sciolino, 2015). An organic winemaker has even been prosecuted by the agricultural ministry on the grounds of not being willing to apply insecticide to his vines (ecowatch.com, 2014).

In a sustainable wine production process, there are many components to consider in addition to the viticulture as such. The supply chain as a whole, from each of the components to the finished product of bottled wine is areas with potential to move towards a more sustainable industry. One of these components is the package of wine. The recent switch to plastic and screw corks in wine bottles, now make up about 30% of the world's amount of wine bottles. This is threatening a centuries old natural cork-making industry. Cork makers wait until the cork trees are 25 years old before they start extracting strips of bark from the trees every nine years. The bark regenerates, and will usually do so for at least six times more. In Europe, the cork production has helped to preserve a key habitat for Mediterranean birds where the cork-trees in Spain and Portugal are among the last remaining spots in its kind for an array of bird species. If the cork industry loses its financial value, the plantations occupied by these trees will most likely be changed to other kinds of higher income farmland (Leal, et. al., 2011).

In light of these facts it is obvious that the problem at hand is not an easy one. Organic wine-making has both its supporters and opponents, and a set of powerful arguments on both sides. According to some estimation, organic wine makes no more than 5% of the overall wine production, although the sector has been slowly growing. The wines produced organically may taste differently as conventionally produced wines, but they also provide the certainty of not being produced with the use of chemicals. This is why organic wine making is being promoted and developed by both businesses and non-governmental organisations (Dal Piaz 2015).

One of the examples of such promotion among NGOs is The Organic Vineyard Alliance (OVA), which unites winemakers, retailers and distributors to distribute information on organic wines among the public and facilitate education in the organic food movement on the whole. The organisation is widely known for its factsheets, articles and videos as well as educational seminars. However, we find it important that organic wine making is promoted both on global and regional levels. While the organisations with global reach can have a bigger impact on the whole, the regional projects are capable of addressing the special features and needs of every particular region and build the awareness of organic wine making importance as well as facilitate the production of organic wines on a bigger scale.

The situation in Czech Republic

Ecological production of wine is part of the organic farming. A truly organic farming in Czech Republic has started to spread in early nineties. At the beginning the Czech Ministry of agriculture

has accepted the general organic farming rules of IFOAM and the first subsidies help to start the organic farming (Urban, Šarapatka 2003, p. 37). Along with establishing first rules the first certification processes were found. The first development was quite fast although it was slowed down by the cancelation of subsidies in 1992 (ibid. p. 38). Nowadays almost twelve percent of farmland is organic¹ (Ministry of Agriculture CZ 2014).

The situation of organic wine production is very similar to the organic farming in Czech Republic. The typical trait of the twentieth century farming is using chemicals to prevent disease and parasites (Urban, Šarapatka 2003, p. 236). During the Soviet era in Czechoslovakia it was very common to use chemicals, pesticides and fertilizers in agricultural sector. The fall of the communist regime in 1989 enabled various changes in the agriculture and the alternatives finally had a chance to be started. Let us turn to examples.

The first union of organic winegrowing called Altvín² was founded in Velké Bílovice³ in 1991 (Urban, Šarapatka 2003, p. 236). According to Urban and Šarapatka, it is necessary to have more grape varieties, which are resistant to certain infections for the development of organic wine production in Czech Republic (ibid.).

The biggest increase in organic vineyards in Czech Republic was between 2010 and 2013. There was a rise from two hundred hectares up to one thousand hectares (EnviWeb 2015). However in recent years the augmentation has slowed down and almost stopped because of the missing subsidies (ibid.).

There are 17 463 hectares used for wine production and around 18 500 registered producers (Ministry of Agriculture CZ 2014, p. 5). Only seven percent of these lands are used for organic wine production, i.e., 1 200 hectares. However, almost eighty percent of lands are used for the so-called integrated⁴ wine production (17 500 hectares) (Hluchý 2013). The organic products are getting more popular in Czech Republic and it is expected that more wine producers are going to switch to the organic production (ekolist 2015).

Organic wine in Czech Republic has its own certification label⁵. On the label is also the code of the monitoring organization. There are three monitoring organizations in Czech Republic - CZ-ABCERT, CZ-BIOKONT or CZ-KEZ (Swiacká, Horká 2011). The organic label is not allowed to be used in the European Union (ibid.). It takes three years to get organic wine status for newly

¹ However most of them are meadows and pastures in foothills areas.

² Now it is the part of PRO-BIO union (Urban, Šarapatka 2003, p. 236).

³ One of the main areas of wine production in Czech Republic.

⁴ It is a form of agriculture which main purpose is to secure sustainability. It works with the agriculture, land and ecosystem as connected parts. However use of chemicals is still allowed in limited amount (Ekovin 2015). Available at: <http://www.ekovin.cz/ekovin/sekce-integrované-produkce/co-je-to-integrovaná-produkce>

⁵ It is the same for wine and other organic products.

started conventional wine production and five years for established wine production. During the three/five years the wine produced in this kind of vineyard cannot be labelled as organic wine (Urban, Šarapatka 2003, p. 237). Despite the higher production costs, the organic wine is not more expensive than the regular wine, unlike the case of other organic products. The higher expenses are compensated by subsidies (EnviWeb 2015). In order to get the subsidies the producer has to be registered by Ministry of Agriculture and has to undergo regular monitoring for certificate.

The Czech NGO Nadace Partnerství has one of their areas of interest on wine. Nadace Partnerství is holding every year two major events focused on wine. First is the festival called *Otevřené Sklepy*. Participants may visit wine producers in certain area and there they can see the vineyard, taste the wine and talk with wine growers. Second festival is called *Víno z blízka*. This festival is co-organized with Slow Food Brno. The biggest difference is that the wine growers come to the Brno where this festival takes place. One thing is the same – participants get to know about the wine and its production. Because Nadace Partnerství is also focused on environmental issues they choose carefully wine growers for these festivals.

Our organization

Czech Republic has a long history in wine making, comparable with that of France and Italy. The region of Southern Moravia has been producing high quality grapes for centuries now, and the traditions of wine making are deeply interwoven into the local culture and customs. It is therefore very important to introduce organic wine-making to the region and transform the old traditions in a way that they become more green along the lines of organic farming. We thus suggest to create an organisation that would promote organic wine-making in wine-producing regions of Czech Republic.

Our vision of the organisation is as follows: We believe the organic way is the only sustainable way. We wish to give Czech winemakers a friendly push in the direction of this progress. Czech viticulture could take a leading part and be an example to follow for other wine producing regions, and provide a model on how to run organic farmland in a successful way. The working title of our organization is “3V” from “in vino veritas” (Latin: the truth is in wine) and “veridis” (Latin: green), thus standing for “the truth is in “green” wine”.

Goals and targets

Our organization has multiple purposes. It will operate on several levels: firstly, it will work as a facilitator for networking between winemakers, both independent and wine-producing companies. At the same time it will organize educational workshops and operate as a resource providing information on organic viticulture for general public as well as professional winemakers.

Our ultimate aim is to encourage the Moravian wine-makers to switch to organic production of grapes. Through that we hope to facilitate the increase of organic wine produced in the region. We want to use the example and experience of organic wine movements in Europe and throughout the globe. By our work we want to raise awareness about the importance of natural production of grapes and to help Czech vineries (especially the small ones) to implement the ecological methods of growing vines. The support of local wine makers is important for a number of reasons. First, the transition of traditional to organic wine production might be difficult for smaller vineyards due to their financial vulnerability. Second, the success of local organic wine makers can be used as a tool of influence on big companies. This is especially important, since, despite the declarations of more environmentally-oriented production, the major wine producers in the Czech Republic, such as Znojmo, Templářské sklepy Čejkovice, etc. are still applying traditional methods of growing vines.

Activity

In accordance with our goals, we will organise our activities on multiple level, so as to combine networking with educational events. For example, one of the main forms of our activity is regular organic wine fairs in different wine locations of Moravia (e.g., Brno, Mikulov, etc.) and, eventually, in other Czech towns. We take our inspiration from famous and successful organic wine events, such as RAWfair. This is an annual festival that celebrates the wines which are “pure, kind to the planet, very possibly better for your health and ... absolutely delicious” (What is RAW 2015). Introducing such fairs in Moravia should not be a problem since various wine festivals are already traditional for the region. For example, there are annual fairs of young wine, St Martin's celebration, etc. At the start our organisation will join these events by helping the organic farmers to present their produce at their stalls in the event. However, in future we plan to organise organic-only wine festivals. The activities would include wine tastings, distribution of factsheets and brochures on organic wines and professional gatherings of organic wine-makers where they will be able to share experience and receive advice.

Since it is important that consumers make informed and good choice of wine, our work also will be aimed at popularisation and education of wine lovers, i.e. potential customers. This part of our work will be organised in different forms. First, we will arrange trips and workshops at local organic vineyards we will cooperate with. This will include the demonstration of the main methods and techniques used by organic wine makers, discussion of the challenges of switching from traditional to ecological production, and degustation of wine. It is important that potential organic wine makers can join these trips, too.

Organic farming is more time-consuming and financially demanding than the traditional one (Réblová 2015). Therefore, an important part of our activity as an organisation is to inform wine

makers of funding possibilities and to help them in seeking funding. This includes European Union funding, especially Common Agricultural Policy (CAP) (2014-2020), which is aimed to help organic farmers (See http://ec.europa.eu/agriculture/organic/eu-funding/cap-and-rural-development/index_en.htm). These grants will support both those who decided to join organic wine making and those who want to switch from the traditional wine production to ecological one.

Another important goal of our organisation is to create a favourable image of organic wine-making in Czech Republic. Indeed, despite being environmentally “greener” and more sustainable than conventional wine-making, organic wine production is still widely considered overpriced and in a way senseless. The most common argument seems to be that organically produced wines don’t have the same flavours (or just “taste like cider”), as well as that the great costs of production are not worth taking because a large share of customers would not want to switch to organic wines (Beckett 2012). The aim of our organisation is therefore to bring the rich palette of the organic wine tastes to the wine lovers and convince the producers that this is an investment worth making. By doing this we aim to transform the attitude to wine production in Czech Republic in a way that it would be environmentally friendly, conscious and responsible. Our methods will include large-scale PR actions in media and active participation in the life of the region - we believe that our organisation and its purpose can become an unalienable part of life in Czech Republic like the wine making itself.

The structure of our organisation

Our organisation will have different departments/sections, connected with the field and type of work. As the core activity of organisation will be built around creating field trips, workshops and wine fairs, we plan to attract volunteers to our work for those project, thus enlarging our team by up to 50%. While most of the volunteers are to participate in organisational matters, a smaller part will also work in other sections of organisation under the tutelage of our employees. We wish to seek volunteers among interested members of public, student organisations, as well as wine-makers themselves. We also plan to offer internships for students interested in the issue of organic wine-making.

What we find crucial is the bottom-up structure of our organisation, which would allow better circulation of ideas and closer cooperation between both employees and volunteers. In a multilevel system of the organisation it is important that every person involved feels included and vital for the whole. The team members will be encouraged to communicate their personal goals and opinions, bring their own experience for the bigger projects, etc. Therefore we plan to hold regular meetings

and discussions with all our employees and volunteers as well as reach out to local fellow organisations to share experience.

Here the critical question of the image of NGOs in Czech Republic can be addressed: creating a connected and highly motivated organisation capable of making a real difference in the matter it works with might change the whole pattern of the NGOs' work in the country. And if our organisation becomes integrated in the Czech society through the volunteer networks and active participation in the social life, its actions will become visible on a bigger scale: its successes will pave the way for other NGOs to step in and promote sustainable way of life and work more widely. Such a goal places big challenges and responsibility on us, but we believe it important to create this link between the NGO and the society it exists in. What we want to show on our example is that our organisation is not trying to change the society from the outside, but it is part of it and is reflecting the changes in the society itself. For that aim we need to create an active and flexible structure based on the bottom-up scheme and sustaining connections with the local social life through volunteer network.

The structure of our sections will include:

PR section will be responsible for our public image and media presence; seeking and establishing contacts with wine makers and festivals/fairs/conference/workshop organisers; creation and publication of promo materials, such as videos explaining work, benefits and challenges of organic farming based on example the local Czech wine makers; etc. The representations of our organisation in social networks, blogspace, internet websites and so on are also part of the PR work. As already mentioned above, this section is crucial for our ultimate goals as well as for attracting attention of the public and future volunteers.

Project section will be responsible for grant and funding applications. There are numerous possibilities for receiving funding. One of them is European Union, yet there are also independent organisations providing support for organic farmers. For example, farmers-led Organic Valley cooperation runs a "Farmers Advocating for Organics" grant program with a variety of grants (though at the moment they are invitation-only), such as "Education and resources supporting beginning, current, and/or transitioning organic farmers" (See <http://www.organicvalley.coop>).

Organisation section will deal with arranging wine fairs, workshops and activities on the event management basis. This section will act in cooperation with the **Education** section. During the regular events this section is to be enlarged with volunteers.

Education section will deal with preparing the contents of workshops and educational activities (e.g.,trips to organic vineyards). It will invite wine-making specialists, establish connections with education institutions working with the issue and hold surveys and public opinion

polls among the various target groups. This section will also be responsible for creation of information leaflets, articles, and materials.

Coordination section will be responsible for attracting, recruiting and preparing volunteers for the upcoming events of the organisation. Apart from working with volunteers themselves, it is the duty of this section to facilitate close cooperation and communication between volunteers and regular employees of the organisation. This is the immediate contact of the organisation and our closest link to the society.

The **Board** of our organisation will be elected from the employees. Furthermore, researchers and wine specialists will be invited to the board, too (e.g., from Wine Academy in Valtice).

We appreciate that establishing an organisation of this time is a financially risky and difficult undertaking. Therefore, it is possible that we will use one of the crowdfunding possibilities (e.g., gofundme, kickstarter or hithit.com) in order to establish our organisation. For the same reason it is important that we attract volunteer work in our organisation.

We would like not to depend on just one financial source. The first possibility is the already mentioned crowd funding. We hope that through this platform we might be able to find our first volunteers and, possibly, our regular donators.

Another possible ways of funding is applying for donations. There are several options where we look. First there is state sphere. We might try to find some funding through the Czech Republic Ministries of Agriculture, Education and Regional Development. Second possibility are the supra – national institutions. European Union is very concerned by the sustainable agriculture and by the development of rural areas. There are various programs we could apply for. The last option is to look up foundations which might be interested in our cause. Nadace Partnerství is the one where we should start.

For the very beginning we would ask IFOAM to help us establish our NGO and start our project. In Czech Republic there are several NGO concerned with organic agriculture and also several union of organic agriculture producers (for example PRO – BIO). We will talk with them and try to find if there is any chance for our founding. We might also try to establish some cooperation with organic wine producers. It is not necessary to ask them just for money. We might use also their products. In return we might do some seasonal works for them, do some propagation etc.

Last possible way of funding is self-funding. In a case we would manage to establish cooperation with wine producers we might try to start some small wine excursion.

Cooperation

Our organisation plans to remain in close cooperation with other organisations involved in organic farming and wine-making both in Czech Republic and globally. We will try to establish a link with Nadace Partnerství and cooperate with them. We envision this cooperation on multiple levels: through participating in joint events, distributing information as to other directions of sustainable living and creating a common network of volunteers and connections. We believe such cooperation can help us spread organic wine-making further and remain in touch with the recent development in other areas as well.

As one of the purposes of our organisation is providing funding possibilities for independent wine-makers willing to make a transition to organic production, we also plan to remain in contact with the fundraising companies and foundations, establishing reliable ways to facilitating sustainable wine-making.

Finally, in terms with spreading our cause to the wide public we consider it valuable to build cooperation with social institutions, such as universities and private businesses, such as cafes, restaurants and bars that would be interested in promoting organic wine-making.

Conclusion

In Czech Republic, like in the rest of Europe, there is an increasing awareness of the wide-reaching negative consequences of traditional farming. Several NGOs focus on sustainable and organic food production both globally and locally. However, there are no NGOs that specifically target Czech viticulture, despite it being a cardinal part of the country's agriculture. Viticulture as such, also represents one of the types of farmland with largest negative impact on the soil, and therefore has a considerable potential for improvement. With the creation of an organisation promoting organic wine-making in Czech Republic we would like to fill this niche and bring the sustainable wine culture closer to the public.

By making use of the already existing rich and living culture of food and wine in Moravia, our organization will attempt to redirect the local viticulture towards a "green" and sustainable profile in a bottom-up fashion. This goal will be achieved through educational workshops and networking strategies in already existing communities of food and wine festivals with a hub in Brno, and with branches throughout Czech Republic. We seek to involve all parts of society into our activity through integrated volunteer network, close cooperation with other organisations and participation in the life of the region.

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