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Ernährung und Forsten Bulgarien**

Viticulture. Future. Danube Region. The Impact of Climate Change on
Viticulture and Wine Tourism

Dear ladies and gentlemen,

Dear colleagues,

Let me first to congratulate our German hosts and to express my gratitude for the possibility to participate in this interesting and important discussion. Climate change is the biggest threat to nature and humanity in 21st century. Statistics show that the 15 warmest years on Earth have been over the last 20 years. This will inevitably lead to changes in agricultural systems and, in particular, in viticulture. Several studies have revealed that the map of the wine regions around the world will change significantly. We, as part of an important wine region in Europe - the Danube region - are faced with comparable challenges and we must work together to resolve them.

Viticulture and wine production are traditionally a strong sector for Bulgaria thanks to the optimal combination of natural and human resources, traditions in the selection and in the technologies of wine making, historical and cultural heritage, supporting wine and rural tourism.

Meteorological conditions are among the main factors determining the productivity of vineyards. Extreme weather phenomena and climatic anomalies have a strong impact and can compromise yields and / or reduce the quality of agricultural produce.

As a result of floods in recent years floods and over-humidities have been reported in the vineyards, as well as a risk of increasing soil erosion under the influence of water. Hailstorms also cause major damage to the vineyards every year by reducing or completely eliminating yields.

Although there is a trend of increase of the areas with vines in 2017 by 1.8% (63 952 ha) compared to 2015 (62 791 ha), due to bad climatic conditions in 2017 lower yields are reported (200,428 tons) by 23,11% compared to 2015 (260,677 tons) and 4,38% compared to 2016 (209,613 tons).

Climate change also increases the risk of further spreading and increasing population and number of weeds, diseases and pests. High temperature, humidity and concentration of atmospheric gases stimulate the growth and generation of plants, fungi and insects and change the interactions between pests and their natural enemies and hosts. Increasing temperatures coupled with high humidity by short and plentiful rainfall shortens the reproductive cycle of many pests. In 2018, due to abundant rainfall, there was a strong distribution of Gray rot on grapes (*Botrytis cynarea*), which caused damage to the crop.

Climate change leads to water shortages in some regions of the country, which would lead to an increase in irrigation requirements. As a result, more and more of the vineyards are created along with drip irrigation systems to compensate for these droughts and ensure a normal development of the vineyard culture.

Since 2007 in Bulgaria has been successfully implemented the National Program for Support of the Viticulture and Wine Sector and its measure "Restructuring and conversion of vineyards. By the measure, grape growers have the opportunity to change the location of the vineyards, to choose high quality and more sustainable varieties and to improve the vineyard management techniques by constructing irrigation installations, building anti-erosion agro-technology, building erosion control facilities, building or reconstruction of terraces. It is owing to the financing of these activities that the winemakers in Bulgaria have the opportunity to neutralize the harmful effects of climate change or to adapt to them.

The new admission under the National Program for Development of the Viticulture Sector for the period 2019-2023 is about to start. The measures to be applied for are: "Restructuring and conversion of vineyards"; "Promotion in third countries"; "Harvest Insurance" and "Investments in Enterprises". Funds are foreseen to insure the harvest of wine vineyards, which will further help grape growers to neutralize the negative impact of climate change.

In recent years, new "chato" wineries have been created with the possibility of wine tourism. These cellars are aimed at creating limited quantities of wines with unique origin and qualities. Combined with modern technologies, skillfully interwoven traditions, historical artifacts and legends, wines are created that are extremely attractive to consumers and highly competitive on international markets. Despite the limited quantity of these batches, their sale attracts consumers from all over the world and is an advertisement for our country.

The attractive new cellars built in the PDO and PGI wine production areas also contribute to the growing interest in wine tourism. In most of them are built degustation halls in which tourists can enjoy the superb qualities, taste and aroma of the Bulgarian red and white wines presented to them with facts and legends related to our rich history of the ancient cultures and civilizations inhabiting our country .

It can be noted that the share of bio-produced wines in Bulgaria is also increasing. At present, more than 10 companies are certified in Bulgaria to produce organic wines. There is a relatively good export of organic produce to Germany. It is expected that in the next 2 to 5 years, organic wine companies will probably increase at least twice.

In 2016, 62,712,160 litres of wine were exported from our country. For the year 2017 there is an increase in exports - 62,954,080 litres. The countries that we most often export to are: Japan, China, Brazil, Poland, Azerbaijan, Sweden, Russia, Germany, Great Britain and others.

For 2016 and 2017, Bulgaria ranks 21st in the world with wine production of 1.2 million hectoliters.

The effective functioning of the system in recent years has led to the improvement and stabilization of the sector as a whole, to the improvement of the quality and competitiveness of Bulgarian wines on the domestic as well as on the external market.

Thank you for your attention!