REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD
Regional Rural Development Standing Working Group

Agricultural Policy Forum 2022

Agriculture and Rural Development in the context of the Green Agenda for the Western Balkans: Overcoming the Impact of the Global Challenges

Working Group 1: Regional cooperation on legal harmonisation and market development in the wine sector

ACTIVITIES ON REGIONAL COOPERATION IN THE WINE SECTOR

Darko Jaksic, Regional Expert for Viticulture and Wine

18 - 20 October 2022
Tirana, Albania

19th October 2022

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP
General Agent BMEL Berlin Office

FAO FIAT PANIS

REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

ACTIVITIES ON REGIONAL COOPERATION IN THE WINE SECTOR

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

1. REPORTING ON JOINT SCIENTIFIC PAPER AT THE 2ND CLIMWINE SYMPOSIUM – 14TH INTERNATIONAL *TERROIR* CONGRESS IN BORDEAUX, FRANCE

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP General Agent BMEL Berlin Office

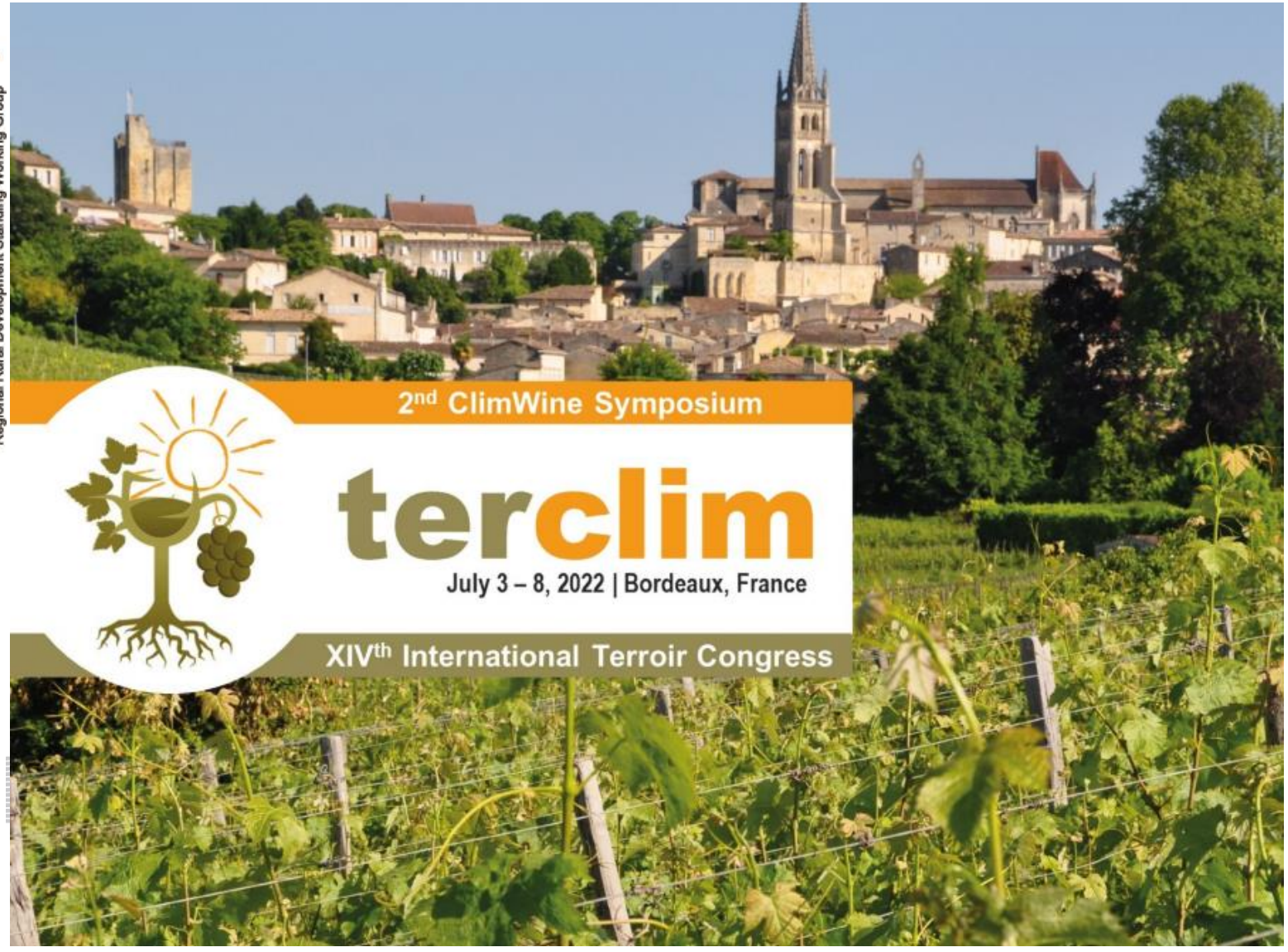
FAO FIAT PANIS

REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

1. REPORTING ON JOINT SCIENTIFIC PAPER AT THE 2ND CLIMWINE SYMPOSIUM – 14TH INTERNATIONAL *TERROIR* CONGRESS IN BORDEAUX, FRANCE

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD
Regional Rural Development Standing Working Group



1. REPORTING ON JOINT SCIENTIFIC PAPER AT THE 2ND CLIMWINE SYMPOSIUM – 14TH INTERNATIONAL *TERROIR* CONGRESS IN BORDEAUX, FRANCE

REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

Organisers

UMR 1287 EGFV
Ecophysiologie et Génomique Fonctionnelle de la Vigne
Institut des Sciences de la Vigne et du Vin Bordeaux Aquitaine, France

https://www6.bordeaux-aquitaine.inrae.fr/egfv/

ISVV Bordeaux Aquitaine
210 chemin de Leysotte, 33882 Villenave d'Ornon
France
Website : https://www.isvv.u-bordeaux.fr

INRAE Nouvelle-Aquitaine Bordeaux
210 chemin de Leysotte, 33882 Villenave d'Ornon
France
Website : https://www.inrae.fr/centres/nouvelle-aquitaine-bo

University of Bordeaux
351 cours de la Libération, 33400 Talence
France
Website : https://www.u-bordeaux.fr

Bordeaux Sciences Agro
1 cours de Général de Gaulle, 33175 Gradignan
France
Website : https://www.agro-bordeaux.fr

Laccave 2.21
France
Website : https://www6.inrae.fr/laccave

International Viticulture and Enology Society (IVES)
210 chemin de Leysotte, 33882 Villenave d'Ornon
France
Website : https://ives-openscience.eu

Région Nouvelle-Aquitaine
14 rue François de Sourdis, 33077 Bordeaux
France
Website : https://www.nouvelle-aquitaine.fr

Conseil Interprofessionnel du Vin de Bordeaux
1 cours du 30 Juillet, 33000 Bordeaux
France
Website : https://www.bordeaux.com

International Organisation of Vine and Wine
35 rue de Monceau, 75008 Paris
France
Website : https://www.oiv.int

...

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP
General Agent BMEL Berlin Office

REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

ACTIVITIES ON REGIONAL COOPERATION IN THE WINE SECTOR

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

Sessions

Session A: Integrated terroir studies, from methodologies to landscapes

Session B: Smart technologies for terroir studies

Session C: Soil physical, chemical and microbiological properties and their impact on vine physiology

Session D: Adaptation to climate change through cultural practices

Session E: Climate change projections

Session F: Climate vine interaction including climate change impacts

Session G: Adaptation to soil and climate through the choice of plant material

Session H: Global and multidisciplinary approaches for vineyard sustainability

Session I: Impact of terroir and climate change on wine quality and typicity

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP General Agent BMEL Berlin Office

FAO FIAT PANIS

REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

1. REPORTING ON JOINT SCIENTIFIC PAPER AT THE 2ND CLIMWINE SYMPOSIUM – 14TH INTERNATIONAL *TERROIR* CONGRESS IN BORDEAUX, FRANCE

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

Participators (Presenters)

22 countries

- **France – 162**
- **Spain – 33**
- **USA – 25**

…

- **Croatia – 14**
- **W. B. region - 3**

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP
General Agent BMEL Berlin Office

FAO FIAT PANIS

REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

1. REPORTING ON JOINT SCIENTIFIC PAPER AT THE 2ND CLIMWINE SYMPOSIUM – 14TH INTERNATIONAL *TERROIR* CONGRESS IN BORDEAUX, FRANCE

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

Session A : Integrated terroir studies, from methodologies to landscapes		
Poster 1	**Isabella Ghiglieno** * Biodiversity in the vineyard agroecosystem: exploring systemic approaches	A9
Poster 2	**Sandra Bravo** First step in the preparation of a soil map of the protected designation of origin Valdepeñas (Central, Spain)	A10
Poster 3	**Sandra Bravo** Protected designation of origin (D.P.O.) Valdepeñas: classification and map of soils	A11
Poster 4	**Maria Heinrich** austrianvineyards.com: online viewer of all designations of Austrian wine	A12
Poster 5	**Alenka Mihelcic** * Different soil types and relief influence the quality of Merlot grapes in a relatively small area in the Vipava Valley (Slovenia) in relation to the vine water status	A13
Poster 6	**Hugo Fernandez-Mena** Grapevine yield-gap: identification of environmental limitations by soil and climate zoning in Languedoc-Roussillon region (south of France)	A14
Poster 7	**Brent Sams** Spatiotemporal patterns of chemical attributes in '*Vitis vinifera*' L. cv. Cabernet Sauvignon vineyards in Central California	A15
Poster 8	**Gavin Duley** * How distinctive are single vineyard Gewürztraminer musts and wines from Alto Adige (Italy) based on untargeted analysis, sensory profiling, and chemometric elaboration?	A16
Poster 9	**Christian Gary** Traditional agroforestry vineyards, sources of inspiration for the agroecological transition of viticulture	A17
Poster 10	**Gwenaël Morin** * Downscaling of remote sensing time series: thermal zone classification approach in Gironde region	A18
Poster 11	**Darko Jaksic** Spatial determination of areas in the Western Balkans region favorable for organic production	A19

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP General Agent BMEL Berlin Office

FAO FIAT PANIS

REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

1. REPORTING ON JOINT SCIENTIFIC PAPER AT THE 2ND CLIMWINE SYMPOSIUM – 14TH INTERNATIONAL *TERROIR* CONGRESS IN BORDEAUX, FRANCE

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

A19

Spatial determination of areas in the Western Balkans region favorable for organic production

Darko Jaksic[1], Vesna Maras[2], Milenko Blesic[3], Tatjana Jovanovic-Cvetkovic[4], Klime Beleski[5], Dragoslav Ivanisevic[6], Ylber Kuci[7], Elton Basha[8] and Ivan Bradic[9]

[1]*Centre for Viticulture and Oenology Niš, Belgrade, Serbia*
[2]*University of Donja Gorica, Faculty for Food Technology, Food Safety and Ecology, Podgorica, Montenegro*
[3]*University of Sarajevo, Faculty of Agriculture and Food Sciences, Sarajevo, Bosnia and Herzegovina*
[4]*University of Banja Luka, Faculty of Agriculture, Banja Luka, Bosnia and Herzegovina*
[5]*University Ss. Cyril and Methodius, Institute of Agriculture, Department for Viticulture and Oenology, Skopje, North Macedonia*
[6]*University of Novi Sad, Faculty of Agriculture, Department for Fruit Growing, Viticulture, Horticulture and Landscape Architecture, Novi Sad, Serbia*
[7]*Department for Vineyards and Wine, MAFRD, Kosovo*
[8]*Agricultural University of Tirana, Tirana, Albania*
[9]*Centre for Viticulture and Oenology Niš, 37230 Aleksandrovac, Serbia*
Presenting author: d.jaksic@cevvin.rs

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP General Agent BMEL Berlin Office

FAO FIAT PANIS

REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

1. REPORTING ON JOINT SCIENTIFIC PAPER AT THE 2ND CLIMWINE SYMPOSIUM – 14TH INTERNATIONAL *TERROIR* CONGRESS IN BORDEAUX, FRANCE

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

In problematic conditions for production of grapes and wine caused by the COVID-19 pandemic and the resulting occurrence of wine surpluses, producers are increasingly turning to the innovative viticulture and winemaking of products that are more appealing to the market and the consumers. On the other hand, consumption of the food safety or organic products, and therefore of organic grapes and wine, is increasingly common in the world, in particular in Europe. The Regional Rural Development Standing Working Group (SWG RRD), as a regional intergovernmental organization gathers actors in the viticulture and winemaking sector from states and territories of the Western Balkans (South-East Europe) in the Expert Working Group for Wine, with the aim of improving viticulture and winemaking in this region through joint activities. In accordance with the aforementioned, the SWG RRD is working on advancing organic production of grapes and wine, and on recognition of specificities of the *terroir* of wine-growing areas in Western Balkans. In addition, as part of the project "Facilitation of Exchange and Advice on Wine Regulations in Western Balkan Countries" helmed by the German Federal Ministry of Food and Agriculture, in addition to harmonization of relevant legislation with EU regulations, efforts are being invested towards recognition of organic wines. Within activities and project implemented by this organization, expert analyses and scientific research of the *terroir* of Western Balkans were carried out, and some of the results are presented in this paper.

The basis for production of organic grapes and wine is the achieved ideal balance between all abiotic and anthropogenic *terroir* factors, and one of the concepts for creating such a complex system is the selection of areas and locations with optimal conditions for (in this case organic) production of grapes and wine. This paper presents spatial determination of areas and localities that could potentially satisfy conditions for organic production of grapes and wine. Research included the territory of Western Balkans, that is, territories of members of the SWG RRD. Being the key topographic *terroir* factor for spatial determination of areas with favorable conditions for organic production of grapes and wine, exposure of terrains up to 600 m elevation was examined. Application of the digital elevation model (DEM) in the ArcGIS software selected areas with south, southeast and southwest terrain exposure as the most favorable exposure with respect to Western Balkans. The analyzed climate *terroir* factor that is significant for spatial selection of areas with high potential for organic production of grapes and wine was wind speed. GIS technology, with use of raster data from the Global Wind Atlas application, was used to select areas with favorable winds. Spatial and attribute data on median annual wind speeds in the interval between 4 and 6 m/s and in the interval between 6 and 8 m/s was analyzed.

The biggest wine producer that currently also has the most surfaces under organic vineyards in the Western Balkans region is North Macedonia. However, after the research and spatial analysis was carried out it was determined that most of the selected surfaces with favorable exposure and wind speeds can be found in Serbia and Bosnia and Herzegovina, and the highest share of determined favorable surfaces in comparison with total surfaces of relevant countries/territories can be found in Serbia and Albania.

With respect to the share of surfaces of selected areas with favorable exposure for potential organic production of grapes in comparison with the surfaces of zoned wine-growing areas, Montenegro has the highest potential with almost 6% of such favorable surfaces. Considering that the Western Balkans region has the spatially determined potential for organic production on surfaces totaling 173,252.52 ha according to the *terroir* factors examined in this paper, the possibility for increasing organic production of grapes and wine in specific spatially determined locations in members of SWG RRD is significant. All of this indicates the necessity for more active use of such positive *terroir* potentials of wine-growing areas in this part of Europe.

Keywords: terroir, terrain exposure, wind speed, organic production of grapes and wine, Western Balkans region

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP General Agent BMEL Berlin Office

FAO FIAT PANIS

REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

1. REPORTING ON JOINT SCIENTIFIC PAPER AT THE 2ND CLIMWINE SYMPOSIUM – 14TH INTERNATIONAL *TERROIR* CONGRESS IN BORDEAUX, FRANCE

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

Introduction

In problematic conditions for production of grapes and wine caused by the COVID-19 pandemic and the resulting occurrence of wine surpluses, producers are increasingly turning to innovative viticulture and winemaking practices, and products that are more appealing to the market and the consumers. On the other hand, consumption of organic products, including organic grapes and wine, is increasingly common in the world, in particular in Europe. As a regional intergovernmental organization, the Regional Rural Development Standing Working Group (SWG RRD) [1] gathers actors in the viticulture and winemaking sector from states and territories of the Western Balkans (South-East Europe) in the Expert Working Group for Wine, tasked with improving viticulture and winemaking in this region through joint activities. In accordance with the aforementioned, the SWG RRD is working on advancing organic production of grapes and wine and recognition of specificities of the *terroir* of wine-growing areas in Western Balkans. In addition to the harmonization of relevant legislation with EU regulations, efforts are being invested towards recognition of organic wines as part of the project "Facilitation of Exchange and Advice on Wine Regulations in Western Balkans"/"Agricultural Policy Dialogue Germany – Western Balkans" helmed by the German Federal Ministry of Food and Agriculture. Expert analyses and scientific research of the terroir of Western Balkans were carried out as part of activities and projects implemented by this organization, and some of the results are presented in this paper.

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP General Agent BMEL Berlin Office

FAO FIAT PANIS

1. REPORTING ON JOINT SCIENTIFIC PAPER AT THE 2ND CLIMWINE SYMPOSIUM – 14TH INTERNATIONAL *TERROIR* CONGRESS IN BORDEAUX, FRANCE

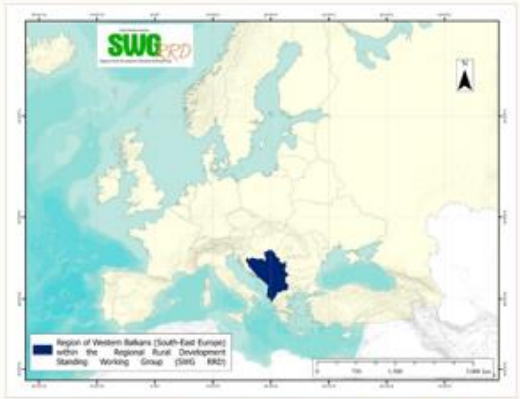
Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

Material and methods

Achievement of the ideal balance between all abiotic and anthropogenic *terroir* factors is the basis for production of organic grapes and wine, and one of the concepts for creating such a complex system is the selection of areas and locations with optimal conditions for (in this case organic) production of grapes and wine. This paper presents spatial determination of areas and localities that could potentially satisfy conditions for organic production of grapes and wine.

Research focused on the territory of Western Balkans, that is, territories of members of the SWG RRD (map 1).



Map 1. Research territory of members of Regional Rural Development Standing Working Group (SWG RRD)

Photos: Landscapes of wine-growing areas (districts) in SWG RRD members

Exposure of terrains up to 600 m elevation was examined since it is the key topographic *terroir* factor for spatial determination of areas with favorable conditions for organic production of grapes and wine.

Application of the digital elevation model (DEM) (map 2) in the ArcGIS software helped select areas with south, southeast, and southwest terrain exposure (map 3), since these are the most favorable exposures in Western Balkans.

The analyzed climate *terroir* factor that is significant for spatial selection of areas with high potential for organic production of grapes and wine was wind speed. GIS technology, with use of raster data from the Global Wind Atlas application [2], was used to select areas with favorable winds (map 4). Spatial and attribute data on median annual wind speeds in the interval between 4 and 6 m/s and in the interval between 6 and 8 m/s was analyzed.

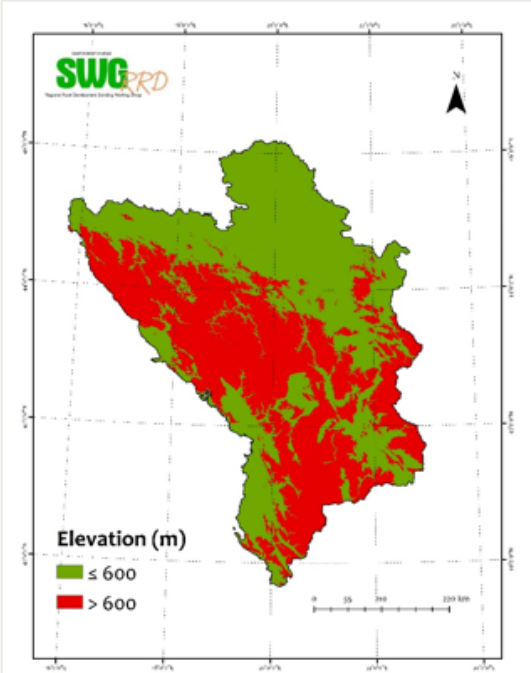
Map 2. Used raster data of Digital terrain model (DEM)

Map 3. Used raster data of terrain exposure

Map 4. Used raster data of wind speed at 10 meters above sea level

Results

Elevation



Map 5. Selected suitable elevation

Elevation is one of the most important favorability parameters for grapevine cultivation [3, 4]. It has a significant effect on temperature, that is, on maximal and minimal temperatures in vineyards, in particular in hilly and mountainous terrains [3].
In order to avoid potential issues for production of organic grapes in terms of low temperatures that could weaken grapevine plants and render them more sensitive in the phytosanitary context, territories with elevation in excess of 600 m were buffered to the examined area (map 5). In addition, this GIS spatial operation was carried out with the aim of eliminating higher locations that have more precipitation during the vegetative period and more days with precipitation, because this strengthens assaults from diseases and pests and reduces the potential for organic production of grapes and wine.
Out of the total examined surface of 20,796,900 ha in the region, the selected (non-buffered) territory with elevation below 600 m had the surface of 11,042,396 ha, which is 53.1% of the total examined territory. This selected favorable territory was the largest in Serbia. In general, high proportion of selected favorable territory in terms of elevation is a good potential for successful cultivation of grapevine and production of organic grapes and wine in the examined region, that is, the territory of SWG RRD members.

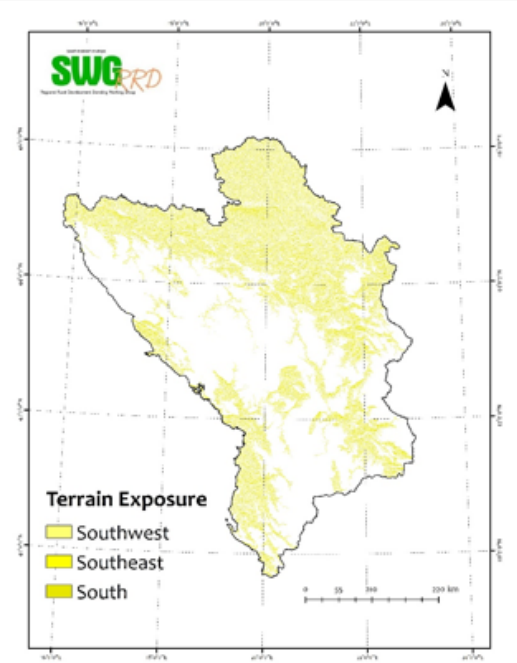
REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

1. REPORTING ON JOINT SCIENTIFIC PAPER AT THE 2ND CLIMWINE SYMPOSIUM – 14TH INTERNATIONAL *TERROIR* CONGRESS IN BORDEAUX, FRANCE

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

Terrain Exposure



Map 6. Selected suitable exposure

Terrain exposure is an important element of topographic conditions, and south, southeastern, and southwestern exposures are considered to be the most favorable [4, 5]. Even vineyards in warmer viticultural areas should be exposed to at least the minimal portion of direct sunlight [6], and the aforementioned terrain exposures in areas with elevation of up to 600 m were mapped through application of GIS technology with the aim of further selection of areas with potential for organic production of grapes and wine.

Out of the total examined surface of 20,796,900 ha, areas with south, southeastern, and southwestern exposures with the aforementioned elevation that were selected spread over 4,383,409 ha (map 6). This represents 21.08% of the total examined area in the region. Serbia has the most surfaces with favorable exposure (both in terms of total surfaces and in terms of percentage of favorable exposure in comparison with the total surface of the country/territory).

Relatively high share of terrains with favorable exposure certainly indicates that there is possibility for selection of areas that favor production of organic grapes and wine in territories of SWG RRD members.

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP General Agent BMEL Berlin Office

FAO FIAT PANIS

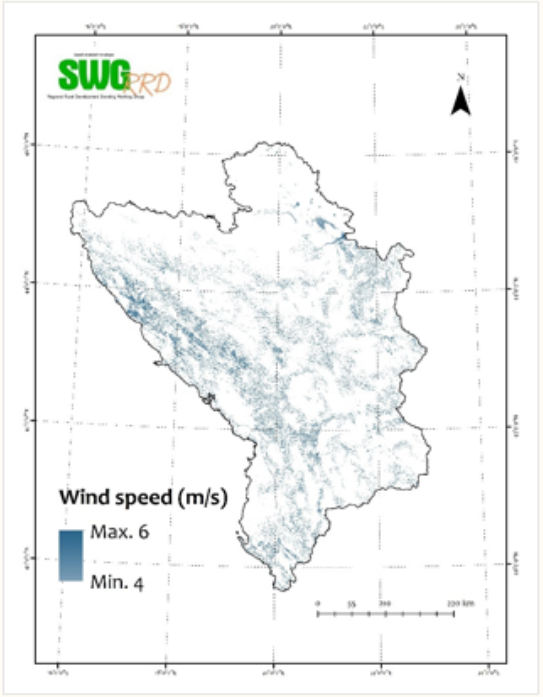
REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

1. REPORTING ON JOINT SCIENTIFIC PAPER AT THE 2ND CLIMWINE SYMPOSIUM – 14TH INTERNATIONAL *TERROIR* CONGRESS IN BORDEAUX, FRANCE

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

Wind speed



Map 7. Wind speed (4-6 m/s)

Good conditions in terms of winds in wine-growing areas have a significant effect on reduction of diseases and damage from pests, and they help with faster drying of land after precipitation [4], which indicates that there is potential in the relevant area for production of organic grapes and wine.

Analysis of median annual wind speeds in examined territories resulted in selection of 2,099,979 ha out of the total examined area of 20,796,900 ha (map 7) with average wind speeds between 4 and 6 m/s. Areas with the mentioned average wind speeds were selected through application of GIS technologies and they account for 10.1% of total examined surfaces in the region. The majority of surfaces selected in this manner can be found in Serbia and Bosnia and Herzegovina. In terms of participation of windy areas in comparison with the total surface of the country/territory, Montenegro has the highest percentage.

Favorable wind conditions in significant surfaces of examined territories of SWG RRD members and a high number of wine-growing localities and micro-areas with favorable wind conditions indicate a significant potential of this region for production of organic grapes and wine.

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP
General Agent BMEL Berlin Office

FAO FIAT PANIS

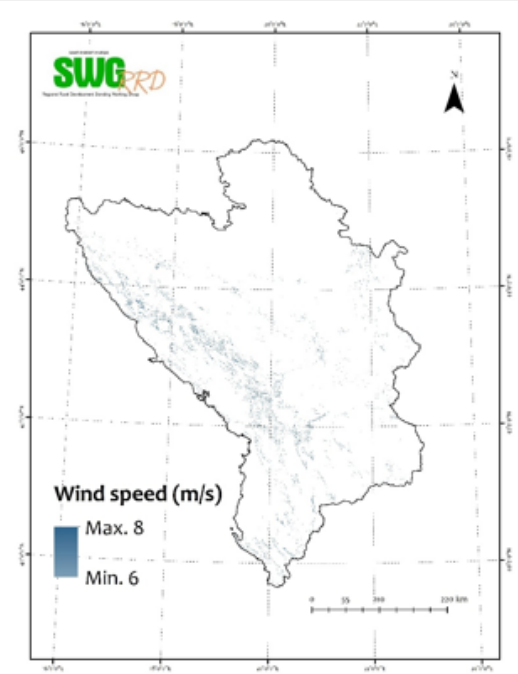
REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

1. REPORTING ON JOINT SCIENTIFIC PAPER AT THE 2ND CLIMWINE SYMPOSIUM – 14TH INTERNATIONAL *TERROIR* CONGRESS IN BORDEAUX, FRANCE

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

Wind speed



Map 8. Wind speed (6-8 m/s)

With respect to terrain with stronger annual median wind speeds of 6 to 8 m/s, which is significantly more favorable for organic production, a significantly smaller area of territories of SWG RRD members was selected. Out of the total surface of the region, only 392,456 ha were selected as areas with stronger average wind speeds of 6 to 8 m/s (map 8). Surface of the selected favorable territory, that is, area with the mentioned median wind speeds represents 1.89% of the total examined surface in the region. The most surface with favorable wind conditions can be found in Serbia and Bosnia and Herzegovina, while the highest share of this territory in comparison with the total territory of the country/territory can be found in Montenegro.

Although not large in terms surface, selected areas with favorable winds indicate the potential for safer organic production of grapes and wine in many wine-growing localities and micro-areas.

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP
General Agent BMEL Berlin Office

FAO FIAT PANIS

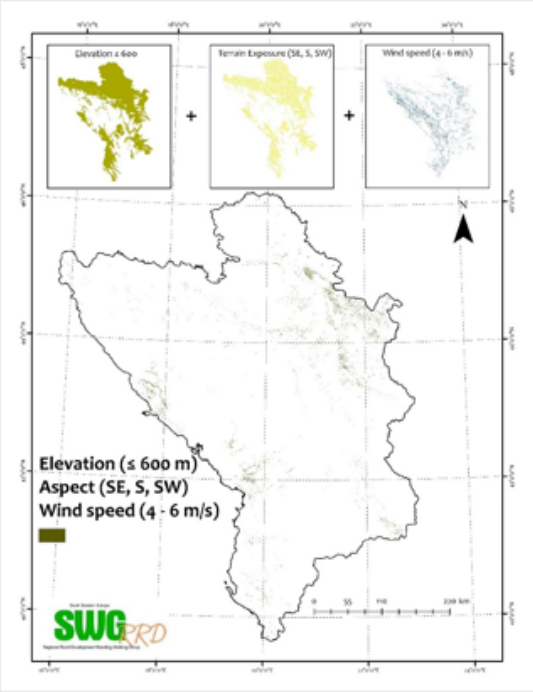
REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE

1. REPORTING ON JOINT SCIENTIFIC PAPER AT THE 2ND CLIMWINE SYMPOSIUM – 14TH INTERNATIONAL *TERROIR* CONGRESS IN BORDEAUX, FRANCE

Agricultural Policy Forum 18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

Selected areas potential suitable and vary suitable for organic production



Map 9. Selected area potential suitable for organic production

Application of GIS technology, i.e. overlap of selected areas with favorable *terroir* factors: elevation of up to 600 m, most favorable exposure for territories of West Balkans (south, southeastern, and southwestern exposure), and favorable median annual wind speeds (4 to 6 m/s), resulted in selection of areas that represent the sublimated territory with favorable conditions and potential for organic production of grapes and wine (map 9).

Out of the total examined surface of the region, 163,925.37 ha were selected as areas with potential for organic production of grapes and wine, which represents 0.79% of the surface of states members of SWG RRD.

The most potential in this context, both in terms of total surfaces with favorable conditions and potential for organic production of grapes and wine, and in terms of the share of these areas in comparison with the total surface of the country/territory was determined in Serbia.

European Commission

german cooperation DEUTSCHE ZUSAMMENARBEIT

Implemented by: giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH; GFA CONSULTING GROUP General Agent BMEL Berlin Office

FAO FIAT PANIS

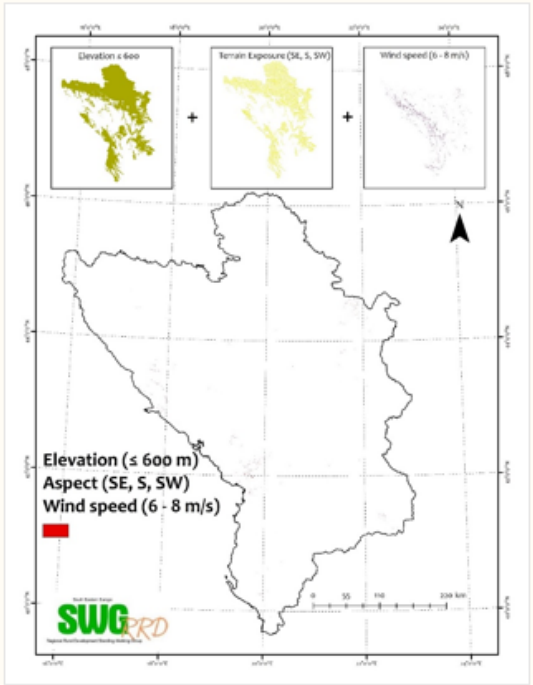
REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

1. REPORTING ON JOINT SCIENTIFIC PAPER AT THE 2ND CLIMWINE SYMPOSIUM – 14TH INTERNATIONAL *TERROIR* CONGRESS IN BORDEAUX, FRANCE

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

Selected areas potential suitable and vary suitable for organic production



Map 10. Selected area potential vary suitable for organic production

Overlap of three layers in the ArcGIS interface (which layers represent the examined and mapper *terroir* factors), in particular: layer representing elevation of up to 600 m; layer representing favorable terrain exposure; and terrain representing favorable median annual wind speeds (between 6 to 8 m/s), resulted in the map of selected terrains with very favorable conditions for potential organic production of grapes and wine. Since the strictest of parameters were applied in this situation, the selected area has the surface of 9,327.15 ha (map 10). This represents only 0.04% of total examined surfaces in the region, i.e. total territories of SWG RRD members. Most of the surfaces selected as very favorable for potential organic production of grapes and wine can be found in Albania, while the highest share of such selected territories in comparison with the territory of the country can also be found in Albania.

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP
General Agent BMEL Berlin Office

FAO FIAT PANIS

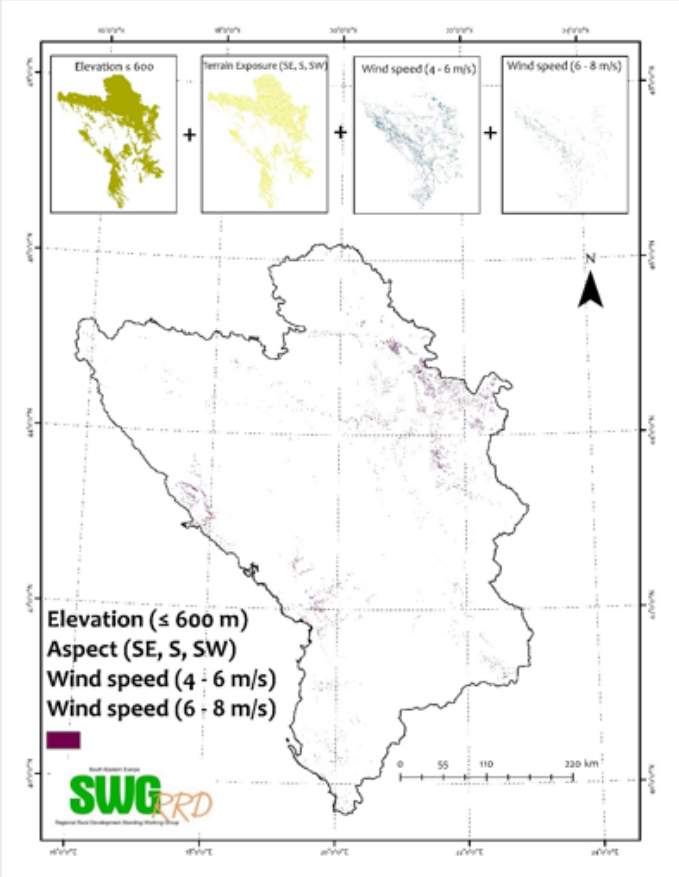
REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

1. REPORTING ON JOINT SCIENTIFIC PAPER AT THE 2ND CLIMWINE SYMPOSIUM – 14TH INTERNATIONAL *TERROIR* CONGRESS IN BORDEAUX, FRANCE

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

Total selected areas from sublimated maps 9 and 10, i.e. both types of areas potentially suitable for organic production of grapes and wine, have the surface of 173,252.52 ha (map 11), which certainly represent good *terroir* potential for more active organic production. The most of the selected surfaces with favorable exposure and both wind speeds within elevation below 600 m (non-buffered territory) can be found in Serbia and Bosnia and Herzegovina, and the highest share of determined favorable surfaces in comparison with total surfaces of relevant countries/territories can be found in Serbia and Albania.



Map 11. Total selected area potential suitable for organic production

REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

1. REPORTING ON JOINT SCIENTIFIC PAPER AT THE 2ND CLIMWINE SYMPOSIUM – 14TH INTERNATIONAL *TERROIR* CONGRESS IN BORDEAUX, FRANCE

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

Conclusions

The biggest wine producer that currently also has the most surfaces under organic vineyards in the West Balkans region is North Macedonia. However, after the conducting research and spatial analysis, it was determined that most of the selected surfaces with favorable exposure and wind speeds within elevation below 600 m can be found in Serbia and Bosnia and Herzegovina, and the highest share of determined favorable surfaces in comparison with total surfaces of relevant countries/territories can be found in Serbia and Albania.

Considering that the West Balkans region has spatially determined potential for organic production on surfaces totaling 173,252.52 ha in terms of *terroir* factors examined in this paper, the possibility for increasing organic production of grapes and wine in specific spatially determined locations in SWG RRD members is significant. All of this indicates the necessity for more active use of such positive *terroir* potentials of wine-growing areas in this part of Europe.

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT

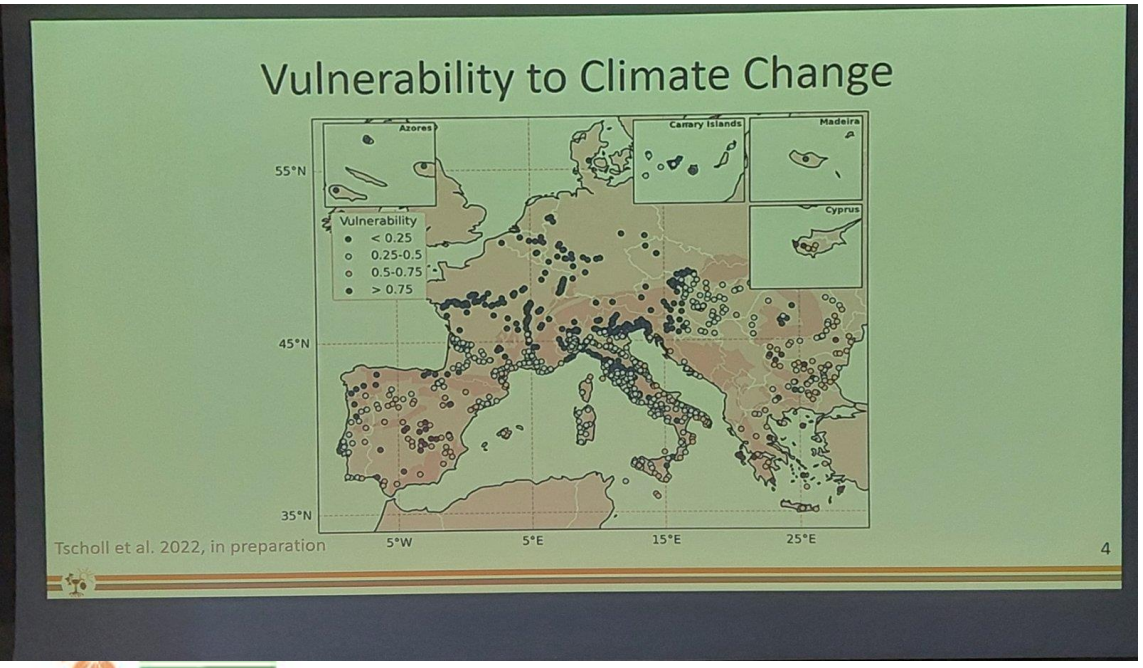
Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP General Agent BMEL Berlin Office

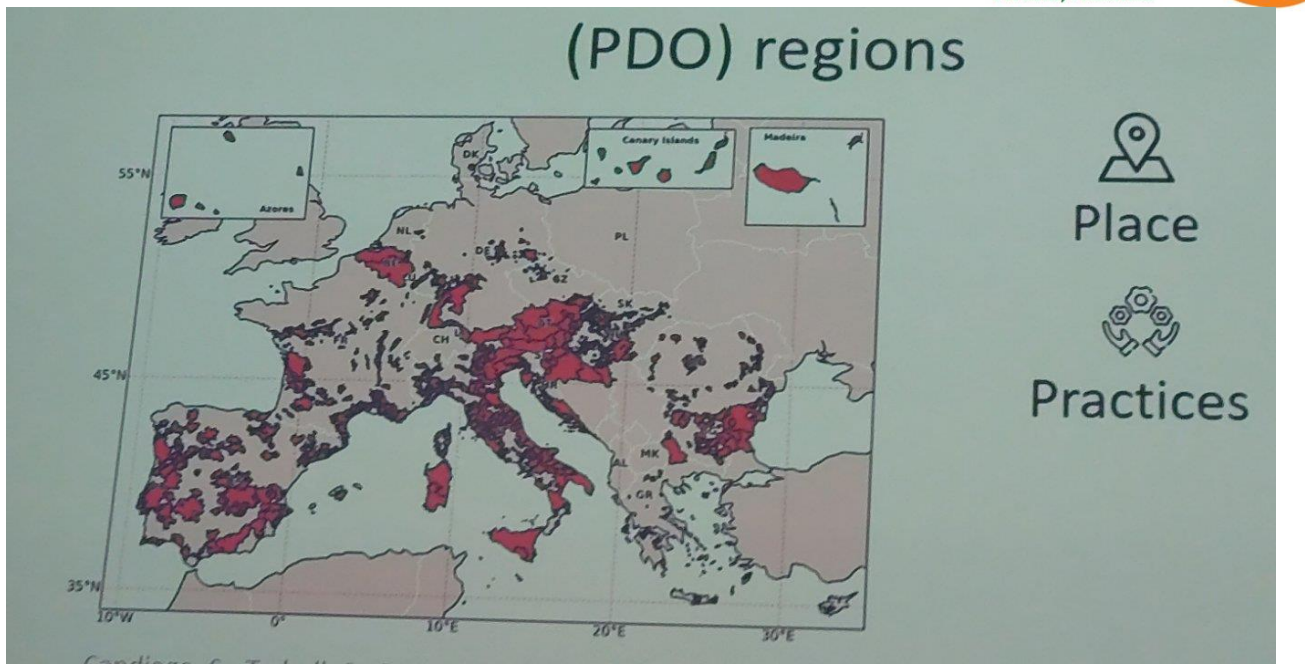
FAO FIAT PANIS

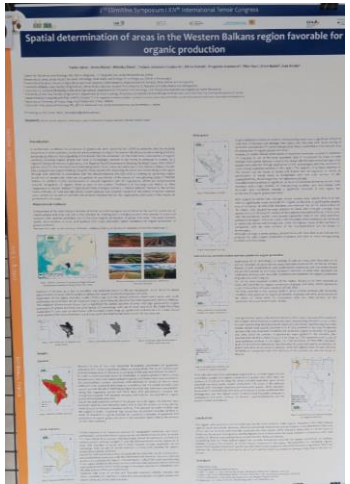
REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

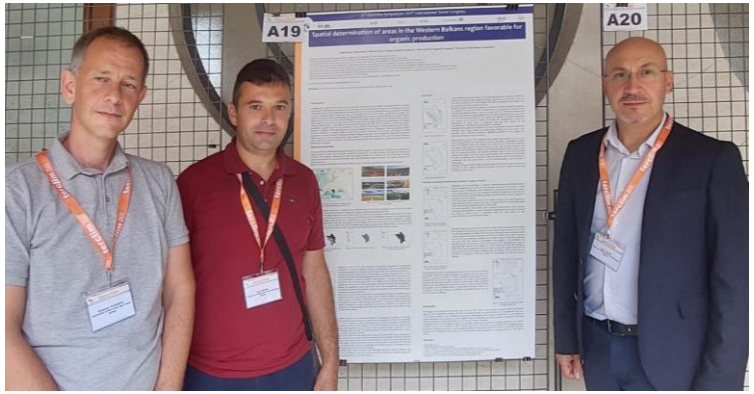
1. REPORTING ON JOINT SCIENTIFIC PAPER AT THE 2ND CLIMWINE SYMPOSIUM – 14TH INTERNATIONAL *TERROIR* CONGRESS IN BORDEAUX, FRANCE

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022









REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

ACTIVITIES ON REGIONAL COOPERATION IN THE WINE SECTOR

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

2. REPORTING ON THE MEETING RELATED TO THE PROJECT ”BALKANS WINE NETWORK” - FAO/EBRD ACTIVITIES

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP
General Agent BMEL Berlin Office

FAO FIAT PANIS

REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

2. REPORTING ON THE MEETING RELATED TO THE PROJECT ”BALKANS WINE NETWORK” - FAO/EBRD ACTIVITIES

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

- Meeting on 23. August with Expert Mr. Frederic Julia
- FAO/EBRD activities
- Analyzing the possibilities of promotion Balkan wine producers and their wines
- Balkan Net Wine
- Joint promotion at the ProWein wine fair (Dusseldorf)
- Common name for the wines of the region …
- Referred to the SWG secretariat and colleagues in the region

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT
Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP General Agent BMEL Berlin Office

FAO FIAT PANIS

REPUBLIKA E SHQIPËRISË

2. REPORTING ON THE MEETING RELATED TO THE PROJECT ”BALKANS WINE NETWORK” - FAO/IBRD ACTIVITIES

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

Balkan Net Wine

- The goals of the activity are very similar to the goals of the SWG wine group

BALKAN NET wine

BALKAN NET wine

- **Network** gathers **Associations** of wine growers and wine producers and **development organizations**, recognized in the territory covered by the network

- **The purpose of establishing the Network**

- Encouraging associations and creation of conditions for jointly solving problems, removing barriers, and enable the creation of **recognizable wine region - Balkan**

22 Kralja Petra I St 34000 Kragujevac Serbia, (+381) 34 302702, officekg@redasp.rs, www.redasp.rs

REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

ACTIVITIES ON REGIONAL COOPERATION IN THE WINE SECTOR

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

3. WINE EVENT OF ALBANIA-NORT MACEDONIA-SERBIA IN BELGRADE "WINE VISION BY OPEN BALKAN"

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP
General Agent BMEL Berlin Office

FAO FIAT PANIS

REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

3. WINE EVENT OF ALBANIA-NORT MACEDONIA-SERBIA IN BELGRADE “WINE VISION BY OPEN BALKAN”

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

- 1-4 September 2022
- Belgrade (Serbia)
- Wine fair “Wine Vision by Open Balkan”
- Wine testing
- Wine competition “Open Balkan Wine Trophy” 2022
- Accompanying program, masterclasses, discussions
- B2B meetings

REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

3. WINE EVENT OF ALBANIA-NORT MACEDONIA-SERBIA IN BELGRADE “WINE VISION BY OPEN BALKAN”

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

- **39 countries**
  - Albania – 11
  - Bosnia and Herzegovina – 13
  - North Macedonia – 34
  - Montenegro 8
  - Serbia – 192 …

- Wine producers – 163
- Buyers – 27
- Distributors/Importers – 62
- Whosalers – 4
- Retailers – 17
- HORECA – 15
- Distillery – 18
- Wine Shop – 7
- Other – 40

Total 353 participants

https://wine-vision-by-open-balkan.b2match.io/

https://wine-vision-by-open-balkan.b2match.io/components/22390?view=organisation

https://www.youtube.com/watch?v=4iLVLUhfIp4

ricultural
licy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

REPUBLIKA E SHQIPËRISË
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

Agricultural Policy Forum
Tirana, Albania
18th – 20th OCTOBER 2022

South Eastern Europe SWG RRD Regional Rural Development Standing Working Group

Working Group 1: Regional cooperation on legal harmonisation and market development in the wine sector

THANK YOU FOR YOUR ATTENTION!

Darko Jaksic, Regional Expert for Viticulture and Wine

19th October 2022

European Commission

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP General Agent BMEL Berlin Office

FAO FIAT PANIS