

PERSONAL INFORMATION



Ordan Chukaliev

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 <http://www.fzh.ukim.edu.mk/en/20070604130/ordan-chukaliev.html>

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Sex Male | Date of birth 08/01/1961 | Nationality Macedonian

JOB APPLIED FOR
POSITION

Expert in Irrigation and climate change

WORK EXPERIENCE

Highlights of experience relevant to the assignment

- More than 12 years in high-level management positions in higher education
- Experienced in business-science-policy partnership based on triple and quadruple helix

- principles as part of the activities in higher education management
- Experience in Innovation hubs and technology centres in the frame of University structure
 - Highly experienced in designing training/educational programs, syllabuses, and teacher/students materials, particularly in curricula development designed on the required competences and learning outcomes (37 years of experience as academic staff at higher education)
 - Experienced in EU operation as a senior researcher in policy support activities (3 years, two years as senior researcher at Joint Research Center of European Commission, one year as consultant)
 - Experienced of implementing of machine learning and artificial intelligence in agriculture gained while working for the JRC and later preparation of scientific papers for conferences and journals.
 - Experienced in policy development in agricultural sector through number of activities:
 - Preparation of the draft irrigation and Drainage Strategy for the period 2021-2031, FAO, Skopje, 2021
 - Preparation of the basic source documents for the National Strategy of Agriculture and Rural Development (Grant and Thornton, 2019)
 - Preparation of climate change part in the NSARD 2021-2027, FAO, 2020
 - Preparation of the Climate Change part for the NSARD 2014-2021, FAO, 2014
 - Preparation of the water sector part for the NSARD 2007-2014
 - Preparation of the National Action Program aligned to the UNCCD 10-Year Strategy and Reporting Process under UNCCD, 2017
 - Preparation of the Initial National Communication to the UNFCCC (including action plan for agricultural sector)
 - Preparation of the Second National Communication to the UNFCCC (including action plan for agricultural sector), UNDP, 2006
 - Preparation of the Third National Plan to the UNFCCC (including action plan for agricultural sector), UNDP 2014
 - Preparation of the Fourth National Plan to the UNFCCC (including action plan for agricultural sector), UNDP 2021
 - Preparation of the Sectoral report for the Fourth National Plan to the UNFCCC (including an action plan for agricultural sector), UNDP, 2021
 - Preparation of the Second Biannual Update Report to the UNFCCC (SBUR) (including action plan for agricultural sector), UNDP, MANU, 2017
 - Preparation of the **Third** Biannual Update Report to the UNFCCC (TBUR) (including action plan for agricultural sector), UNDP, MANU, 2019
 - Preparation of vulnerability assessment report for Montenegro, UNDP, 2022
 - 2 Years experience in evidence based policy support as climate change and crop production senior expert at JRC, Ispra, Italy

And climate change

April 2014 - Present

University Professor

Ss. Cyril and Methodius University in Skopje, Faculty of Agricultural Sciences and Food – Skopje, North Macedonia

- (i) Teaching courses on Irrigation, Irrigation of Agricultural Crops, Soil and Water Quality, Climate Change, Selected chapters in Irrigation principles and practices, Information technologies in irrigation, Advanced chapters in Irrigation of Agricultural Crops and Scientific Methods to undergraduate and graduate students (ii) Research on topics related to irrigation, climate change, soil water properties. water requirement in agriculture, water use efficiency, crop yield response to climate change and water deficit, earth observation, land use and land use change. climate change etc. (iii) Mentoring master and doctoral students and participating as a comity member for doctoral thesis in Macedonia, Sweden, Bosnia and Herzegovina and Croatia (iv) Consultant for international organizations FAO, UNDP, European Commission, World Bank and companies Industrial Economic and Stone Environment from USA, PROWA and GFA Tera Systems from Germany and others. (v) Cooperation with the Macedonian business sector, such as private farmers, pharmaceutical companies (Alkaloid), consultancy companies (Grant and Thornton, Skopje, Epicentar – Skopje, PointPro - Skopje...) (vi) providing training and technology transfer in agricultural water management for extension service, State Agricultural Inspectorate and private farmers.
- Participant in the Horizon 2020 project Revenue diversification pathways in Africa through bio-based and circular agricultural innovations (DIVAGRI 2021-2024) that aims to increase the productivity, income and economic opportunities of subsistence and smallholder farmers in arid and semi-arid regions of Sub-Saharan Africa by implementing state-of-the-art, innovative bio-based solutions to improve agricultural production, enable diversification of crops and increase added-value, create environmental, social and economic sustainability, and generate new local economic opportunities.
- National team leader in the Horizon 2020 project GEO_CRADLE.(2015-2018). The aim of the project is the continuous provision of accurate and timely information through coordinated and sustained Earth Observation (EO) activities is considered a key enabler for informed decision making in response to challenges such as adaptation to climate change, improved food security, better access to raw materials and energy and many more.
- Senior expert in USAID Adaptation to Climate Change in Agriculture Project.
- I was engaged as a consultant by European Commission on assessing the irrigation and agricultural water use on an EU scale.
- National expert and consultant in the preparation of the National Strategy for Agriculture and Rural development for the period 2021-2027 (NSARD 2021-2027), for the preparation of the NSARD 2014-2021, preparation of irrigation and drainage strategy for the period 2021 -2031, preparation of the regional policy reports on Agri-environmental policy and Areas with Natural constraints etc.
- Moreover, I was engaged as a national expert on the preparation of a national GHG inventory for the Agriculture, Forestry and Other Land Use (AFLOU) sector for the Second and Third Biannual Update Report to the UNFCCC including a national inventory report and information on mitigation actions, needs and support received. Also, I worked on the preparation of the update report on actions undertaken, including the status of GHG emissions and removals by sinks, as well as on the actions to reduce emissions or enhance sinks.
- Also, I was engaged in preparation of the sectoral report on Agriculture for the preparation of the Initial, Second, Third and Fourth National report to the UNFCCC.
- Moreover, I was working as regional expert in the project supported by SWG RD and GIZ in Assessing the regional capacities in the Western Balkan for preparation of the documents for designation of Areas with Natural Constrain (ANC). The same institutions engaged me as regional expert on assessment of the agri-environmental policies in SEE countries and deriving of policy recommendations. I participated in the European Commission Project for Assessing the situation with small scale irrigation (SSI) in the country and preparation of ToR for rehabilitation of SSI at national level. Moreover, I participated in UNDP/GEF Restoration of Lake Prespa project implemented by UNDP. Particularly, I was engaged in promotion of the environmentally friendly agricultural practices. The aim of these activities was to reduce pollutants load from agricultural sources in Prespa Lake. Due to the success of this I am engaged by UNDP in the project for replicating these activity in Strumica River catchment.
- Regional expert in the SWG RD project on assessing the capacities for adaptation to climate change of WB agricultural sector

Business or sector Higher Education

September 2021 – September 2023

Vice Rector for International Cooperation

Ss. Cyril and Methodius University in Skopje,

- Managing the International cooperation at the University level. Contributing to the internationalisation of the Ss. Cyril and Methodius University in Skopje. Responsible for the Student and Staff exchange in the frame of EU Erasmus Program. Development of the strategical plans and directions for increased the international visibility of the University. Contribution to the activities of the rector management Board and university Senate. Running the Rector's commission for International Cooperation.

Business or sector Higher Education – University management

February 2012 – February 2014

Senior Researcher, Grant Holder Category 40

European Commission, Joint Research Center, Institute for Environment and Sustainability, MARS Unit

- I was engaged by European Commission Joint Research Centre as Senior Scientist in Agricultural Meteorology / Crop Modelling, GH40. The biggest portion of my working time within Monitoring of Agricultural Resources (MARS) Unit of the Institute for Environment and Sustainability was dedicated to analyst work particularly developing and operationally running a crop yield forecasting system. The MARS Crop Yield Forecasting System (MCYFS), monitors crop vegetation growth (cereal, oil seed crops, protein crops, sugar beet, potatoes, pastures, rice), including the short-term effects of meteorological events on crop production, and provides seasonal yield forecasts of key European crops, thereby contributing to the evaluation of global production estimates (wheat, maize, etc.) in support of CAP management decisions. As analyst my work was to use MCYFS in operational issuing of crop yield forecasts for Finland, Estonia, Latvia, Lithuania, Poland and Croatia. Also, the work comprises preparation of special reports for various extreme weather events (frost, floods, drought, etc.) and expected effects on crop yields. Also, I had duties in organization of E&IA Workshop "Crop Yield Forecast in SEE". My research activities were in preparation of modelling solutions for effect of various irrigation scenarios on biomass production and soil carbon content on European scale in the Carbon Preservation and Sequestration in European Soils (CAPRESE) Project. My operational activities were related to issuing of crop yield forecasts based on statistical analysis and contribute to the publication of the MARS Crop Yield Forecasting Bulletin. Also, I participated to the development activities of the Action, in particular about the calibration and extension of the crop growth models and crop yield forecasting techniques as well as to climate change impacts on agriculture. Finally, I was engaged on improvement and extension of the the MARS Crop Yield Forecasting System with several SEE countries as: Croatia, Macedonia and Serbia. Moreover my research activities were in desining the modelling scenarios for assessment of the Climate change mitigation and adaptation.

Business or sector Research

September 1996 – February 2012

University Professor

Ss. Cyril and Methodius University in Skopje, Faculty of Agricultural Sciences and Food – Skopje, North Macedonia

- Giving lectures for undergraduate, graduate and doctoral students in: Irrigation of agricultural crops, Irrigation techniques, Soil and Water quality. Conduct research in above mentioned topics. Prepare applications for manage domestic and international research and technology transfer projects. Work as researcher and/or team leader of national and international projects. Work as consultant for international companies as agricultural expert in irrigation, water and soils. Work on preparation of Master and Ph.D. thesis research. Work on reforms of education and research in irrigation. Managing the irrigation unit and laboratory for soil water properties and laboratory for soil and plant analyze in respect of macro and micronutrients and pollution with heavy metals and GIS Laboratory. Work on extension activities and technology transfer from University to extension service and on the farm scale.
- During this period my research activities were mainly oriented to agriculture and environment. The accumulated experience in the soil and water management as well as irrigation projects allow me to spread my activities in climate change issues, assessing the vulnerability of agricultural sector, establishing and testing of adaptation measures as well as working on designing and testing of various agro-environmental measures. Moreover, I was focused to assessment of the GHG emission from AFLOU sector. During this period, I was particularly active in development of national policies in environmentally sound agriculture and I was working on development of the vulnerability and adaptation measures for the Initial, Second, and Third National Communication to UNFCCC. Moreover, I was working on the preparation of the national GHG inventory and measures for reducing the GHG emission (mitigation). I also participated in the World Bank program on Reducing Vulnerability to Climate Change in ECA Agricultural Systems particularly on preparation of the report on Reducing the vulnerability of FYR Macedonia's Agricultural System to Climate Change: Preliminary Adaptation Options. I also participated in preparation of the publication "Assessing the Economic Impact of Climate Change: National Case Studies", published by UNDP in 2011. Despite development of documents of national importance I was active in capacity building and transfer of know-how from developed European countries, particularly in modernization of educational system with emphasis on environment. I participated in more than 30 national and international projects and I published more than 90 various publications

Business or sector Higher Education

October 2004 – March 2009

Dean

Ss. Cyril and Methodius University in Skopje, Faculty of Agricultural Sciences and Food – Skopje, North Macedonia

- As dean I was responsible manager of the Faculty of Agricultural Science and Food of Ss Cyril and Methodius University in Skopje. The Faculty of Agricultural Science and Food is complex institution consist of 6 Institutes (Crop Science, Animal Science, Environment, Agricultural economy, Plant protection and Food technology) and administration, established in 1947. The dean is fully responsible for financial work (the budget is more than 2 million EUR), education (6 undergraduate, 6 graduate and 3 doctoral study programmes with about 1500 active students) and research and application activities (about half of the budget). Part of my work as a dean was presidency with Educational and Scientific board (all professors and representative of the students with about 80 members) and with Managing board (representatives of the Institutes and of the students). The role of Educational and Scientific board is decision making in educational and research activities and managing board is responsible for operational and financial decision making. Also as dean I was member of Managing board of Ss Cyril and Methodus University (about 35000 students, 23 faculties and 5 research institutes and 11 accompanying members - public institutes, libraries and student services).
- During that period I was member of the advisory board of the Minister for Agriculture, Forestry and Water Economy an participated in development of the agricultural policy, particularly in development of farmers support system (national subsidies system).
- I have accumulated huge experience in efficient and effective management of staff as well as physical and financial resources. Also, I gain significant experience in managing and evaluating different types of projects at international level and working with different stakeholders at national and international levels as well as in rising funding for research, technology transfer and education in agricultural sector.
- The position of dean is additional to position of professor and dean keeps his previous post. Duplication of employment periods is due to fact that I had two positions in same time (professor and dean). Also I was doing my regular teaching and research activities Replace with main activities and responsibilities

Business or sector Higher Education - University Management

October 2000 - September 2004

Vice Dean for International Cooperation

Ss. Cyril and Methodius University in Skopje, Faculty of Agricultural Sciences and Food – Skopje, North Macedonia

- As Vice Dean for International Cooperation I was responsible for international cooperation of the Faculty of Agricultural Sciences and Food of Ss Cyril and Methodius University in Skopje. My major activities were related in establishing contact with similar institutions in Europe and wider and finding partners for exchange of students and teachers, research projects, as well as to follow calls for applications and to prepare applications for various international programs.
- During my mandate I established cooperation (with signed agreement of cooperation) with more than 20 high educational institutions from Europe, USA and Japan. More than 25 students spent at least one semester in high educational institutions in the European Union and majority of the teaching staff conducted study visits in EU Institutions. Major source of financing of these activities were EU TEMPUS projects. I was responsible for several EU TEMPUS projects for modernizing the high education in agriculture. As result of these activities the Faculty of agricultural sciences and Food established new study programs, curriculums and syllabuses. During my mandate Bologna process became active and I was responsible person for conducting Bologna process reforms at the Faculty of Agricultural Sciences and Food in Skopje.
- Finally, I had very active project cooperation with various donors (their representatives and contact points in the country) as: EU TEMPUS, IAEA, SCOPES, SIDA, JICA, USAID, UNDP etc. Therefore, I accumulated huge experience in all stages of the project activities from preparation, conducting and evaluating of various projects.
- The position of vice dean is additional to position of professor and vice dean keeps his previous post. Duplication of employment periods is due to fact that I had two positions in same time (professor and vice dean). Also I was doing my regular teaching and research activities.
- us position

Business or sector Higher Education - University Management

September 1989 - March 1996

Teaching assistant

Ss. Cyril and Methodius University, Faculty of Agricultural Sciences and Food – Skopje, North Macedonia

- As teaching assistant I support professors in conduction of lecturing in following courses: Irrigation of Agricultural Crops, Land Reclamation and Soil Erosion. My major duties were to conduct practical lessons with the students and to control their progress in the course. I was also involved in research activities of the department and do participate in several research projects.
- Also, I was responsible for lecturing the practical classes to the students as well as in obtaining my Master and Ph.D degrees. During this period, I participated in several national research projects as supporting staff. My main approach was education and I was highly oriented in training programs abroad. Also I attended training courses in USA (Colorado State University), Turkey (TUBITAC and University of Ankara) and Austria (IAEA Laboratories in Sibersdorf). These training programs were crucial in my development as expert and further achievements I have done during my career

Business or sector Higher Education

Part-time activities as consultant and expert

May 2023 – September 2024

Regional Consultant - expert on climate change

Standing Working Group for Regional Rural Development (SWG RRD)

The aim of the project is assessment of the climate change adaptation capacities for the Western Balkan countries. The tasks are to asses vulnerability, including the exposure, Sensitivity, Impact and Adaptive capacities. The analyses of the existing national policies for climate change adaptation, institutional setup and legal framework. Finally the task is assessment of the existing climate change adaptation policies, strategies and measures, including and those that are not directly addressed as climate change, but has significant effect to adaptation to CC, particularly those that increase adaptive capacities.

May 2023 – September 2024

International consultant - Enhancing Montenegro's capacity to integrate climate change risks into planning. Data consolidation and gender-sensitive climate risk and vulnerability assessment assessments of the sector agriculture.

UNDP Montenegro, CHAOS - Portugal

The major activities in the project were tealted to the: i) Assessment of the national and the local legal, policy and institutional capacities for climate action and climate adaptation planning and implementation; ii) A comprehensive review and consolidation of available climate risk and/or vulnerability assessments within the sector, that includes an examination of the impacts on both public and private sectors assets and systems in the assessments. lii) Gender-sensitive climate risk assessments of the sector, focusing on filling the gaps in information that were identified from the review and consolidation exercise that should identify prioritized actions that address climate-driven vulnerabilities and gender-disaggregated impacts.

September 2019 – August 2022

National expert for mitigation measures, Vulnerability assessment and Adaptation of Agricultural Sector to Climate Change for preparation of the Third Biannual Update report and Fourth National Communication to UNFCCC

Ministry of Environment and Physical Planning of North Macedonia, UNDP, GEF

Engaged as leading expert for preparation of the mitigation options and mitigation measures for the preparation of the Third Biennial Update Report of the Republic of North Macedonia to the UNFCCC. Also, I am leading expert and team leader of the national expert team for vulnerability assessment and adaptation of Agricultural sector for the preparation of the Fourth National communication to the UNFCCC. The mitigation report is in the final stage of preparation and in April work on the Vulnerability assessment should start.

Business or sector Agriculture – Environment, Climate Change

March 2020 – Dec 2021

National expert for Agro-meteorology and Climate change

FAO, Ministry Agriculture, Forestry and Water Economy of North Macedonia,

Engaged as leading expert for preparation of the assessment of the agro-meteorological services in the country, assessment of the existing services and development of the new user-friendly services. Preparation of the Climate change contribution to the National Strategy for Agriculture and Rural Development. Capacity building of the National Hydromet in using of the modern tools for crop yield modelling, effects of climate and climate change on crop growth and productivity. Preparation of the National Strategy on irrigation and Drainage for the period 2021-2031

Business or sector Agriculture – Agricultural Meteorology, Climate Change

December 2017 - July 2018

International Consultant in Irrigation

European Commission, Joint Research Center, Ispira, Italy

- The consultancy activities for European commission, Joint Research Centre for establishing the data sets of sub national irrigation activities and water use in Europe, and to propose novel methodologies for assessing the irrigated areas in Europe for preparation of the Map of Irrigated areas in Europe

Business or sector Agriculture - Irrigation

June 2016 - September 2018

Consultant in increasing the water use efficiency in agriculture

Epicentar Skopje, UNDP Office in Skopje

- The activities aimed in providing the technical assistance for Introduction of Sustainable Farming Practices in the Strumica River Basin. Working on establishing the innovative environmentally friendly agricultural practices in order to reduce water pollution from agricultural sources and to reduce/minimize the over-exploitation of the water in on-farm activities in Strumica River Basin. Developing of the on-farm irrigation scheduling system, based on the soil monitoring, development of the highly efficient water use irrigation practices for tomato, pepper, apples and plums cultivated in Strumica River Basin. Emphasis given to the building of the adaptive capacities of the farmers for climate change. Training for about 120 farmers that will be nucleus for scaling up of the activities and know-how.. Preparation of the training manuals. Regular visits of the participating farmers farms and control of their practices

Business or sector Agriculture – irrigation, capacity building

January 2018 - October 2018

National consultant – expert in Climate Change, GHG Inventory and Mitigation Scenarios for Agriculture, Forestry and Other Land Use (AFOLU)

UNDP office in Skopje, Macedonian Academy of Sciences and Arts, Skopje,

- Working as national expert on the preparation of the Macedonian second biennial update report on climate change (Macedonian SBUR to UNFCCC). Particularly engaged in preparation of the GHG inventory from the AFOLU sector, in identifying input parameters and using of the IPCC methodology. Also worked on preparation on mitigation options and scenarios for AFOLU sector. The report is available [http://unfccc.int/files/national_reports/non-annex_i_parties/biennial_update_reports/application/pdf/macedonian_sbur_eng_\[preview\].pdf](http://unfccc.int/files/national_reports/non-annex_i_parties/biennial_update_reports/application/pdf/macedonian_sbur_eng_[preview].pdf)

Business or sector Agriculture, Climate Change, GHG Inventory and mitigation

January 2016 - May 2017

Regional Consultant - expert on agri-environmental policy -

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Skopje Office and Standing Working Group for Regional Rural Development (SWG RRD)

- The consultancy activities for development of a study and support the process of provision of policy recommendations on characterization and mapping of areas with natural constraints (ANC) in the SEE countries, compatible with the EU methodology and standards in WB Countries. Working as regional expert on assessing the national policies in the WB countries related to Areas with Natural Constraints, their assessment, mapping, proclamation and policy support. Managing the national experts' teams from Albania, Bosnia and Herzegovina, Kosovo, Macedonia, Montenegro and Serbia and providing technical support and transferring know-how on using the models and tools required for assessing the ANC based on EU standards and practices. Coordinating the activities for preparation of the national reports and participating in the preparation of the synthesis report with regional perspective. Preparation of the guidance for National reports preparation, managing and quality checking of the national reports and preparation of the synthesis report. The project derived policy recommendation by country as well as development of the common regional policy and methodology for designation of the ANC. Preparation of synthesis report. The report is available <http://seerural.org/wp-content/uploads/2009/05/Areas-with-Natural-Constraints-in-SEE-Assessment-and-Policy-Recommendations.pdf>

Business or sector Consultancy

January 2018 - October 2018

National Consultant - expert in Irrigation

GPM consulting, European Commission office in Skopje

- The consultancy activities in small-scale, low-cost and environment-friendly irrigation projects: elaboration on the concepts and preparation of TOR's. The main activities were working in close cooperation with international expert in data collection, analyses of the existing small-scale irrigation systems, determining the best practices and sites for construction of the efficient and environmentally friendly small-scale irrigation systems in Macedonia. Moreover, participated in the preparation of the report on Small scale irrigation in the country. Finally participated in the preparation of the ToR for selecting the bidder for designing the small-scale irrigation systems for the selected sites.

Business or sector Consultancy

February 2014 – December 2016

National consultant – expert in irrigation of agricultural crops

Rural Development Network, USAID

- Working as national expert on USAID supported project Adaptation to Climate Change in Agriculture. Work on development of the adaptation measures for reducing the water use in agriculture. Also work on the promotion and use of different water saving irrigation techniques determined as adaptation options to climate change. Moreover, prepared the report on EU approach to adaptation of agricultural sector to climate change.

Business or sector Consultancy, Climate Change, GHG Inventory and mitigation

EDUCATION AND TRAINING

October 1992 – March 1996

Doctor of Agricultural Sciences – Ph.D

University Ss. Cyril and Methodius in Skopje, Faculty of Agriculture, Skopje, Macedonia

- Mentored type of Ph.D. . Ph.D. Thesis title: The effect of pulse irrigation on shugar beet yield and quality in Skopje Region. Gained skills in conducting independent research, advanced statistical skills for analysing agricultural experiments, advanced public presentation skills, advanced skills in preparation of scientific papers, advanced skills in preparation of written reports, advanced skills in science communication, etc.

October 1986 – February 1991)

Master of Agricultural Sciences – M. Sc

University Ss. Cyril and Methodius in Skopje, Faculty of Agriculture, Skopje, Macedonia

- Advanced courses in: Research Methods, Statistics, Crop Physiology, Irrigation, Hydraulics, Hydrology etc. M.Sc. thesist title: The soil water properties in Kamnik area and their Use in Maize Irrigation. Gained skills in soil surveying, laboratory analyses of soil properties, empirical modelling,

October 1981 – February 1986

Graduated Agricultural Engineer

University Ss. Cyril and Methodius in Skopje, Faculty of Agriculture, Skopje, Macedonia

- 28 two semestral courses in: Mathematics, Botany, Chemistry, Agricultural Meteorology, Agricultural Machinery, Land Reclamation, Soil Erosion, Soil science, Agrochemistry, Crop Science, Agricultural Economy, etc. Graduation thesist: The effect of the velocity of the row seeding machine on the winther wheet yield and yield components.

September 1975 – June 1979

High School Graduate

High School Cvetan Dimov,, Skoje, Macedonia

- Four years education in general education including: Natural sciences and Mathematic, Social sciences, Humanities, Languages Sports and Arts. (Ex. Mathematics, Physic, Biology, Chemistry, History, Geography, Phylosophy, Sociology, Logics, Physology, Macedonian, English, Latin, Sports, Arts, etc)

OTHER TRAINING

July 2004 – September 2004

International Course GIS (Geographic Information System) Technology for Sustainable Management of Natural Resources and Agricultural Products

JICA training program - University of Nagoya, Nagoya, Japan

April 1999 – June 1999

International Course on Pressurized Irrigation Systems

CINADCO/MASHAV, Israel - System of technical cooperation of Israelian government

May 1996 – July 1996

International Training Course on the Use of Nuclear Techniques on Soil/Plant Relationships with Emphasis on Soil-Water Management

FAO/IAEA, Sibersdorf, Austria - System of technical cooperation in UN organization .

August 1993 – October 1993

International Training Course on Agricultural Techniques in Arid Areas

TAC, Ankara, Turkey, System of technical cooperation of Turkey, governmental organization)

July 1988 – August 1988

Short Course on Flow Regulation and Measurement in Irrigation Systems

Colorado State University, Colorado Institute for Irrigation Management, Fort Collins, USA

August 1988 – September 1988

Short Course on Modern Surface Irrigation Systems, Design and management

Colorado State University, Colorado Institute for Irrigation Management, Fort Collins, USA

PERSONAL SKILLS

Mother tongue(s)

Macedonian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	B2
Serbo-Croatian	C1	C1	C1	C1	C1
Bulgarian	B1	B1	A2	A2	A1
Italian	A1	A1	A1	A1	A1
	Replace with name of language certificate. Enter level if known.				
Replace with language	Enter level	Enter level	Enter level	Enter level	Enter level
	Replace with name of language certificate. Enter level if known.				

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills

- good communication skills gained through my experience as university professor, as team member in number of multidisciplinary projects (national and international) and as national and international expert engaged by international organizations (World Bank, European Commission, Consultancy companies, etc.)
- Excellent presentation skills gained in 34 years of lecturing experience and participating on number of conferences, symposiums, congresses, workshops etc (see publication list)

Organisational / managerial skills

- Excellent leadership skills gained in the 10 years period when I was working as high level decision maker in high education and running the institution with more than 130 employees (Vice dean and Dean of the Faculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University in Skopje). Moreover I gained such University Senate member, team leader and principal investigator in number of national and international projects, etc.
- Very good organisational skills gained in organizing the number of events, Workshops, Conferences, Symposias etc. .at national and international level

Job-related skills

- Highly experienced in Climate change issues, with developed skills in GHG inventory, Mitigation options, strategies and measures, adaptation practices, design, modelling and testing in real environment gained trough number gained inalmost 30 years of activities in climate change issues at national and international environment.
- Excellent understanding of national circumstances related to the climate change gained in number of projects and consultancy activities in last 20 years, particularly in the activities related to the preparation of all 4 national reports on climate change for UNFCCC, and participation in the second and third Biannual Update Report to the UNFCCC.
- Very good understanding of the methodology, tools and practices implemented in the International activities related to Climate change, gained during my work for the Joint Research Center in Ispra, Italy and number of international and regional projects and consultancy activities already presented above.
- Very good experience in assessment of the adaptive capacities, legal framefork and institutional setup for climate change adaptation.

Digital skills

- good command of office suite (word processor, spread sheet, presentation software)
- Good capacities in analyse of the climate change using Climate Data Operators (CDO), R – packages, FAO AquaCrop model and some other tools.
- Basic knowledge of GIS and RS software (ArcGIS, QGIS)
- Some experience in Statistica software (Statistica, SPSS...)

Other skills

- Art photography (classic, using film and foto paper, never passed to digital), gained as long-time member of the photo club "Chair" in Skopje, and participating in number of art photography exhibitions.
- Ham radio skills gained as long time member of Ham-Radio Club Bratstvo in Skopje
- Good knowledge in 3D printing (present hobby)
- Good experience in building drones for various purposes (video capturing, spectral photography, spraying of agricultural crops, etc.) gained as hobby and building more than 10 different size drones with various functions.
- Good experience in robotics and constructing of the various robots and CNC machines, gained trough hobby building of several 3D printers, CNC routers, drawing robots and laser cutters).
- Basic knowledge on embedded computers and their use in robotics and agriculture (Arduino, Raspberry Pi, etc)
- Experienced in creating innovative concepts for smart agriculture based on advanced technologies (IoT, sensor networks....)

Driving licence

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ADDITIONAL INFORMATION

Publications

In last 5 years, full list attached as annex

1. Tatjana Blazhevska, Tanaskovik, V., Čukaliev, O., Valentina Pavlova, Marija Menkinoska, Zora Uzunoska. (2018) Physical-chemical properties of water in Crna river in the Pelagonia region. Journal of Agricultural, Food and Environmental Sciences, Vol. 72, No.1 pp.192-197. Special Issue: Proceedings 3rd International Symposium for Agriculture and Food 18-20 October 2017, Ohrid, Republic of Macedonia.
2. Šimunić, I., Spalević, V., Miseckaitė, O., Tanaskovik, V., Chukaliev, O. and Vukelic-Shutoska, M., 2018. Crop yield on hydromelioration soil in dry and humid years. In Green Room sessions 2018: international GEA (Geo Eco-Eco Agro) conference, 1-3 November 2018, Podgorica, Montenegro: book of abstracts. Podgorica: University of Montenegro, 2018. Podgorica: University of Montenegro, 2018.
3. Tanaskovik, V., Cukaliev, O., Romić, D., Ondrasek, G., Savić, R., Markoski, M., Nechkovski, S., (2019). Water use efficiency and pepper yield under different irrigation and fertilization regime. CONTRIBUTIONS, Section of Natural, Mathematical and Biotechnical Sciences, MASA, Vol. 40, No. 1, pp. 53–62, Dedicated to academician Gjorgji Filipovski on the occasion of his 100th birthday. ISSN 1857–9027; e-ISSN
4. Zajac, Z., Gomez, O., Gelati, E., van der Velde, M., Bassu, S., Ceglar, A., Chukaliev, O., Panarello, L., Koeble, R., van den Berg, M. and Niemeyer, S., 2022. Estimation of spatial distribution of irrigated crop areas in Europe for large-scale modelling applications. Agricultural Water Management, 266, p.107527.
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Projects

- More than 50 national and international projects, full list attached as annex.
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ANNEXES

Annex 1. List of publications

Annex 2. List of projects

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Annex 1. Publication list

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Annex 2. Project list

Date from-to	Project	Location	Company/Client	Position	Description
Jun 2021 – May 2025	Revenue diversification pathways in Africa through bio-based and circular agricultural innovations Developing innovative bio-based technologies	Skopje, nad number of EU and African countries	Horizon 2020 Project, European Commission	Team Member	The DIVAGRI project proposes a wide range of bio-based innovative solutions adapted to specific conditions in target countries. Ecosystem restoration in combination with diverse crop production in regenerative agricultural systems, mobile biorefineries for biomass conversion to high-value compounds and bioenergy, and the highly innovative clay-based micro-irrigation system "SLECI" (Self-regulating, Low Energy, Claybased Irrigation) are solutions developed by DIVAGRI. In addition, building on community participation and co-development of collaborative business models, the project will enable smallholder farmers to increase income and generate new economic opportunities while guaranteeing food security, real rural opportunities, and sustainability. The focus of this project is not only on the primary production sector but also on the food and bio-based industries, thus promoting new partnerships between producers, processors, retailers and consumers and opening new sustainable avenues for businesses, services and value chains in support of rural communities.
Feb 2016 – Jul 2018	Coordinating and integRating state-of-the-art Earth Observation Activities in the regions of North Africa, Middle East, and Balkans and Developing Links with GEO related initiatives towards GEOSS (GEOCRADLE)	Skopje	Horizon 2020 Project, European Commission	National Coordinator and Key Researcher	The overarching objective of the GEO-CRADLE project is to create a multi-regional (Balkans, N. Africa and Middle East) coordination network, supporting the effective integration of Earth Observation (EO) capacities, providing the interface for the engagement of the complete ecosystem of EO stakeholders, promoting the uptake of EO services and data in response to regional needs and, finally, contributing to the implementation of GEOSS and Copernicus in the Region of Interest.
Jan 2016 – Dec 2016	Protection of human life and environmental health through sustainable management of agrarian landscapes",	Skopje, Thessaloniki, Loutra Volvis	IPA Cross-border Programme "Greece - The former Yugoslav Republic of Macedonia	National team leader	Work on implement water quality and quantity monitoring actions in the test sites of the project and to carry out a subsequent environmental evaluation of the system's performance. Developing the common methodology standards for the water and soil ecosystems management in the context of protecting environmental and human health. Managing activities of the national team.
Mar 2013 – Aug 2013	Carbon Preservation and Sequestration in agricultural soils (CAPRESE)	Ispra	Joint Research Centre of European Commission (JRC)	Researcher	Development of irrigation strategies and modelling solution for full and deficit irrigation. Drafting part of the report dedicated to the effect of different irrigation strategies on maize productivity in Europe.
Jan 2012 – Dec 2014	Interactive System for Farmers Support in efficient water use and management, EU IPA with Greece, 2012-2014	Skopje, Bitola, Thessaloniki, Kazhani	European commission 2007 - 2013 Greece - Former Yugoslav Republic of Macedonia IPA CBC	National team leader, researcher	Development of the interactive farmers support system for irrigation scheduling based on soil moisture sensors and automated weather stations. Position left due to new employment
Dec 2006 - Dec 2010	Education, Research and Training for Global Environmental Change and Sustainable Management of Natural Resources in Western Balkans	As, Norway, Belgrade Serbia and 8 other University cities on WB	Norwegian University of Life Sciences, University of Belgrade SIU, Norwegian Cooperation Program	National Project Coordinator	Establishing education (curricula or courses) on global environmental changes and Sustainable Management of Natural Resources at WB Universities Improving research activities Research and Training for Global Environmental Change in Western Balkans among WB Universities and establish joint research activities among partners Support young scientist trough Ph.D. fellowship

Mar 2008 – Dec 2009	Delivering of a training programme on implementation of Integrated Pest Management and Integrated Crop Management in accordance to the GAP standard for the farmers in Prespa	Resen, Macedonia	UNDP, GEF Prespa park Project	Project Coordinator	Conducting training for farmers on Integrated Pest Management and Integrated Crop Management in accordance to the GAP standard. Two groups of 20 farmers each was trained.
December 2006 June 2008	INTERREG III B - CADSES Project, Remotely Accessed Decision Support System for Transnational Environmental Risk management - STRiM	Chania, Greece	Mediterranean Agronomic Institute of Chania, Faculty of Agricultural Sciences and Food - Skopje and 14 more partners from region	Team member	Establishing Remotely Accessed Decision support system for Transnational Environmental Risk Management - Flood control and water use from Vardar River and its tributaries (Greece-Macedonia International Water)
Jan 2005 Dec 2007	Upgrading of Food Safety System in the Republic of Macedonia	Skopje- Macedonia	International Agency for Atomic Energy, Viena, Austria, Ministry of Education and Science, Faculty of Agricultural Sciences and Food - Skopje	Team Member	Establishing of laboratory for GMO at Faculty of Agricultural Sciences and Food Establishing of Radiology Laboratory of Faculty of Agricultural Sciences and Food Infrastructural upgrading, equipment supply, staff training
May 2005 Dec 2005	Preparation of National Action plan for Combating Land Degradation, Drought and Desertification	Skopje, Macedonia	Implementing Agency: Ministry of Environment and physical planning, Executing agency: UNDP,	Team Member	Preparation of National Action Plan on Land Degradation, Drought and Desertification Preparation of National Strategy on Land Degradation, Drought and Desertification
Jan 2004 Dec 2005	Development of a Land Information System and its Implementation in Agriculture and Environmental Protection	Various locations in Macedonia	Ministry of Education and Science, Faculty of Agricultural Sciences and Food - Skopje, Biotechnical Faculty of University of Ljubljana	Team Leader	Establishing of GIS and RS Laboratory at Faculty of Agricultural Sciences and Food in Skopje Establishing of procedures/processes for Land Information System in Macedonia based on Slovenian Experience
May 2003 Dec 2004	Modern Geomatics Technology for Land Improvement and Crop Management	Lausanne - Swiss, Plovdiv - Bulgaria, Skopje - Macedonia	SCOPES Programme, SNFL, Swiss, EPFL, Swiss, Agricultural University, Plovdiv Bulgaria, Faculty of Agriculture Skopje	National Team leader	Capacity building of two SEE universities for use of modern geomatic technologies in Agriculture (GIS, RS, GPS, Aerial Photos, Total Station...)
Mart 2003 Apr 2003	<i>Regional workshops for raising public awareness on climate changes in the country</i>	Skopje, Macedonia	Implementing Agency: Ministry of Environment, Executing agency: UNDP,	Agricultural Expert	Transfer of Know how and raising of public awareness for climate change related problems and methods for adaptation

July 2001 Dec 2002	Vulnerability assessment and adaptation with respect to the specific geographical and climatologically characteristics of the country to climate changes in Macedonia	Skopje, Macedonia	Implementing Agency: Ministry of Environment, Executing agency: UNDP,	Team leader of agricultural team	Enabling Macedonia to prepare its first national communication in response its commitment to the UNFCCC Assesment of vulnerability of Agricultural Sector (Soils, Crop production, Animal Husbandry) to CC Recommendation of adaptation measures for each sector Soci-economic impact and Gender issues
Mar 2001 Sep 2001	Urban plan for protection of Rasche springs area	Skopje	Public institute for urban planning	Team Member	Analyze of Agricultural activates in Rasche protected area (all zones). Recommendation of Best Available Practices for avoiding pollution of the spring water Analyze of Crop water requirement and possibilities for leaching of excess water
Jan 2001 Dec 2004	Fertigation for Improved Crop Production and Environmental Protection	Vienna, Skopje	IAEA/FAO, Austria, and 12 research institution from Europe	Principal Investigator and Main Counterpart from Macedonian Part	Regional project financed by International Atomic Energy Agency Effect of fertigation on yield of cabbage and Tomato crop and analyze of environmental effects in comparison with traditional irrigation and Fertilization Methodology
Jul 2000 Jun 2003	Use of nuclear techniques in irrigation and fertilization in order to increase crop yield and protect the environment	Skopje	Ministry of Education and Science, Faculty of Agriculture	Principle Investigator, Team Leader	National project as national contribution to IAEA/FAO supported project
Jan 1999 Dec 2002	The Use of Nuclear Techniques in Soil Fertility and Water Management Studies in Order to Obtain Higher Crop Yield,	Skopje, Macedonia Vienna, Austria	IAEA,FAO, Faculty of Agriculture	Principle Investigator and Main Counterpart	Use of nuclear techniques to increase water use efficiency and fertilizer use efficiency in winter wheat production in Macedonia Infrastructural building (Lab space) Equipping of Laboratories Training of Staff and Scientific visits On field experiments and recommendations
Jan 1999 Dec 2000	Possibilities to Grow Canola by Private Farmers in Republic of Macedonia	Skopje, Macedonia	Ministry of Agriculture, Forestry and Water Economy, Faculty of Agriculture	Principle Investigator and Team Leader	Introduction of Canola crop among private farmers in Macedonia, based on on-farm experiments
Jul 1998 Dec 2000	Increasing of Irrigation Efficiency and Economy by Use of Modern Irrigation Techniques	Skopje, Macedonia	Ministry of Agriculture, Forestry and Water Economy, Faculty of Agriculture	Team Member	Comparison of traditional and modern irrigation techniques (Surge flow irrigation, drip irrigation, micro sprinkler irrigation) and determination of yield increasing and increased profitability
Sep 1997 Mar 1998	Survey of Small-Scale Farmers in Republic of Macedonia	Whole Territory of Macedonia	World Bank Environmental and Socially Sustainable Development, Europe and Central Asia Region of the World Bank	Team Leader	Survey of 500 small farmers all over the country on their agricultural practices and their needs assessment
Oct 1996 Mar 1997	Profiles crop modelling	Whole Territory of Macedonia	Faculty of Agriculture, Agribusiness Centre	Team Leader of Local Consultancy Group	Analyze of crop production cost for agricultural companies in Macedonia.
Jan 1996 May 1999	The Use of Modern Micro Irrigation Techniques in Tomato and Alfalfa Production	Skopje, Gevgelija	Faculty of Agriculture, Ministry of Education and Science	Team member	Use of pulse irrigation in alfalfa irrigation and drip irrigation in tomato production and analyse of benefits achieved with new irrigation techniques
Feb 1995 Sep 1996	Rehabilitation of Irrigation Schemes "Bregalnica", Tikvesh" and "Polog"	Skopje	Institute for Water Management, Ministry for Agriculture, Forestry and Water Economy	Agricultural Engineer, Team Member	Present and predicted situation in agriculture on the scheme level Cropping pattern in present and predicted situation Soil s Crop water requirement Irrigation Water Requirement using Proposed irrigation techniques based on crop and soil Economic Analyze

Jan 1994 Apr 1997	Systems of Growing, Irrigation Techniques and Frost Protection in Fruit Production	Skopje	Faculty of Agriculture, Ministry of Education and Science	Team Member	Analyze of irrigation use for frost protection, fruit coloring and mulching. Effects and achievements.
Jan 1991 Jun 1994	Investigation of HMS "Bregalnica", it's Functionality, Upgrading and Modernization	Skopje, Stip	Faculty of Agriculture, Ministry of Education and Science	Team Member	Analyze of HMS Bregalnica Recommendation for modernization and increasing of water use efficiency in distribution network and on the farm level
Jan 1992 Mar 1995	Improvement of Crop Production by Usage of Modern Irrigation Techniques (Pulse, Surge Flow Irrigation)	Skopje, Bitola	Institute for Field and Vegetable Crops	Team Member	Analyze of effects on crop production of pulse and surge irrigation techniques for Macedonian environment
Jan 1986 May 1992	Improvement of Field Crop Production by Usage of Rational Irrigation	Skopje	Institute for Field and Vegetable Crops	Team Member	Use of rational irrigation for sugar beet production. Effects on crop yield and sugar content
Apr 1987 Mar 1988	Agricultural Master Plan for Irrigation Scheme "Udovo" – Valandovo	Skopje, Valandovo	Institute for Field and Vegetable Crops	Team Member	Preparation of Agricultural Master Plan for Irrigation Scheme "Udovo" – Valandovo : Present and predicted situation in agriculture on the scheme level Cropping pattern in present and predicted situation Soil s Crop water requirement using Blaney & Criddle methodology Irrigation Water Requirement using Hydromodule Proposed irrigation techniques based on crop and soil Economic Analyse
Mar 1986 Dec 1986	Agricultural Master Plan for Irrigation Scheme "Zletovica" – Probishtip	Skopje, Probishtip	Institute for Field and Vegetable Crops	Team Member	Preparation of agricultural Master Plan for Irrigation Scheme "Zletovica" – Probishtip Present and predicted situation in agriculture on the scheme level Cropping pattern in present and predicted situation Soil s Crop water requirement using Blaney & Criddle methodology Irrigation Water Requirement using Hydromodule Proposed irrigation techniques based on crop and soil Economic Analyse