

Proceedings of
the 38th International Business Information Management Association Conference
(IBIMA)

23-24 November 2021, Seville, Spain

ISBN: 978-0-9998551-7-1

ISSN: 2767-9640

Innovation Management and Sustainable Economic Development
in the Era of Global Pandemic

Editor

Khalid S. Soliman

International Business Information Management Association (IBIMA)

Copyright 2021

Conference Chair

Khalid S. Soliman, International Business Information Management Association, USA

Special Session I Chair

Marilena Ianculescu, National Institute for R&D in Informatics – ICI București, Romania

Special Session II Chair

Karina Szafrńska, Warsaw University of Life Sciences, Poland

Ewa Małachowska, Warsaw University of Life Sciences, Poland

Conference Advisory Committee

John F. Affisco, Hofstra University, USA

Abdul Rahman Ahmad, Universiti Tun Hussein Onn Malaysia, Malaysia

Omar Al-Azzam, University of Minnesota Crookston, USA

Hesham H. Ali, University of Nebraska at Omaha, USA

Ahmed Azam, DeVry University, USA

Az-Eddine Bennani, Reims Management School, France

Emil Boasson, Central Michigan University, USA

Regina Connolly, Dublin City University, Ireland

Rene Leveaux, University of Technology, Sydney, Australia

Susana de Juana Espinosa, Universidad de Alicante, Spain

Xiuzhen Feng, Beijing University of Technology, China

Mohammad Ayub Khan, Tecnologico de Monterrey, Mexico

Sherif Kamel, The American University in Cairo, Egypt

Najib Saylani, Florida State College at Jacksonville, USA

Magdy Serour, InContext Solutions, Australia

Amine Nehari Talet, King Fahd University of Petroleum & Mineral, KSA

Abraham G. van der Vyver, Monash University, South Africa

Program Committee

(it is IBIMA Policy to include a program committee member's name only after reviewing at least one submitted paper)

Natalia Vladimirovna Antonova, Honorary Consulate of Mongolia in the Russian Federation, European Council for Business Education, Russia

Magdalena Wójcik-Jurkiewicz, Cracow University of Economics, Department of Accounting, Poland

Magdalena Cyrek, University of Rzeszów, Poland

Anna Tokarz-Kocik, University of Szczecin, Poland

Onur Guvenc, Almaty Management University, Kazakhstan

Łukasz Wróblewski, WSB University, Poland

Dana Corina Deselnicu, University POLITEHNICA of Bucharest, Romania

Małysiak Justyna, Military University of Land Forces, Poland

Sergey Ilkevich, Financial University under the Government of the Russian Federation, Russia

Dmitry Rodionov, Peter the Great St.Petersburg Polytechnic University, Russia

Kateryna Tiulkina, Odessa State Academy of Civil Engineering and Architecture, Ukraine

Ilona Pawełoszek, Częstochowa University of Technology, Poland
Kamil Wróbel, Poznan University of Technology, Poland
Piotr Wittbrodt, Opole University of Technology, Poland
Rodionov Mikhail, Penza State University, Russian Federation
Anton K. Kuznetsov, I.N. Ulyanov Chuvash State University, Russia
Adriana Dima, Bucharest University of Economic Studies, Romania
Bogdan Ghilic-Micu, Bucharest University of Economic Studies, Romania
Octavian Dospinescu, Alexandru Ioan Cuza University of Iasi, Romania
Pupentsova V. Svetlana, Peter the Great St. Petersburg Polytechnic University, Russia
Edyta Kardas, Czestochowa University of Technology, Poland
E. Emmanuel Okoh, Covenant University, Nigeria
Farrah Diana Saiful Bahry, Universiti Teknologi MARA, Malaysia
Katarzyna Sanak-Kosmowska, Cracow University of Economics, Poland
Karol Krol, University of Agriculture in Krakow, Poland
Piotr Maśloch, Institute of Management, War Studies University, Poland
Mercy A. Agumadu, Chrisland University, Nigeria
Elżbieta Szulc, Nicolaus Copernicus University in Toruń, Poland
Adriana Krawczyk, Amsterdam University of Applied Sciences, Netherlands
Ladislav Mariš, University of Žilina, Slovakia
Pavle Jakovac, University of Rijeka, Faculty of Economics and Business, Croatia
Rosmaizura Mohd Zain, Universiti Malaysia Kelantan, Malaysia
Iwona Zdonek, Silesian University of Technology, Poland
Shavrovskaya Marina, Ural State University of Economics, Russian Federation
Svetlana Bukhantseva, MIREA — Russian Technological University, Russia
Nibedita Saha, Tomas Bata University in Zlin, University Institute, Czech Republic
Iwona Lupa-Wójcik, Pedagogical University of Krakow, Poland
Ayodeji Olonode, Olabisi Onabanjo University, Ago-Iwoye, Ogun State, Nigeria
Sofoduchó-Pelc Letycja, Wrocław University of Economics and Business, Poland
Grzegorz Maśloch, SGH Warsaw School of Economics, Poland
Bartosz Kozicki, Military University of Technology, Poland
Diana Bratić, University of Zagreb, Croatia
Rafał Nagaj, University of Szczecin, Institute of Economics and Finance, Poland
C.S. Kaveri, Dayananda Sagar University, India
Athanasios Podaras, Technical University of Liberec, Czech Republic
Łukasz Tomczyk, Pedagogical University of Craciw, Poland
Andreea Muraru, The Bucharest University of Economic Study, Romania
Yousif Abdelrahim, Prince Mohammad Bin Fahad University, KSA
Viktorija Šipilova, Daugavpils University, Latvia
Alla Ivashchenko, Kyiv National Economic University named after Vadym Hetman, Ukraine
Tomas Broum, The University of West Bohemia, Czech Republic
Larysa Novak-Kalyayeva, Ukrainian State Employment Service Training Institute, Ukraine
Ruxandra Pitorac, West University of Timisoara, Romania
Chijioke Esogwa Nwachukwu, Horizons University Paris, France
Nik Hazimah Nik Mat, Universiti Malaysia Terengganu, Malaysia
Nataliia Pavlenchuk, Lviv State University of Physical Culture named after Ivan Boberskyj, Ukraine
Petr Cech, University College of Business in Prague, Czech Republic
Katarzyna Szymczyk, Czestochowa University of Technology, Poland
Grzegorz Wesołowski, The John Paul II Catholic University of Lublin, Poland
Anna Karczewska, Czestochowa University of Technology, Poland
Rubina Masum, IQRA University, Pakistan
Derweanna Bah Simpong, Universiti Malaysia Kelantan (UMK), Malaysia
Dorin Maier, Technical University of Cluj-Napoca, Romania
Laura Elena Zapata Jimenez, Universidad Católica Luis Amigó, Medellín Colombia
Iwona Krzyżewska, WSB University (Akademia WSB), Poland
Clara Silveira, Polytechnic Institute of Guarda, Portugal

Dian Damayanti, Institut Ilmu Sosial dan Manajemen STIAMI, Indonesia
Silvia Barnová, DTI University, Slovakia
Liudmila A. Guzikova, Peter the Great Saint-Petersburg Polytechnic University, Russia
Edyta Kulej-Dudek, Czestochowa University of Technology, Poland
Tatjana Vasiljeva, RISEBA University of Applied Sciences, Latvia
Imene Essoussi, University of Business and Technology, KSA
Chiraz Ben Salem Ben Gaied, Lab. ISEFE - University of Tunis el Manar, Tunisia
Dariusz Nowak, Poznan University of Economics and Business, Poland
Andrei-Mirel Florea, "Dunarea de Jos" University of Galati, Romania
Shamima Raihan Manzoor, Multimedia University, Malaysia
Sandra Grabowska, Silesian University of Technology, Poland
Maciej Woźniak, AGH University of Science and Technology, Poland
Natalya V. Alesina, Sevastopol State University, Russia
Galina Bannykh, Ural Federal University, Russia
Paulina Golinska-Dawson, Poznan Univ. of Technology, Poland
Honorata Howaniec, University of Bielsko-Biala, Poland
Katarzyna Czainska, General Tadeusz Kosciuszko Military University of Land Forces, Poland
Karlis Kreslins, Ventspils University of Applied Sciences, Latvia
Robert Ulewicz, Czestochowa University of Technology, Poland
Sebastian Saniuk, University of Zielona Góra, Poland
Małgorzata Okręglicka, Czestochowa University of Technology, Poland
Agnieszka Kłysik-Uryszek, University of Łódź, Poland
Lilla Knop, Silesian University of Technology, Poland
Rossana Soto Gonzales, Universidad San Ignacio de Loyola, Peru
Ouail El Imrani, Abdelmalek Essaadi University, Morocco
Arwa Mashat, King Abdulaziz University, KSA
Maciej Dębski, University of Social Sciences, Poland
Pavel Shust, St-Petersburg State University, Russia
Tamara Iskra Alcántara Concepción, Universidad Nacional Autónoma de México, México
Georgiy Greyz, South Urals State University, Russia
Maciej Czaplewski, University of Szczecin, Poland
Elena Korostyshevskaya, Saint-Petersburg State University, Russia
Elena Rozhdestvenskaia, Tomsk State University, Russia
Paulo Pinto-Moreira, Coimbra Business School – ISCAC, Portugal
Anna Kowalska, Wroclaw University of Economics and Business, Poland
Joseph Ugochukwu Madugba, Landmark University, Nigeria
Anna Yu. Kosobutskaya, Voronezh State University, Russia
Aleksandra Skrabacz, Pomeranian University, Poland
Agata Mesjasz-Lech, Czestochowa University of Technology, Poland
Adrian Ioana, Politehnica University of Bucharest, Romania
Galina Yu. Fedotova, The Russian Presidential Academy of National Economy and Public Administration, Russia
Tomasz Szczepanik, Czestochowa University of Technology, Poland
Maria Plakhotnikova, Moscow Open Institute, Russia
Emmanuel Olusuyi Ajayi, Bells University of Technology, Ota, Nigeria
Ekaterina Uskova, UrFU, Russia
Rawlings Jerry Mazuba Kalubi, Peter the Great, St. Petersburg Polytechnic University, Russia
Sergey Evgenievich Barykin, Peter the Great St. Petersburg Polytechnic University, Russia
Marina Olegovna Efremova, Peter the Great St.Petersburg Polytechnic University, Russia
Tadeusz A. Grzeszczyk, Warsaw University of Technology, Poland
Funmilade Loveth Adeoye, Covenant University, Nigeria
Boris Miethlich, IIC University of Technology, Cambodia
Iveta Linina, Turiba University, Latvia
Daria Bylieva, Peter the Great St.Petersburg Polytechnic University (SPbPU), Russia
Pawel Bartoszczuk, Warsaw School of Economics, Poland

Simona-Andreea Apostu, Bucharest University of Economic Studies, Romania
Yuanyuan Xia, Sumy National Agrarian University, Ukraine
Victor Dostov, Distributed Ledger Technology Center of Saint-Petersburg State University, Russia
Oksana Pirogova, Peter the Great St. Petersburg Polytechnic University, Russia
Anna Wziątek-Staško, Jagiellonian University in Kraków, Poland
Małgorzata Solarz, Wrocław University of Economics and Business, Poland
Marcin Olkiewicz, Koszalin University of Technology, Poland
Zuriyati Ahmad, Universiti Teknologi MARA, Malaysia
Bogdan Cîmpan, Bucharest University of Economic Studies, Romania
Issam Izza, Université Sultan Moulay Slimane, Morocco
Rafał Klóska, University of Szczecin, Poland
Maher Toukabri, Northern Border University, KSA
Leszek Kazmierczak-Piwko, University of Zielona Góra, Poland
Marius Schönberger, Research Institute for Education and Digitization (FoBiD), Germany
Valentina Mikhailovna Sharapova, Ural State University of Economics, Russia
Oana Vlăduț, Politehnica University of Bucharest, Romania
Mariam Cherqaoui, Université Ibn Tofail, Morocco
Afshan Rauf, University of Wollongong, Australia
Karolina Drela, University of Szczecin, Poland
Olga Zaborovskaia, The State Institute of Economics, Finance, Law, and Technology, Russia
Iryna Koshkalda, Kharkiv National Agrarian University named after Dokuchaiev, Ukraine
Gratiela Dana Boca, Technical University Cluj Napoca, Romania
Piotr Walentynowicz, University of Gdansk, Poland
Sławomir Jankiewicz, SB University in Poznan, Poland
Barbara Grabinska, Cracow University of Economics, Poland
Rim K. Nurmukhametov, Financial University, Russia
Djula Borozan, Josip Juraj Strossmayer University in Osijek, Faculty of Economics in Osijek, Croatia
Adrianna Guzowska, UTP University of Science and Technology, Poland
Nina Golowko, Self-employed lecturer, Germany
Cristina Popescu, Petroleum-Gas University of Ploiesti, Romania
Sanja Pfeifer, Josip Juraj Strossmayer University of Osijek, Croatia
Klaudia Smoła, Czestochowa University of Technology, Poland
Justyna Brzezińska, University of Economics in Katowice, Poland
Mateusz Jankiewicz, Nicolaus Copernicus University in Toruń, Poland
Konrad Peszynski, RMIT University, Australia
Izabela Sztangret, University of Economics in Katowice, Poland
Anastasia Ilyina, Kyiv National University of Trade and Economics, Ukraine
Arkadiusz Banasik, Silesian University of Technology, Poland
Ruxandra Dinulescu, Bucharest University of Economic Studies, Romania
Steliana Rodino, INCDSB/ICEADR, Romania
Radu Ștefan Pătru, Bucharest University of Economic Studies, Romania
Iwona Markowicz, University of Szczecin, Poland
Małgorzata Dąbrowska-Świder, Military University of Technology in Warsaw, Poland
Agnieszka Knap-Stefaniuk, Jesuit University Ignatianum in Krakow, Poland
Yuliya Karpovich, Perm National Research Polytechnic University, Russia
Katarzyna Łukasik, Czestochowa University of Technology, Faculty of Management, Poland
Elizaveta Gromova, Peter the Great St. Petersburg Polytechnic University, Russia
Agnieszka Piasecka-Robak, University of Lower Silesia, Poland
Matthew A. Oluwatoyin, Covenant University, Ota, Nigeria
Inna Berzhanir, Pavlo Tychyna Uman State Pedagogical University, Ukraine
Manuel Luis Lodeiros-Zubiria, Universidad Peruana de Ciencias Aplicadas, Peru
Zhanna Shmeleva, Krasnoyarsk State Agrarian University, Russia
Sabina Kubiciel-Lodzińska, Opole University of Technology, Poland
Galina Podbiralina, Plekhanov Russian University of Economic, Russia
Mihai Orzan, Bucharest University of Economic Studies, Romania

Luiza Trzcńska, Military University of Technology in Warsaw, Poland
Evgenia Prokopjeva, Khakass Technical Institute – branch of Siberian Federal University, Russia
Martina Blašková, Police Academy of the Czech Republic in Prague, Czech Republic
Renata Biadacz, Czestochowa University of Technology, Poland
Mohammad Y. Abuhashesh, Princess Sumaya University for Technology (PSUT), Jordan
Oleh Lazariev, Uman National University of Horticulture, Ukraine
Victor S. Voronov, St. Petersburg State University of Economics, Russia
Lidiya Viktorovna Mazur, Moscow Financial-Industrial University “Synergy”, Moscow, Russia
Ahmad Suffian Mohd Zahari, Universiti Teknologi MARA, Malaysia
Jan Chromy, Media4u Magazine, Czech Republic
Maria Samir Frangieh, Bucharest University of Economic Studies, Romania
Zbigniew Ofiarski, University of Szczecin, Poland
Iwona Wasielewska-Marszałkowska, Nicolaus Copernicus University in Torun, Faculty of Economic Sciences and Management, Poland
Alexander Ehimare Omankhanlen, Covenant University Ota, Nigeria
Ugochukwu Moses Urin, Covenant University, Nigeria
Laurentiu-Stelian Mihai, University of Craiova, Romania
Joanna Hardukiewicz-Chojnowska, WSB University in Wrocław, Poland
Ryszard K. Miler, WSB Gdańsk, Poland
Wioletta Wróblewska, University of Life Sciences in Lublin, Poland
Cristian Mera Macías, Universidad Laica Eloy Alfaro de Manabí, Ecuador
Sylvia Pieńkowska-Kamieniecka, University of Warmia and Mazury in Olsztyn, Poland
Ivan Strugar, University of Zagreb, Croatia
Tan Choo Peng, Multimedia University, Malaysia
Anastasiya Kopytova, Tomsk State Pedagogical University, Russia
Paula Bajdor, Czestochowa University of Technology, Poland
Niki Derlukiewicz, Wrocław University of Economics and Business, Poland
Madalina Ecaterina Popescu, The Bucharest University of Economic Studies, Romania
Olaleye Sunday Adewale, University of Oulu, Finland
Mercy Ejoywokeoghene Ogbari, Covenant University, Nigeria
Tomasz Grodzicki, Nicolaus Copernicus University in Toruń, Poland
Jacek Woźniak, Military University of Technology, Poland
Shilpa Taneja, Mudra Institute of Communications Ahmedabad (MICA), India
Katarzyna Szelańska-Rudzka, Gdynia Maritime University, Poland
Marzena Fährnich, University of Szczecin, Poland
Małgorzata Kutera, Jagiellonian University, Poland
Olga Rudakova, Orel State Institute of Culture, Russia
Karima Haoudi, Ibn Tofail University, Morocco
Małgorzata Cygańska, University of Warmia and Mazury in Olsztyn, Poland
Irina Avdeeva, Central Russian Institute of Management, Branch of RANEPA, Russia
Hezekiah O. Falola, Covenant University, Nigeria
Katarzyna Marek-Kolodziej, Opole University of Technology, Poland
Ionela-Roxana Petcu, Bucharest University of Economic Studies, Romania
Egor Golovanov, SUSU, Russia
Alexandra Cristina Dinu, Bucharest University of Economic Sciences, Romania
Nataliya Samoylenko, Sevastopol State University, Russia
Katarzyna Liczmańska-Kopcewicz, Nicolaus Copernicus University in Torun, Poland
Paulina Spanu, Politehnica University of Bucharest, Romania
Marcin Sitek, Czestochowa University of Technology, Poland
Fabrizio Amarilli, The Polytechnic University of Milan, Italy
Adam Ryszko, Silesian University of Technology, Poland
Olukemi Ade-Adeniji, Covenant University, Nigeria
Oscar Odiboh, Covenant University, Nigeria
Liliana Barbu, Lucian Blaga University of Sibiu, Romania
Elena Lylova, RUDN University, Russia

Oksana Portna, V. N. Karazin Kharkiv National University, Ukraine
Taiseera Al-Balushi, Sultan Qaboos University, Oman
Wojciech Bożek, University of Stettin, Poland
Sylvia Konecka, Poznań University of Economics and Business, Poland
Anna Ludwiczak, CALISIA-University, Kalisz, Poland
Iwona Pawlas, University of Economics in Katowice, Poland
Dorota Krupa, Nicolaus Copernicus University in Toruń, Poland
Paweł Brzustewicz, Nicolaus Copernicus University in Toruń, Poland
Aneta Kłopotcka, University of Economics and Human Sciences in Warsaw, Poland
Emilia Krajňáková, University of Alexander Dubček in Trenčín, Slovakia
Agnieszka Szczygielska, War Studies University, Poland
Dawuda Alhassan, ASA College, USA
Anna Firsova, Saratov State University, Russia
Arkadiusz Piwowar, Wrocław University of Economics and Business, Poland
Tomasz Studzieniecki, Gdynia Maritime University, Poland
Klaudia Skelnik, Wyższa Szkoła Bankowa w Gdańsku, Poland
Teresa Kupczyk, General Tadeusz Kościuszko Military University of Land Forces, Poland
Rozalia Kicsi, "Ștefan cel Mare" University of Suceava, Romania
Ines Ben Messaoud, University of Gabes / University of Sfax, Tunisia
Mariusz Cembruch-Nowakowski, Pedagogical University of Krakow, Poland
Konstantin Shvetsov, Peter the Great St. Petersburg Polytechnic University (SPbPU), Russia
Camelia Delcea, Bucharest University of Economic Studies, Romania
Anna Chwiłkowska-Kubala, Poznań University of Economics and Business, Poland
Maciej Gliniak, University of Agriculture in Krakow, Poland
Chuks O. Odiogwu Enwerem, National Open University of Nigeria, Nigeria
Olga Ivanovna Solodukhina, Southwest State University, Russia
Grzegorz Pietrek, WSB University in Gdansk, Poland
Adela Coman, University of Bucharest, Romania
Norhayati Baharun, Universiti Teknologi MARA (UiTM), Malaysia
Michał Teczle, Cracow University of Economics, Poland
Liviu-Adrian Cofas, Bucharest University of Economic Studies, Romania
Ewa Marchwicka, Wrocław University of Science and Technology, Poland
Ayobami Jolaade, Graduate, Covenant University, Nigeria
Ionel-Bujorel Păvăloiu, University POLITEHNICA of Bucharest, Romania
Martina Solenički, University of Zagreb, Faculty of Economics and Business, Croatia
Blanka Tundys, University of Szczecin, Poland
Tetyana Calinescu, National Aerospace University "Kharkiv Aviation institute", Ukraine
Aderounmu Busayo Olubunmi, Covenant University, Nigeria
Izabela Ostrowska, University of Szczecin, Poland
Malgorzata Ofiarska, University of Szczecin, Poland
Constanta-Nicoleta Bodea, The Bucharest University of Economic Studies, Romania
Mirona Ana Maria Popescu, University POLITEHNICA of Bucharest, Romania
Beata Skowron-Mielnik, Poznan University of Economics and Business, Poland
Marek Szajt, Czestochowa University of Technology, Poland
Agnieszka Malkowska, University of Szczecin, Poland
Vera Samarina, Staryy Oskol Technological Institute, branch of National Research Technological University "MISIS", Russia
Anetta Pukas, Wrocław University of Economics and Business, Poland
Raisa Kvasnytska, Khmelnytskyi National University, Ukraine
Cezar Scarlet, University "Politehnica" of Bucharest, Romania
Marcin Fliieger, General Tadeusz Kościuszko Military University of Land Forces, Poland
Włodzimierz Strelcow, Pomeranian University, Poland
Gabriela Roszyk-Kowalska, Poznań University of Economics and Business, Poland
Oluwaseun Johnson Awosejo, Tshwane University of Technology, ICT . Soshanguve Campus, South Africa
Alexandra Georgiadi, Sevastopol State University, Russia

Anca-Cristina Stanciu, Ovidius University of Constanța, Romania
Amparo Maset-Llaudes, Universitat Jaume I, Spain
Eva Petiz Lousã, University of Maia, Portugal
Jarosław Brodny, Silesian University of Technology, Poland
Manuela-Roxana Dijmarescu, POLITEHNICA University of Bucharest, Romania
Mioara Duca, POLITEHNICA University of Bucharest, Romania
Adam Kolinski, Poznan School of Logistics, Poland
Alicja Sekuła, Gdansk University of Technology, Poland
Oluwafemi Samson Balogun, University of Eastern Finland, Finland
Ebenezer Bowale, Covenant University, Nigeria
Luiza Piersiala, Czestochowa University of Technology, Poland
Valerii Pavliuk, University of the State Fiscal Service of Ukraine, Ukraine
Ioana Andreea Bogoslov, Lucian Blaga University of Sibiu, Romania
Svetlana Globa, Siberian Federal University, Russia
Álvaro Quiroz Bustos, Universidad del Bío Bio, Chile
Maria Mach-Król, University of Economics in Katowice, Poland
Daniela Zirra, Romanian-American University, Romania
Joanna Dynowska, University of Warmia and Mazury, Poland
Anita Peša, University of Zadar, Croatia
Obiamaka Nwobu, Covenant University, Nigeria
Lorena Batagan, Bucharest University of Economics, Romania
Liubov Afanasyeva, Southwest State University, Russia
Anton Petrov, KubSAU, Russia
Agnieszka Żołądkiewicz-Kuzioła, Nicolaus Copernicus University in Toruń, Poland
Isaiah Oluranti Olurinola, Covenant University, Nigeria
Alexander Kuntsman, St. Petersburg State University, Russia
Joanna Drobiazgiewicz, University of Szczecin, Poland
Adrian Kapczyński, Silesian University of Technology, Poland
Katarzyna Cheba, West Pomeranian University of Technology, Szczecin, Poland
Iuliia Efimova, Financial University under the Government of RF, Russia
David Orenuga, Covenant University, Nigeria
Redouane Mouhoub, Bucharest University of Economic Studies, Romania
Małgorzata Śliwa, University of Zielona Góra, Poland
Sebastian Białoskurski, University of Life Sciences in Lublin, Poland
Magdalena Swacha-Lech, Wrocław University of Economics and Business, Poland
Constantin Ilie, Ovidius University of Constanta, Romania
Dorina Sandu, Academy of Economic Studies - Doctoral School of Management, Romania
Lanre Amodu, Covenant University, Nigeria
T. G. Vasista, Vasista Consulting & Performing Services OPC Pvt Ltd., India
Galina Krapivina, Priazovsky State Technical University, Ukraine
Hanna Żuraw, University of Natural and Humanistic Sciences, Poland
Tadeusz Mędzelowski, Wyższa Szkoła Biznesu - National Louis University, Poland
Dorota Podgórska-Jachnik, University of Łódź, Poland
Ewa Ślęzak, Cracow University of Economics, Poland
Gheorghe Lucian, Ovidius University of Constanta, Romania
Vasily Makolov, Russian State University for the Humanities, Russia
Małgorzata Grzywińska – Rapca, University of Warmia and Mazury in Olsztyn, Poland
Gabriela Dobrotă, Constantin Brâncusi University of Targu Jiu, Romania
Elena Sibirskaya, Plekhanov Russian University of Economics, Russia
Maciej Marczyk, WSU Warsaw, Poland
Mohammad Khaled, Cybersecurity and Digital Transformation Thought Leader, UAE
Manuela Ingaldi, Czestochowa University of Technology, Poland
Janusz Wielki, Opole University of Technology, Poland
Jolana Fedorková, University of Defence, Czech Republic
Anna M. Korzeniowska, Maria Curie-Skłodowska University in Lublin, Poland

Aleksandra Kuzior, Silesian University of Technology, Poland
Gabriel Neagu, National Institute for R&D in Informatics – ICI Bucharest, Romania
Nicolai Jieri, Stefan cel Mare University of Suceava, Romania
Ionut Laurentiu Petre, Bucharest University of Economic Studies, Romania
Constantin Ionut, University of Bucharest, Romania
Magdalena Tutak, Silesian University of Technology, Poland
Mircea Georgescu, "Al. I. Cuza" University of Iasi, Romania
Cătălina Radu, Bucharest University of Economic Studies, Romania
Liudmyla Ilich, Borys Grinchenko Kyiv University, Ukraine
Stanislaw Minta, Wroclaw University of Environmental and Life Sciences, Poland
Ecaterina Daniela Zeca, "Dunarea de Jos" University of Galati, Romania
Ioana – Ruxandra Ioniță, POLITEHNICA University of Bucharest, Romania
Małgorzata Ćwiek, Cracow University of Economics, Poland
Nataliia Demeshkant, Pedagogical University of Krakow, Poland
Victor Stukach, Omsk States Agriculture University, Russia
Karol Kowalewski, University of Finance and Management in Bialystok, Poland
Laurentiu-Gabriel Talaghir, Dunărea de Jos University of Galati, Romania
Hector Jose Mendoza Cuellar, Universidad Peruana de Ciencias Aplicadas, Perú
Aleksandra Radziszewska, Czestochowa University of Technology, Poland
Liudmila Oveshnikova, PLEKHANOV Russian University of Economics, Russia
Anna Odrobina, Cracow University of Economics, Poland
Liana-Elena Anica-Popa, Bucharest University of Economic Studies, Romania
Esther Sleilati, Notre Dame University (NDU), Lebanon
Gabriela Prostean, Politehnica University of Timisoara, Romania
Milena Palczewska, War Studies University, Poland
Sebastian Bobowski, Wroclaw University of Economics and Business, Poland
Vladimir Nosov, Peoples' Friendship University of Russia (RUDN University), Russia
Simona Frone, Institute of National Economy, Romania
Andreyeva Darya Andreyevna, St. Petersburg State University of Economics, Russia
Dorota Balcerzyk, Military University of Land Forces in Wrocław, Poland
Łukasz Konopielko, Łazarski University, Poland
Irina V. Kokushkina, Saint-Petersburg State University, Saint-Petersburg, Russia
Justina Lavinia Stanica, Romanian-American University, Romania
Jozef Kubás, University of Zilina, Slovakia
Branka Tuškan Sjauš, University of Zagreb - Faculty of Economics and Business, Croatia
Małgorzata Smolarek, Humanitas University, Poland
Valentyna Shapoval, Dnipro University of Technology, Ukraine
Delia Deliu, West University of Timișoara, Faculty of Economics & Business Administration, Romania
Olawale Yinusa Olonade, Covenant University, Nigeria
Agnieszka Komor, University of Life Sciences in Lublin, Poland
Anatoly Kalyayev, Hetman Petro Sahaidachnyi National Army Academy, Ukraine
Svetlana Borisovna Vereshchak, I. N. Ulyanov Chuvash State University, Russia (Cheboksary)
Vlatka Skokic, University of Split, Croatia
Daniel Homocianu, Alexandru Ioan Cuza University of Iasi, Romania
Anna Sołtysik-Piorunkiewicz, University of Economics in Katowice, Poland
Aleksandra Ferens, University of Economics in Katowice, Poland
Mihai Parean, West University of Timisoara, Romania
Agnieszka Kurdyś-Kujawska, Koszalin University of Technology, Poland
Angheluță Petrică Sorin, Bucharest University of Economic Studies, Romania
Erhan Lica, Academy of Economic Studies of Moldova, Moldova
Marta Bistroń, Military University of Technology, Poland
Dorota Domalewska, War Studies University, Poland
Jerzy Stanik, Military University of Technology, Poland
Sandeep Kumar, Tectnia Institute of Advanced Studies Delhi, Affiliated to GGSIP University, Delhi, India
Mirela Ștefănică, "Alexandru Ioan Cuza" University of Iași, Romania

Piotr Kuraś, Czestochowa University of Technology, Poland
Mariusz Tomczyk, War Studies University, Poland
Marcin Lawnik, Silesian University of Technology, Poland
František Milichovský, Faculty of Business and Management, Brno University of Technology, Czech Republic
Adriana Alexandru, National Institute for Research and Development in Informatics, Romania
Eugenia Țirziu, National Institute For R & D In Informatics – ICI BUCUREȘTI, Romania
Elena-Anca Paraschiv, National Institute for Research and Development in Informatics, ICI Bucharest, Romania
Alexandru Tudor George, University POLITEHNICA of Bucharest, Romania
Galina Badicu, Academy of Economic Studies of Moldova, Moldova
Ildikó-Csilla Takács, The Bucharest University of Economic Studies, Romania
Larisa Gennadievna Gordeeva, Chuvash State Agrarian University, Russia
Renata Żaba-Nieroda, Cracow University of Economics, Poland
Ruta Adamoniene, Mykolas Romeris University, Lithuania
Svetlana Mihaila, Academy of Economic Studies of Moldova, Moldova
Natalia Manea, POLITEHNICA University of Bucharest, Romania
Grzegorz Tratkowski, Wroclaw University of Economics and Business, Poland
Lamyaa El Bassiti, Mohammed V University in Rabat, Morocco
Irina Georgescu, Bucharest University of Economics, Romania
Ivan S. Gumenyuk, IKBFU, Russia
Doina I. Popescu, Bucharest University of Economic Studies, Romania
Alersandr Palei, South Ural State University, Russia
Osereme Omoike, Covenant University, Nigeria
Olga Pilipczuk, University of Szczecin, Poland
Kátia Cristiana Matos Ribeiro Lemos, School of Management, Institute Polytechnic of Cávado and Ave, Portugal
Marcin Kuzel, Nicolaus Copernicus University, Poland
Waldemar Woźniak, University of Zielona Góra, Poland
Justyna Berniak-Woźny, UITM in Rzeszów, Poland
Patrycja Zwiech, University of Szczecin, Poland
Arkadiusz Kowalski, Wroclaw University of Science and Technology, Poland
Dana-Roxana Atanasescu, Politehnica University of Timisoara, Romania
Mahmaod Alrawad, Al Hussein Bin Talal University, Jordan
Ayooluwa Aregbesola, Landmark University, Nigeria
Emilia Herman, “George Emil Palade” University of Medicine, Pharmacy, Sciences and Technology of Tirgu-Mures, Romania
Ovidiu Popa-Velea, University of Medicine and Pharmacy Carol Davila, Bucharest, Romania
Adina Dornean, Alexandru Ioan Cuza University of Iasi, Romania
Kamil Kaczyński, Military University of Technology, Poland
Elżbieta Szaruga, University of Szczecin, Poland
Hela Haj Mohamed, University of Monastir, Tunisia
Agnieszka Szczudlińska-Kanoś, Jagiellonian University, Poland
Michał Goliński, Warsaw School of Economics, Poland
Sviatoslav Kniaz, Lviv Polytechnic National University, Ukraine
Łucja Waligóra, University of Economics in Katowice, Poland
Anna Gagat-Matuła, Pedagogical University of Cracow, Poland
Jaishree Asarpota, Higher Colleges of Technology, UAE
Alina Gentimir, Alexandru Ioan Cuza University, Romania
Dana Fatol, Politehnica University Timisoara, Romania
Jolanta Maria Ciak, WSB University in Torun, Poland
Monika Wyrzykowska-Antkiewicz, WSB University in Torun, Poland
Ljubica Milanović Glavan, University of Zagreb, Faculty of Economics and Business, Croatia
Elena Simona Apostol, Politehnica University of Bucharest, Romania
Adrian Turek Rahoveanu, UASVM Bucharest, Romania
Boris Mucha, Comenius University in Bratislava, Faculty of management, Slovakia

Petr Scholz, College of Polytechnics Jihlava, Czech Republic
Wojciech Lewicki, West Pomeranian University of Technology in Szczecin, Poland
Wojciech Sadkowski, Jagiellonian University, Poland
Maciej Słomian, Poznań University of Economics and Business, Poland
Agnieszka Wójcik-Czerniawska, Warsaw School of Economics (SGH), Poland
Julian Jakbowski, University of Zielona Góra, Poland
Irina Severin, Politehnica University of Bucharest, Romania
Anna Lemańska-Majdzik, Czestochowa University of Technology, Poland
Christianah Olufunke Adetunde, Covenant University, Ota, Nigeria
Mihaela Diana Oancea-Negescu, Bucharest University of Economic Studies, Romania
Kamal Abou El Jaouad, National School of Commerce and Management of Casablanca, University Hassan II, Morocco
Janusz Marek Lichtarski, Wrocław University of Economics and Business, Poland
Adelaida Cristina Hontuş, University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania
Kurtz Law, Bucharest University of Economic Studies, Romania
Marija Bečić, University of Dubrovnik, Croatia
Agnieszka Budziewicz-Guźlecka, University of Szczecin, Poland
Lucia Morosan-Danila, "Stefan cel Mare" University of Suceava, Romania
Katarzyna Świercz, Military University of Technology in Warsaw, Poland
Elena Florentina Matei, Bucharest University of Economic Studies, Romania
Natalia Buchalska-Sugajska, Bydgoszcz University of Science and Technology, Poland
Monica Ariana Sim, University of Oradea, Romania
Daria Bieńkowska, Pomranian University Słupsk, Poland
Fran Galetic, University of Zagreb, Croatia
Yvonne Lean-Ee Lee, Multimedia University, Malaysia
Magdalena Kąkol, Maria Curie Skłodowska University in Lublin, Poland
Lukáš Smerek, Matej Bel University in Banská Bystrica, Slovakia
Tatiana Egorushkina, Russian Economic University named after G.V. Plekhanova, Russia
Poon Wai Ching, Monash University Malaysia, Malaysia
Marin Fotache, Al. I. Cuza University of Iasi, Romania
Tomasz Dryl, University of Gdańsk, Poland
Isaac Akintoyese Oyekola, Landmark University, Nigeria
Carmen Sonia Duşe, Lucian Blaga University, Romania
Maria Claudia Diaconeasa, The Bucharest University of Economic Studies, Romania
Cristian Eparu, Petroleum-Gas University of Ploiesti, Romania
Alawiya Allui, Prince Sultan University, KSA
Zygmunt Kruczek, University School of Physical Education, Poland
Najeh Aissaoui, ESSEC Tunis, Tunisia
Artur Kisiółek, The Great Poland University of Social and Economics in Środa Wlkp., Poland
Lidia Bajenaru, University Politehnica of Bucharest, Romania
Sorin Soviany, National Institute for Research and Development in Informatics –ICI Bucharest, Romania
Marilena Ianculescu, National Institute for Research and Development in Informatics –ICI Bucharest, Romania
Silvia Ovreiu, University Politehnica of Bucharest, Romania
Adrian Nicolae Branga, Lucian Blaga University of Sibiu, Romania
Marcel Kordoš, Alexander Dubček University in Trenčín, Slovakia
Jolanta Baran, Silesian University of Technology, Poland
Petr Aleksandrovich Kostromin, Russian State University for the Humanities, Russia
Javier Gamboa Cruzado, Nacional Mayor de San Marcos, Perú
Adrianna Toboła, Poznan School of Logistics, Poland
Anna Surowiec, AGH University of Science and Technology in Krakow, Poland
Sanja Franc, University of Zagreb, Faculty of Economics and Business, Croatia
Simona Činčalová, College of Polytechnics Jihlava, Czech Republic
Gheorghe Militaru, Politehnica University of Bucharest, Romania
Jolanta Kruk, University of Lower Silesia, Poland
Ravil Akhmadeev, Plekhanov Russian University of Economics, Russia

Joanna Wyrobek, Cracow University of Economics, Poland
Dorota Palka, Silesian University of Technology, Poland
Tereza Otcenaskova, University of Hradec Kralove, Czech Republic
Svitlana Naumenkova, Taras Shevchenko National University of Kyiv, Ukraine
Mohammad Ekhlague Ahmed, Institute of Business Management, Pakistan
Anna Barwińska-Małajowicz, University of Rzeszów, Poland
Grażyna Kowalewska, University of Warmia and Mazury in Olsztyn, Poland
Magdalena Sobocińska, Wrocław University of Economics and Business, Poland
Silvius Stanciu, "Dunărea de Jos" University of Galați, Romania
Ovidiu Blajina, Politehnica University of Bucharest, Romania
Ivica Linderová, College of Polytechnics Jihlava, Czech Republic
Camelia-Daniela Hategan, West University of Timisoara, Romania
Cassia Galvao, Texas A&M University, USA
Magdalena Rybaczewska-Błażejowska, Kielce University of Technology, Poland
Syed Asad Ali Shah, Alhamb Islamic University, Pakistan
Anna Murawska, Bydgoszcz University of Science and Technology, Poland
Marko Tomljanović, University of Rijeka, Faculty of Economics and Business, Croatia
Radu D. Stanciu, POPLITEHNICA University of Bucharest, Romania
Bogdan Tiganoaia, Politehnica University of Bucharest, Romania
Justyna Łapińska, Nicolaus Copernicus University in Toruń, Poland
Adela Sorinela Safta, Bucharest University of Economic Studies, Romania
Olena Berezina, Cherkasy State Technological University, Ukraine
Camelia Catalina Mihalciuc, Ștefan cel Mare University of Suceava, Romania
Christopher Boycie Mokone, KAIST, South Korea
Marcin Kawiński, Warsaw School of Economics, Poland
Svetlana Anđelić, Information Technology School ITS- Belgrade, Serbia
Dorian-Laurentiu Florea, Pontificia Universidad Católica del Perú, Peru
Przemysław Niewiadomski, University of Zielona Góra, Poland
Izabela Račka, Calisia University – Kalisz, Poland
Provita Wijayanti, Universitas Islam Sultan Agung, Indonesia
Zuzana Janková, Brno University of Technology, Faculty Business and Management, Czech Republic
Štěpán Chalupa, The Institute of Hospitality Management in Prague, Czech Republic
Iustina Alina Boitan, Bucharest University of Economic Studies, Romania
Małgorzata Pankowska, University of Economics in Katowice, Poland
Ryszard Szynowski, WSB University, Poland
Agnieszka Puto, Technical University of Częstochowa, Poland
Danuta Zawadzka, Koszalin University of Technology, Poland
Lilianna Wojtynek, Opole University of Technology, Poland
Alla Polyanska, Ivano-Frankivsk National Technical University of Oil and Gas, Ukraine
Larisa Yu. Ovsyanitskaya, International Institute of Design and Service, Russia
Ali Ahmadi, Faculty of Economics and Management of Sfax, Tunisia
Tomislava Pavic Kramaric, University of Split, University Department of Forensic Sciences, Croatia
Agnieszka Stanimir, Wrocław University of Economics and Business, Poland
Dušan Stojaković, Faculty of Contemporary Arts, Serbia
Lyudmila I. Mironova, Ural Federal University after named the First President of Russia B.N. Yeltzin, Russia
Milena Ilić, University Business Academy in Novi Sad, Serbia
Cristian Bucur, Petroleum-Gas University of Ploiești, Romania
Ridouane Tachicart, Mohammed V University in Rabat, Morocco
Michał Szyszka, WSB University, Poland
Anna Tanina, Peter the Great St. Petersburg Polytechnic University (SPbPU), Russia
Maciej Hojda, Wrocław University of Science and Technology, Poland
Adrian Deaconu, Transilvania University, Romania
Joseph A. Dada, Joseph Ayo Babalola University, Nigeria
Emese Tokarcikova, University of Zilina, Slovakia
Bolesław Szafranski, Military University of Technology, Poland

Paweł Kobis, Czestochowa University of Technology, Poland
Razifah Othman, UiTM Cawangan Negeri Sembilan, Kampus Rembau, Malaysia
Liva Grinevica, Latvian Academy of Agricultural and Forestry Sciences, Latvia
Richard Fedorko, Presov university - Faculty of Management, Slovakia
Paweł Lubiewski, Wyższa Szkoła Policji, Poland
Magdalena Gębczyńska, Silesian University of Technology, Poland
Marius Constantin, Bucharest University of Economic Studies, Romania
Anna Rutkowska-Ziarko, University of Warmia and Mazury in Olsztyn, Poland
Oluwasogo Adediran, Covenant University, Ota, Nigeria
Judyta Kabus, Czestochowa University of Technology, Poland
Bianca Cristiana Voicu, ASE Bucuresti, Romania
Wahiba Ben Abdessalem, Tunis University, Tunisia
Cristina-Nicoleta Caranica, Artifex University of Bucharest, Romania
Catalin Popescu, Petroleum-Gas University from Ploiesti, Romania
Barbara Cyrek, Jagiellonian University, Poland
Aneta Sokół, Univeristy of Szczecin, Poland
Aleksandra Krajnović, University of Zadar, Croatia
Angelika Wodecka-Hyjek, Cracow University of Economics, Poland
Elena V. Butsenko, Ural State University of Economics, Russia
Damian Ostrowski, WSB Univeristy in Wroclaw, Poland
Karolina Kolinska, Poznan School of Logistics, Poland
Felix Sadyrbaev, Daugavpils University, Latvia
Anna Kochmańska, Silesian University of Technology, Poland
Eugenia Czernyszewicz, University of Life Sciences in Lublin, Poland
Iulian Gole, The Bucharest University of Economic Studies, Romania
Piotr Uchroński, Akademia WSB, Poland
Dan Dumitriu, University POLITEHNICA of Bucharest, Romania
Sara Cruz, Instituto Politécnico do Cávado e do Ave, Portugal
Katarzyna Świetla, Cracow University of Economics, Poland
Ludmila M. Osinevich, Kursk State University, Russia
Dajana Barbić, Faculty of Economics & Business Zagreb, University of Zagreb, Croatia
Saltanat Kondybayeva, Al-Farabi Kazakh National University, Kazakhstan
Miroslav Malaga, University of West Bohemia, Pilsen, Czech Republic
Ana Ježovita, University of Zagreb, Faculty of Economics & Business, Croatia
Dekar Urumsah, Universitas Islam Indonesia, Indonesia
Katarzyna Huk, University of Zielona Góra, Poland
Martin Holubčík, University of Zilina, Slovakia
Wafa Ben Slama Souei, University of Sousse, Tunisia
Zuzanna Ostraszewska, Czestochowa University of Technology, Poland
Maja Mihelja Žaja, Faculty of Economics and Business Zagreb, Croatia
Anastasiya Pesha, Ural State Economic University, Russia
Larisa Ismagilova, Ufa State Aviation Technical University, Russia
Teodora Mihaela Tarcza, University of Oradea, Romania
Anna Stasiuk-Piekarska, Poznan University of Technology, Poland
Igor Klioutchnikov, International Banking Institute, Russia
Urszula Motowidlak, University of Lodz, Poland
James León Parra-Monsalve, Universidad Nacional de Colombia, Colombia
Olesia Demianyshyna, Pavlo Tychyna Uman State Pedagogical University, Ukraine
Dan-Alexandru Bejenaru, Politehnica University of Bucharest, Romania
Lucie Severová, CULS in Prague, Czechia
Ivana Bilić, University of Split, Croatia
Krzysztof Świder, Military University of Technology in Warsaw, Poland
Alina Kankovskaya, Peter the Great St. Petersburg Polytechnic University, Russia
Alexander Vicentiy, Kola Science Centre of the Russian Academy of Sciences, Russia
Anna Stroncsek, AGH University of Science and Technology, Poland

Amal Trifa, National School of Computer Sciences, Tunisia
Radoslav Jankal, University of Zilina, Slovakia
Wojciech Koziół, Cracow University of Economics, Poland
Kamila Veselá, Czech university of Life Science, Faculty of Management and Economics, Czech Republic
Diana Panait-Ioncica, BUES, Romania
Georgiana Armenita Arghiroiu, University of Agronomic Sciences & Veterinary Medicine of Bucharest, Romania
Josef Dvorak, University of West Bohemia, Czech Republic
Paulo Jorge Pinheiro Gonçalves, Polytechnic of Porto, ISCAP, Portugal
Monika Górska, Czestochowa University of Technology, Poland
Lubica Gajanova, University of Zilina, Slovakia
Mihaela Neculita, Dunarea de Jos University of Galati, Romania
Dorota Kurek, War Studies University, Poland
Sylwia Pangsy-Kania, University of Gdansk, Poland
Rafał R. Wasilewski, University of Szczecin, Faculty of Law and Administration, Poland
Elena V. Kolganova, Peoples' Friendship University of Russia (RUDN University), Russia
Vyacheslav Makedon, Oles Honchar Dnipro National University, Ukraine
Iryna Mihus, Scientific Center of Innovative Researches, Estonia
Ireneusz Miciuła, University of Szczecin, Poland
Jana Coculova, University of Presov in Presov, Slovakia
Patricio Ramírez Correa, Universidad Católica del Norte, Chile
Agnieszka Mazurek-Czarnecka, Crakow University of Economics, Poland
Anna Kobiałka, University of Life Sciences in Lublin, Poland
Cristiana Tudor, Bucharest University of Economic Studies, Romania
Małgorzata Kożuch, Cracow University of Economics, Poland
Rhita Sabri, Ibn Tofail University, Morocco
Monika Hadaś-Dyduch, University of Economics in Katowice, Poland
Leonidas Asto Huaman, Universidad Nacional Autónoma de Tayacaja "Daniel Hernández Morillo, Perú
Ireneusz Kubiak, Military Communication Institute-State Research Institute, Poland
Agung Nugroho, Universitas Indonesia, Indonesia
Shahabudin Abdullah, Universiti Teknologi Malaysia, Malaysia
Maria Johann, Warsaw School of Economics, Poland
Yong Jing Yi, Taylor's University, Malaysia
Paula Pyplacz, Czestochowa University of Technology, Poland
Joanna Rosak-Szyrocka, Czestochowa University of Technology, Poland
Łukasz Szewczyk, University of Economics in Katowice, Poland
Olga Pyataeva, Russian State Academy of Intellectual Property, Russia
Paweł Ślaski, Military University of Technology, Poland
Karina Szafrąńska, Warsaw University of Life Sciences, Poland
Beata Szczecińska, West Pomeranian University of Technology, Szczecin, Poland
Andreea-Florina Fora, University of Oradea, Romania
Radek Doskočil, Brno University of Technology, Faculty of Business and Management, Czech Republic
Grażyna Rosa, University of Szczecin, Poland
Renáta Pakšiová, University of Economics in Bratislava, Slovakia
Aleksandra Ostrowska, University of Warmia and Mazury in Olsztyn, Poland
Emilia Mazurek, Wroclaw University of Science and Technology, Poland
Maria Magdalena Roșu, POLITEHNICA University of Bucharest, Romania
Carmen Costea, Bucharest University of Economic Studies, Romania
Nikolay Vladimirovich Zhakhov, Southwest State University, Russia
Sanda Rašić Jelavić, University of Zagreb, Faculty of Economics and Business, Croatia
Băcanu Șerban Constanța, "Dunarea de Jos" University of Galati, Romania
Jurij Renkas, Cracow University of Economics, Poland
Aurelia Ioana Chereji, University of Oradea, Romania
Meryem Alaoui, University Hassan II, Casablanca, Morocco
Vítor José Domingues Mendonça, Polytechnic Institute of Bragança, Portugal
George Ungureanu, Iasi University of Life Sciences (IULS), Romania

Siti Nuryanah, Universitas Indonesia, Indonesia
Vlad Constantin Turcea, Bucharest University of Economic Studies, Romania
Ana-Maria Holobiuc, Bucharest University of Economic Studies, Romania
Agata Sudolska, Nicolaus Copernicus University in Toruń, Poland
Ekaterina Mochalina, Plekhanov Russian University of Economics, Russia
Tatiana Arkadijevna Karandaeva, Mari State University, Russia
Katarzyna Ragin-Skorecka, Poznan University of Technology, Poland
Sussy Bayona Ore, Universidad Autónoma del Perú, Perú
Rejaul Abedin, GEPEA (Global Educational and Professional Excellence Academy), Portugal
Ştefan Cristian Gherghina, Bucharest University of Economic Studies, Romania
Jarosław Pawłowski, Nicolaus Copernicus University in Toruń, Poland
Olena Akilina, Borys Grinchenko Kyiv University, Ukraine
Layla Rasheed Abdallah Hasan, Universiti Teknologi Malaysia, Malaysia
Elena-Iuliana Gingu (Boteanu), Politehnica University of Bucharest, Romania
Gabriela Bucur, Petroleum-Gas University of Ploiesti, Romania
Marta Dobrzyniak, Warsaw University of Life Sciences, Poland
Wojciech Piontek, Pedagogical University of Krakow, Poland
Anna Kwiotkowska, Silesian University of Technology, Poland
Taras Medvedkin, Don State Technical University, Russia
Ivana Načinović Braje, University of Zagreb, Faculty of Economics & Business, Croatia
Ewa Szafraniec-Siluta, Koszalin University of Technology, Poland
Liudmyla Chvertko, Pavlo Tychyna Uman State Pedagogical University, Ukraine
Jana Kajanová, Comenius University in Bratislava, Slovakia
Mihaela Rodica Ganciu, Polytechnic University of Bucharest, Romania
Ewa Wanda Maruszewska, University of Economics in Katowice, Poland
Alexei Dolzhenko, Rostov State University of Economics, Russia
Dariusz Wielgórka, Czestochowa University of Technology, Poland
Iuliana Grecu, Politehnica University of Bucharest, Romania
Iwona Deska, Czestochowa University of Technology, Poland
Jakub Doński-Lesiuk, University of Lodz, Poland
Lina Artemenko, NTUU KPI Igor Sikorsky, Ukraine
Andreea Elena Matic, "Dunarea de Jos" University of Galati, Romania
Natalia Vladimirovna Lazareva, International Banking Institute named after Anatoly Sobchak, Russia
Dragan Benazić, Juraj Dobrila University of Pula, Croatia
Kazimierz Nagody-Mrozowicz, Military University of Land Forces, Poland
Krzysztof Wąsowicz, Kraków University of Economics, Poland
Vasile Daniel Pavaloaia, Alexandru Ioan Cuza University of Iasi, Romania
Mihaela Maftai, Bucharest University of Economic Studies, Romania
Anna Drab-Kurowska, University of Szczecin, Poland
Dražen Novaković, Josip Juraj Strossmayer University of Osijek, Faculty of Economics, Croatia
Zarehan Binti Selamat, Multimedia University, Malaysia
Noorul Azwin Md Nasir, University Malaysia Kelantan, Malaysia
Lidija Dedi, University of Zagreb, Faculty of Economic & Business, Croatia
Maciej Kiedrowicz, Military University of Technology, Poland
Oksana O. Yuldasheva, SPb State University of Economics (UNECON), Russia
Katalin Gál, Partium Christian University, Romania
Tomasz Urbańczyk, UMK, Poland
Wiktoria Czernecka, Poznan University of Technology, Poland
Katarzyna Mazur-Włodarczyk, Opole University of Technology, Poland
Hanna Bortnowska, University of Zielona Góra, Poland
Tomislav Herceg, FEB Zagreb, U. of Zagreb, Croatia
Maria Jastrzębska, Gdansk University of Technology, Poland
Ioseb Gabelaia, RISEBA, Latvia
Henryk Wojtaszek, War Studies University, Poland
Agnieszka Parkitna, Wroclaw University of Science and Technology, Poland

Natalia Viktorovna Pyanova, Orel State University named after I.S. Turgenev, Russia
Sebastian Kot, Czestochowa UT, Poland
Samar Al-Saqqa, The University of Jordan, Jordan
Taras Hutsol, Polissia National University, Ukraine
Cristiana Tindeche, University of Agricultural Sciences and Veterinary Medicine Bucharest, Romania
Otilia Manta, Romanian Academy, Romania
Irina-Adriana Chiurciu, USAMV Bucharest, Romania
Kalaiselvel Rethinam, AIMST University, Malaysia
Marcin Wyskwarski, Silesian University of Technology in Gliwice, Poland
Tomáš Sadílek, Prague University of Economics and Business, Czech Republic
Andrii Galkin, O. M. Beketov National University of Urban Economy in Kharkiv, Ukraine
Joanna Zimmer, Wroclaw University of Science and Technology, Poland
Olufemi Adebayo Oladipo, Landmark University, Nigeria
Júlia Szőke, Széchenyi István University, Hungary
Mateja Brozović, University of Zagreb, Faculty of Economics and Business, Croatia
Marcel Rolf Pfeifer, Brno University of Technology, Czech Republic
Beata Gontar, University of Łódź, Poland
Jessica Ong Hai Liaw, National Defence University of Malaysia, Malaysia
Wojciech Żarski, Bydgoszcz University of Science and Technology, Poland
Monika Fabińska, University of Lodz, Poland
Danuta Strahl, University WSB, Poland
Anna Mazurkiewicz, University of Rzeszów, Poland
Camelia Slave, Bucharest University of Agronomical Sciences and Veterinary Medicine, Romania
Elena Iadrennikova, Ural Federal University named after the first President of Russia B.N. Yeltsin, Russia
Barbara Marciszewska, Gdynia Maritime University, Poland
Joanna Perzyńska, West Pomeranian University of Technology in Szczecin, Poland
Silviu Beciu, University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania
Miroslaw Matusek, Silesian University of Technology, Poland
Simona Cătălina Ștefan, The Bucharest University of Economic Studies, Romania
Karolina Olejniczak, Poznan University of Technology, Poland
Mihaela Popa, Politehnica University of Bucharest, Romania
Jakub Horváth, University of Prešov, Faculty of Management and Business, Slovakia
Dessy Isfianadewi, Universitas Islam Indonesia, Indonesia
Irina Teodora Manolescu, Alexandru Ioan Cuza University, Romania
Łukasz Brzeziński, Poznan School of Logistics, Poland
Corina Larisa Bunghez, Bucharest University of Economic Studies, Romania
Beata Sofrankova, University of Presov, Faculty of Management and Business, Slovakia
Andreea Maier, Technical University of Cluj-Napoca, Romania
Ika Permatasari, Universitas Negeri Surabaya, Indonesia
Afroze Nazneen, Jeddah University, KSA
Jelena Franjković, Josip Juraj Strossmayer University of Osijek, Croatia
Rafał Prusak, Czestochowa University of Technology, Poland
Andreea – Emanuela Drăgoi, Institute for World Economy, Romania
Katarina Tomičić-Pupek, University of Zagreb, Faculty of Organization and Informatics, Croatia
Renata Brajer-Marczak, Wroclaw University of Economics, Poland
Florin Stoica, Lucian Blaga University of Sibiu, Romania

Disclaimer: The abstracts and papers included in these Conference Proceedings remain the work of the authors and represent their own research / opinion. IBIMA staff have had only non-editorial intervention.

It is IBIMA policy to make reasonable effort to send complete papers to two members of the program committee for full blind peer review and to send a summary of review back to the author(s)

Copyright @ 2021 International Business Information Management Association (IBIMA)
Individual authors retain copyright on their authored papers. Please contact authors directly for reprint permission

A Cloud Holistic Cyber Security Approach Based on Chaos Theory..... <i>Livia Maria BRUMÁ</i>	4890
Selecting The Key Environmental Characteristic of a Product Using the Life Cycle Assessment..... <i>Marcin RYCHWALSKI</i>	4898
The Impact of Covid-19 On Higher Education in Poland – Study Based on Polytomous Item Response Analysis..... <i>Justyna BRZEZIŃSKA</i>	4907
The Popularity of Fintech Services in Poland: Results of a Survey Conducted on Polish Households..... <i>Joanna WYROBEK and Katarzyna ŁACH</i>	4919
#JusticeforUwa: An Analysis of the 2020 Twitter Anti-Rape Campaign..... <i>Toluwanimi ONAKOYA and Stella ARIRIGUZOH</i>	4926
An Empirical Study Assessing Variances in Dysfunctional Audit Behavior with Experience..... <i>Sandra KHALIL</i>	4939
Selection of Tools for Motivating Employees in A New Generation Cohort - Generation X, Y, Z..... <i>Edyta BIELIŃSKA-DUSZA</i>	4945
How The Employer Branding Strategy Influences the Process of Attracting Talents in The Organization..... <i>Denisa Ligia MATEI</i>	4957
Organic Products Market in Ukraine: State and Prospects of Development..... <i>Dmytro SEMENDA, Olha SEMENDA, Nataliia BLENDIA, Diana SOKOVNINA and Iryna KORMAN</i>	4967
Analysis of Selected Elements of The Quality Management System in A Production Company..... <i>Dominika STRYCHARSKA</i>	4979
Legislation On Drug Offences in The Visegrad Group Countries..... <i>Milan MARCINEK, Michaela MARCINEKOVÁ and Magdalena SZYDŁOWSKA</i>	4986
Legal Conditions for Dangerous Goods Transport by Road..... <i>Milan MARCINEK, Michaela MARCINEKOVÁ and Magdalena SZYDŁOWSKA</i>	4992
Regional SME Support Instruments on The Example of Selected EU Countries - Based on Research Conducted in The Kuyavian-Pomeranian Voivodship in Poland..... <i>Zbigniew GRZYMAŁA</i>	4996
Central Bank Digital Currency in the European Union..... <i>Maciej BOLISEGA</i>	5004
Mobile Collaborative Smart Farm: Proposed Poultry IoT Solution for Indonesia Farming..... <i>Faisal SYAFAR, Misita ANWAR and Ridwansyah</i>	5013
Hybrid Trade Fairs as Syncretic Format of Business Meetings at Boundary between Reality and Cyberspace – Possible Research Directions in Post-Pandemic Times..... <i>Marcin GEBAROWSKI</i>	5018
Impacto De La Pandemia (COVID19) En Las Transacciones En El Comercio Electrónico Sobre El Comportamiento De Recompra..... <i>Carlos GALLEGUILLOS, Rubén HURTADO and José SILVA</i>	5025

Organic Products Market in Ukraine: State And Prospects of Development

Dmytro SEMENDA

Uman National University of Horticulture, Uman, Ukraine, E-mail: dksemenda@ukr.net

Olha SEMENDA

Uman National University of Horticulture, Uman, Ukraine, E-mail: olga-semenda@ukr.net

Nataliia BLENDIA

Uman National University of Horticulture, Uman, Ukraine, E-mail: nblendia176@gmail.com

Diana SOKOVNINA

Uman National University of Horticulture, Uman, Ukraine, E-mail: dianasokovnina@gmail.com

Iryna KORMAN

Uman National University of Horticulture, Uman, Ukraine, E-mail: irynakorman@gmail.com

Abstract

The production of organic products has been one of the most urgent tasks for modern society for many years. Ukrainian society is increasingly interested in what "organic production" and "organic products" are. Along with the promotion of a healthy lifestyle, the relevance of organic products is growing. Therefore, the purpose of the study is to determine the state of production and sale of organic products on the market of Ukraine.

By the method of theoretical generalization in the article typical features of organic production are given; using the method of analysis and synthesis, the current situation in the organic market is considered, including available land resources, number of producers, cost of sales; graphical and tabular methods were used for optimal visualization of the results of the study.

The study analyses the relevance and importance of organic agriculture and farming, considers key aspects of organic production, the importance of certification and well-established legislation that will help enterprises engaged in the production of organic products to develop. The importance of introducing the marketing concept into the practical activities of enterprises engaged in the production of organic products is noted. The importance of applying effective marketing approaches to product promotion to the consumer is emphasized and the main types of product promotion of organic origin are noted. The elements that form marketing channels for the production of organic products are indicated. It is noted that the market for organic products is gradually developing and expanding, which allows consumers to buy more and more organic products.

The research conducted in the article is aimed at informing domestic specialized manufacturers about the possibilities of diversification of the product range and marketing of their products both in the domestic and international markets in accordance with modern consumer needs.

Keywords: Producer, Market, Organic Products, Consumer, Certification, Legal Regulation.

Introduction

Organic agriculture is one of the most promising businesses, contributing to the transition to sustainable development and a green economy. This is important for humanity because the agro-industrial complex provides jobs for almost a fifth of the world's population, but at the same time is one of the largest polluters and one of the largest consumers of drinking water. And organic agriculture helps to restore soil fertility, preserve biodiversity, reduce the negative impact on water resources. In addition, organic products have a positive effect on human health.

Cite this Article as: Dmytro SEMENDA, Olha SEMENDA, Nataliia BLENDIA, Diana SOKOVNINA and Iryna KORMAN "Organic Products Market in Ukraine: State And Prospects of Development" Proceedings of the 38th International Business Information Management Association (IBIMA), 23-24 November 2021, Seville, Spain, ISBN: 978-0-9998551-7-1, ISSN: 2767-9640

A full-fledged domestic market of organic products with a complete production cycle is formed rather slowly. The social and environmental usefulness of organic products requires increased attention to its promotion in the market and the formation of commitment and loyalty of consumers. Under these conditions, the importance of marketing management of the industry and its organic sector in order to strengthen market positions and competitiveness.

The process of formation and development of the organic market of Ukraine unites unique and important for all mankind life values of each organic company. However, it is necessary to constantly analyse the state of development and conditions for the creation of competitive production and distribution chains. Today, the formation of an effective market environment in Ukraine is influenced by: the development of domestic trade, work with consumers, and increasing demand for organic products.

Material and Methods

Theoretical and practical aspects of the functioning of the market of organic agricultural products and food products, the organization of organic agricultural production are thoroughly disclosed in the works of domestic and foreign scientists:

S. Ilyashenko (2013) in a monograph using marketing methods and tools explored the problems and outlined the prospects for the introduction of environmental innovations as a prerequisite for the transition to sustainable development. The paper highlights the approaches to motivating the creation and implementation of environmental innovations, developed the principles of the mechanism of implementation of environmental innovations.

The article by T. Dudar and O. Dudar (2014) reveals the main trends in the organic sector and potential opportunities for expanding the domestic market of environmentally friendly agricultural products based on international standards, substantiates the conceptual model of organic agri-food market infrastructure to ensure quality and safety of agri-food products in Ukraine.

T. Zaychuk (2009) paid attention to the definition of marketing tools for the formation of domestic demand for organic products and ways to minimize the economic risks of organic production.

E. Milovanov (2012) in his work highlighted the main prerequisites for the need for state support for organic production in the world. He analysed the European experience of supporting organic agriculture and highlighted the main areas of financial support under the EU Common Agricultural Policy.

N. Buga, I. Yanenkova (2015) substantiated the results of expert evaluation of consumers' attitude to organic products. Problems and reasons for the unsatisfactory level of development of organic production were identified. The peculiarities of the organic-oriented model of development of the agricultural sector of the economy were determined.

V. Artysh (2014) analysed the state of organic production in the European Union.

T. Chaika (2012) considered the problems that create obstacles to the development of organic production in the agricultural sector of the economy.

N. Lampkin, S. Padel, K. Foster (2000) in their work conducted as part of a research project on organic farming and SAR, assessed the impact of the 1992 SAR reform on organic farming, and explored, how organic farming can affect achieving the goals of EU agricultural and environmental policy.

Catherine Badgley, Jeremy Mogteider, Eileen Quintero, Emily Zakem, M. Jahi Chappell, Catia Aviles-Vazquez, Andrea Samulon, and Yvette Perfecto (2007) conducted a study that suggests that organic agriculture can make a significant contribution to global supply, while reducing the harmful effects of conventional agriculture on the environment.

M. Jaime, J. Coria, H. Lew (2016) analysed the impact of the Common Agricultural Policy of the European Union on the use of organic production technologies by farmers.

Janike Edward, Carolyn Dimitri, and Lydia Oberholzer (2011) studied changes in supply and demand for products with organic labeling.

Aims

Determining the state of production and realization of organic products on the market of Ukraine.

Results and Debate

Environmental security, in particular the safety of the human environment, is one of the highest priorities for the development of society, as stated in the National Security Strategy of Ukraine. Creating conditions for maintaining ecological balance on the territory of Ukraine, modernization of communal infrastructure, strengthening environmental protection, the introduction of new systems of waste management and reduction of industrial emissions, ensuring efficient use of natural resources, protection of forests and reservoirs, development of protected areas, prevention of negative consequences emergencies of natural and man-made nature and their elimination (The national security strategy of Ukraine» (2020)).

The study of the nature of the current relationship between nature and man, overcoming the contradictions of their development suggests that the solution lies in the plane of systemic action, a systemic approach. At the same time in the system "nature-society," it is necessary not just to move from "human interests" to "natural interests", but to consider them as a single system of eco-development, based on the interests of a holistic socio-natural development system - in order to further its systemic development in the desired eco-evolutionary direction" (Hvesik M.A., Stepanenko A.V. (2014)).

Ukraine's accession to the world community, WTO membership, Ukraine-EU Free Trade Area action require in-depth attention to export-oriented industries, enterprises, and industries, finding ways to ensure maximum adaptation of agricultural production to EU standards and WTO requirements. Cooperation in the international dimension opens up great opportunities for realizing the potential of the agricultural sector of the national economy and poses new challenges.

In the context of research, we first consider the state of development of organic agricultural production, the main function of which remains unchanged throughout its existence. It can be formulated as ensuring, through a system of cross-border exchange, the interaction of all elements of the world food system and all parts of the food chain to supply the planet's population with the nutrients needed to sustain life.

According to IFOAM, organic agriculture is a production system that maintains the health of soils, ecosystems, and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than on the use of resources with harmful results (Basic Standards: approved by the IFOAM General Assembly. (2002)). This definition emphasizes that organic agriculture is aimed at working with ecosystems, biogeochemical cycles of substances and elements, supports them, and gets the effect of their optimization.

Definitions of organic agricultural production, which are found in numerous domestic and foreign scientific publications, emphasize primarily its technological features of an applied nature, the implementation of which does not violate self-healing processes in nature and agricultural resources. In particular, O. Rudnytska (2007) understands the term "organic agricultural production" of agricultural practice without the use of synthetic pesticides and fertilizers, based on the maximum use of biological factors to increase natural soil fertility, agroecological methods of pest and disease control, biodiversity benefits and more. Artysh V.I. (2005) reveals the essence of organic agriculture as one that provides «... environmental protection; prevention of soil degradation processes that occur during intensive agriculture; improving the health of the population as a result of the use of environmentally friendly products.

In Ukraine, producers began to consciously engage in organic production in the late 1990s. Actively developing the domestic market, our state is increasingly asserting itself in the international market of organic products, entering the world leaders in terms of agricultural land used for its cultivation, increasing the range of products offered and the geography of supply.

Demonstrating in recent years a stable positive dynamics of growth of agricultural land, which is certified organic production, there is a steady growth in both the number of operators of the organic market and the level of consumption of organic products in Ukraine, which contributes to the tendency organic raw materials. These include cereals, flour, dairy and meat products, juices, honey, oils, teas, and herbs.

Official statistical surveys of IFOAM confirm that if in 2002 there were 31 farms registered in Ukraine, which received the status of "organic" in 2020, there were already 722 organic farms (Fig. 1, 2).

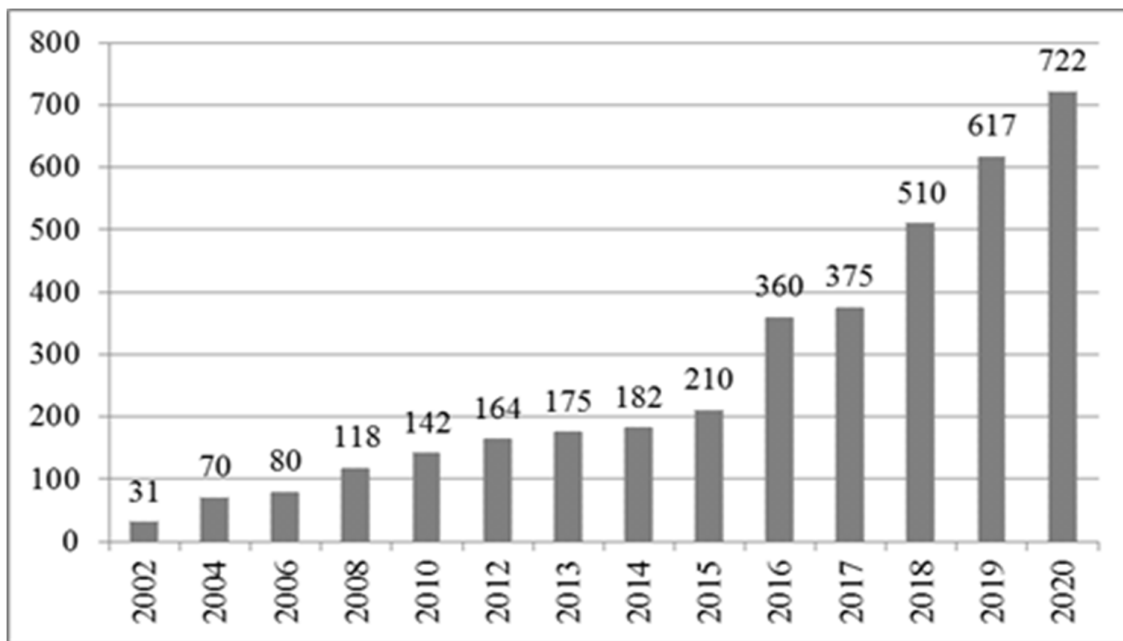


Fig.1. Number of certified organic farms in Ukraine (Organic in Ukraine. (2021))

Most Ukrainian organic farms are locating in Kyiv, Odesa, Kherson, Poltava, Vinnytsia, Zakarpattia, Lviv, and Zhytomyr regions. Ukrainian certified organic farms - of various sizes - from a few hectares, as in most European countries, to several thousand hectares of agricultural land. Given the growing number of small organic farms, their specialization is focused primarily on growing fruits and vegetables, and berries. However, the export orientation of producers, especially legumes and berries, remains a fact.

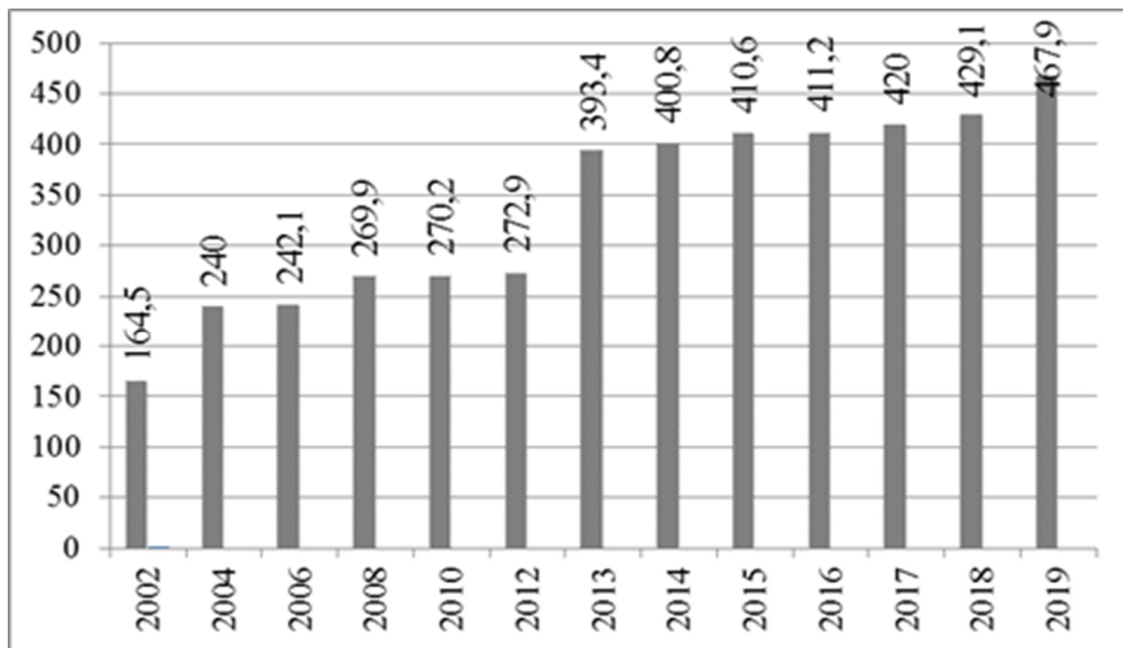


Fig. 2. Total area of organic agricultural land in Ukraine, 2002-2019 (Organic in Ukraine. (2021))

Ukraine took second place in the supply of its organic raw materials to the EU and first place among other European countries. 95% of exported products are raw materials, and the remaining 5% increases the list of processed products (chocolate, ice cream, various cereals) (Ukraine took second place in the supply of its organic raw materials to the EU. (2020)). However, in recent years there has been a tendency to actively fill the domestic market with domestic organic products by establishing their processing of organic raw materials. According to the research of the Federation of Organic

Movement of Ukraine, since the early 2000s in our country there has been a stable annual growth of the domestic consumer market of organic products, showing the data shown in Fig.3.

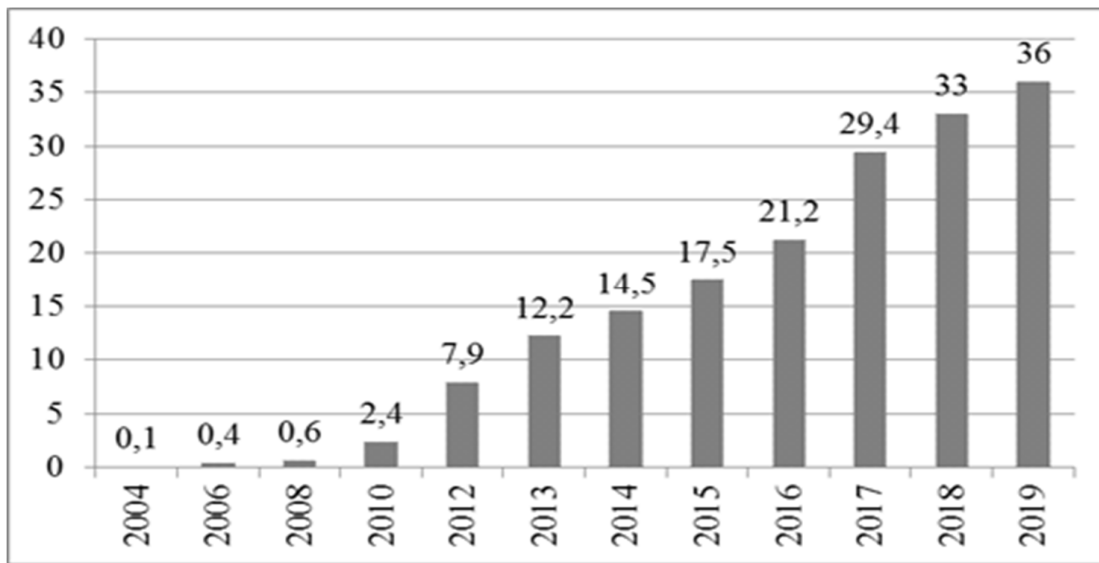


Fig. 3. Volumes of the consumer market of organic products in Ukraine, 2004-2019, million euros (Organic in Ukraine. (2021))

An important condition for ensuring the commercial success of the enterprise in the market of organic products is the orientation of the final results to the needs and demands of end-users and ensure their effective satisfaction. This means that to avoid problems with the sale of its products on the market, the company must constantly study consumer behavior, their requirements, the level of satisfaction of needs for a particular organic product, motives, product market structure, and adjust its production activities according to these requirements. production of such goods that the consumer needs in the market. Ensuring the implementation of this principle is possible only if the implementation of the marketing concept in the practice of enterprises engaged in the production of organic products.

It is important to apply effective marketing approaches to product promotion to the consumer. The main types of promotion of organic agricultural products should be considered: advertising, personal selling, sales promotion. An extremely important role belongs to the key elements of the formation of marketing channels for the sale of organic products by producers, some of which are in the process of formation, and others are just being formed (ECO-MARATHON: Green Business Ukraine. (2019)).

In the domestic market of Ukraine, organic products are distributing in most cases through direct distribution channels: sales on the farm, in open markets, farm shops, fairs, and mainly through door-to-door sales. In rare cases, organic products are distributing through indirect distribution, through specialized health food stores and supermarkets.

A significant number of domestic farms are unable to produce adequate quantities of organic products for the consumer market. Therefore, a small proportion of the organic products they produce are distributing through direct channels. Direct distribution increases income because the money on the trading margin remains on the farm.

For domestic producers of organic products, direct sales are the easiest way to sell. The production unit, which wants to engage in direct sales of organic products, is facing numerous organizational changes. To start with direct sales, the producer, in addition to his main activity of organic production, assumes new responsibilities, such as storage, processing, and sale of its products, which sometimes brings numerous economic obligations.

The sale of finished products significantly increases income, but also activities in the economy. Only farms with well-developed entrepreneurial characteristics can meet all the requirements. Moreover, these farms must also meet other requirements for direct sales, such as the type of goods sold on the farm, the market, and the production capacity of the farm. Farms wishing to engage more directly in direct sales should invest in storage, processing, and distribution goods, especially if they are in the process of converting from conventional to organic production when this is necessary to prevent contact of traditionally produced products with organic.

Door-to-door sales include online sales through social networks or websites, ordering by phone. The question of the method of delivery is decided by consumers themselves, depending on the term and conditions of storage of products.

Organic producers are active participants in fairs. Among the most famous among organic producers of Ukraine is the "All-Ukrainian Fair of Organic Products" where domestic producers demonstrate their products and the world fair of organic products BioFach in Nuremberg (Germany).

Indirect distribution channels for organic products in Ukraine are wholesale and retail trade.

Retail trade in organic products takes place through supermarkets and hypermarkets, specialized health food stores, and, as a new type of retail trade in the Ukrainian market, organic supermarkets.

In general, supermarket chains show varying degrees of interest in natural foods. The motives for their entry into the organic market are different, and they use different strategies when selling organic products.

The main distribution channels for organic processed products in cities are supermarkets. According to the register of importers of organic food, these are such supermarket chains as "Furshet", "Velyka Kyshenya", "NOVUS", "Silpo", "EcoMarket", "Fora", "Rost", "Digma", "Fozzi". Marketopt. The network through which organic products are distributed is growing. Most points of sale are located in Kyiv, cities with a population of millions, and regional centers.

Organic stores are gaining popularity in Ukraine: "Eco-club", "Natur Boutique", trading house "Organic Era" which offer their customers a wide range of organic certified food, as well as organic cosmetics, household goods, and children of domestic and imported production, goods can also be ordered in their online stores. In addition, companies - "Natur Boutique", "Eco-Chic", "Glossary", trading house "Organic Era", offer organic catering services - on-site restaurant service. Also, in Ukraine, there is an eco-estate "Maison Blanche", certified by the international environmental program Green Key, which includes an eco-hotel, cafe, shop. The eco-estate is decorated with natural materials, the rooms are cleaned with organic products, and guests are offered organic cosmetics.

Producers of organic consumer goods are beginning to actively use natural materials: wool, vine, hemp, cotton, as well as clay, wood, and glass because natural materials guarantee the durability of things and allow you to save natural resources in case of excessive consumption. In the Ukrainian market, they are represented by the following eco-brands - "DevoHome", "Green Elvis", "ZERNO", "AVOSKA", "Her", "Ochi Coffee", "Ecopack Gifts", "OZERO", "Raw Flaw" (ECO-MARATHON: Green Business Ukraine. (2019)). Such products are becoming quite popular for the category of eco-consumers and attract other buyers to the culture of eco-consumption.

Organic companies pursue a constant marketing policy aimed at promoting this area, using the following methods of influence: conferences, exhibitions, advertising campaigns, various promotions, tastings (if it is food). By such measures, producers draw the attention of potential consumers to organic products, and with the right tactics of action inclines them to buy. All these methods of sales promotion are a very powerful channel of influence on the formation of ecological thinking and consumption, as the consumer receives not only a quality product but also the complex consumer value of the product, which includes important basic needs - safety and health. Information support of useful organic goods saves resources and time and is an important element in the system of environmental marketing.

Ukrainian consumers are becoming more informed and knowledgeable, and as a result, their inquiries about product characteristics are changing and becoming more demanding. They do not believe in advertising fiction, carefully study the composition of products, labeling, product characteristics, read publications that expose unscrupulous manufacturers, and already know most of the deceptive marketing techniques.

Special labeling helps to distinguish organic products from those available on store shelves.

"Labeling - information about organic products, the state logo for organic products, applied to the label, packaging, packaging, container, counter label, necklace, label, cork, insert or other elements of packaging that accompanies such products or refers to it, respectively to the requirements of the legislation in the field of organic production, circulation, and labeling of organic products ". That is, a special logo must be placed on the label of organic products (approved by the order of the Ministry of Agrarian Policy dated 22.02.2019 №67 "About the statement of the state logo for organic production"(2019). The logo consists of a graphic image of two circles that intersect, forming a figure in the form of a plant leaf, as well as the inscription "Organic product" (Fig. 4). It is forbidden to use on product labels the names: "organic", "biodynamic", "biological", "ecological", "organic" and any monosyllabic derivatives of these words with the prefixes "bio-", "eco-", etc. any languages. The application of the image of the State logo indicates that the producer of organic products has passed special certification and has the appropriate documents.



Fig. 4. Logo for organic products of Ukraine

According to the law, organic production and circulation of organic products in Ukraine are subject to certification - i.e. undergoing a special procedure for compliance of organic production and circulation of organic products with the requirements of legislation in the field of organic production, circulation, and labeling of organic products. Logistics, storage, and sale of organic products by catering establishments and retailers do not require certification.

In Ukraine, such certification is carried out by a special authority, which is entered in the State Register of Certification Authority. The certification decision is made after the inspection if all the necessary documents were available. At the same time, it is very important that the operator is well prepared for the inspection.

The mechanism of control is prescribed in the law of Ukraine "About the state control over compliance with legislation on food, feed, animal by-products, animal health and welfare" (2017) and is based on a risk-based approach. Control over the activities of certification bodies is in accordance with the law of Ukraine "The basic principles of state supervision (control) in the sphere of economic activity" (2021).

Violation of the requirements of organic law provides for quite severe penalties (Level of responsibility: Who and what fines will be paid in case of violation of organic law. (2020)):

- labeling of products with the state logo for organic products or use in the labeling of designations and inscriptions "organic", "biodynamic", "biological", "ecological", "organic" and/or any monosyllabic and/or derived words from these words with prefixes "Bio-", "eco-", etc. in any language, in the absence of a certificate certifying compliance of the production process and its circulation with the requirements of legislation in the field of organic production, circulation and labeling of organic products - entail the imposition of fines on legal entities in the amount of eight minimum wages, for individual entrepreneurs - in the amount of five minimum wages;
- non-fulfillment, untimely fulfillment of legal requirements (instructions, administrative acts) to eliminate violations of legislation in the field of organic production, circulation, and labeling of organic products - entail the imposition of a fine on legal entities in the amount of eight minimum wages, on individual entrepreneurs - in the amount of five minimum wages;
- failure to provide, untimely or inaccurate information on the volume of organic products put into circulation - entail the imposition of a fine on legal entities in the amount of five minimum wages, on natural persons-entrepreneurs - in the amount of three minimum wages.

Responsibility of certification authority:

- non-fulfillment, untimely fulfillment of legal requirements (instructions, administrative acts) to eliminate violations of legislation in the field of organic production, circulation, and labeling of organic products - entail the imposition of a fine of eight minimum wages;
- violation of the requirements for certification of organic production and/or circulation of organic products, which resulted in the illegal issuance of a certificate - entails the imposition of a fine of sixteen minimum wages;
- failure to provide, untimely provision or provision of inaccurate information, or a report on the certificates issued by them - entail the imposition of a fine of five minimum wages;
- repeated violation of the requirements for certification of organic production and/or circulation of organic products, which resulted in the illegal issuance of a certificate - entails the imposition of a fine of twenty-four minimum wages.

Responsibility of persons who sell products labeled as organic:

- putting into circulation or sale of products without a certificate certifying compliance of the production process and/or its circulation with the requirements of legislation in the field of organic production, circulation, and labeling of organic products or legislation of the country of origin of such products entails eight minimum wages, for individual entrepreneurs in the amount of five minimum wages.

The State Food and Consumer Service have the right to apply to the Ministry of Agrarian Policy with a request to exclude a certification authority from the Register of Certification Authorities or to exclude an operator from the Register of Operators. In case of violations, the Ministry of Agrarian Policy has the right to apply to the National Accreditation Agency with a request to deprive a specific certification authority of the accreditation certificate.

Inspection and certification is an extremely important component of organic production. For example, a farmer grows tomatoes following the principles and rules of organic production, and then these products reach the consumer. And in this way, all stages: production, packing, warehousing, transportation, placement on trade areas - are inspected and certified. If the consumer in the store wants to know who grew specific certified organic tomatoes or from which wheat organic cake is made, he will be able to trace not only all stages of organic production but also accurately identify the area, district, farm, and even the field where this product is produced grown (Guidelines for labeling of organic food and feed. (2019))

Ukrainian consumers, as well as European ones, strive to consume safer and higher-quality products (Fig. 5).

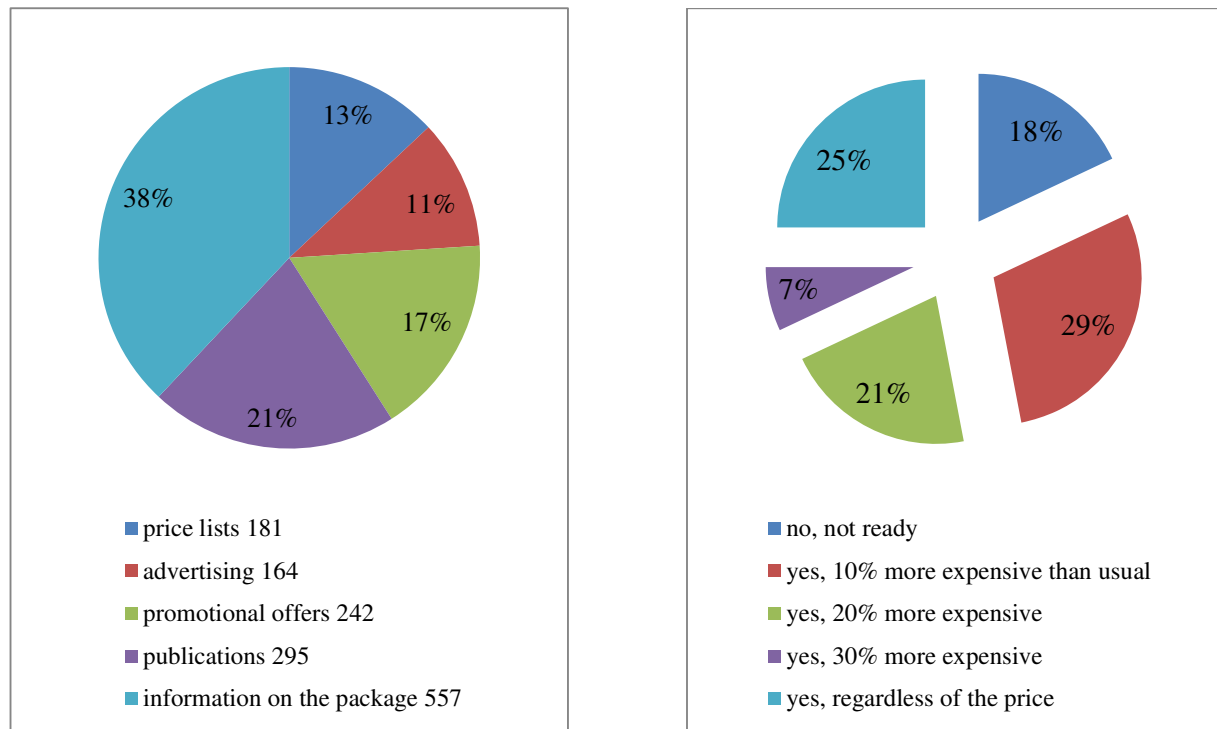


Fig.5. Survey data of Ukrainian consumers (International Federation of Organic Agricultural Movement. (2021))

According to the survey, in 2019, 84% of Ukrainians are consciously ready to choose products with improved environmental performance and pay more for them, if they are confident in its benefits. Willingness to buy such products regardless of the price was expressed by 25% of respondents, to pay 10% more than the average market price - 29%, 20% more - 21%, and 30% more - 7%. Only 18% are not ready to overpay.

A distinctive feature of consumers who focus on organic products is environmentally friendly is the unambiguous indicator of the environmental safety of products. 47% of respondents believe that the conclusions of state control bodies guarantee the environmental safety of goods.

But 51% of consumers of this type are willing to buy organic products, while 27% agree to pay for them 1.5-2 times more than traditional. In this segment, more than half of the respondents have higher education; their age is from 31 to 50 years; 20% hold managerial positions or are entrepreneurs with a high monthly income. Thus, the segment of consumers who are focused on organic products is the most active, solvent, and environmentally motivated population. The purchase of

environmentally friendly products for consumers-fans is equally due to the reputation of the brand and the recommendations of friends, acquaintances, relatives (International Federation of Organic Agricultural Movement. (2021)).

One of the important issues for the development of the organic market in Ukraine is the need to regulate the regulatory framework, which will ensure the activities of producers according to domestic organic standards with appropriate control by both certification bodies and the state. Thus, in 2013, the Law of Ukraine "On Production and Circulation of Organic Agricultural Products and Raw Materials" was adopted, which was valid until August 2, 2019. However, it is better to say that the Law was ineffective because the provisions of the document were imperfect and, in most cases, did not meet the requirements of European regulation in the field of organic production, circulation, and labeling of organic products.

In order to improve the principles of legal regulation of organic production, circulation, and labeling of organic products and adaptation of organic legislation to EU law, with the support of the public sector and organic market specialists, executive authorities adopted a new Law of Ukraine "On Basic Principles and Requirements for Organic Production, circulation and labeling of organic products" (962496-VIII, entered into force on August 2, 2018, came into force on August 2, 2019).

First of all, the Law takes full account of EU directives and regulations, which allows adapting Ukrainian legislation to European legislation; production requirements were improved, provisions on assessing the suitability of land for the production of organic products were removed, which contradicted international practice; the principles of production certification have been changed; requirements for certification bodies, the inspector for organic production have been significantly improved.

Currently, experts of the working group at the Ministry of Agrarian Policy on the development of legislation in the organic field, which includes experts from the Federation of Organic Movement of Ukraine, are working on the development of bylaws that are important for the functioning of the organic market.

Thus, the resolutions of the Cabinet of Ministers of Ukraine and the orders of the Ministry of Economic Development, Trade and Agriculture of Ukraine, as well as the former Ministry of Agrarian Policy and Food of Ukraine, have already been approved:

- order (detailed rules) of organic production and circulation of organic products;
- the procedure for maintaining the State Register of operators producing products in accordance with the requirements of legislation in the field of organic production, circulation and labeling of organic products, the State Register of certification bodies in the field of organic production and circulation of organic products, the State Register of organic seeds and planting material;
- the procedure for maintaining the List of foreign certification bodies;
- state logo for organic products;
- a list of substances (ingredients, components) that are allowed to use in the process of organic production and which are allowed to use in the maximum permissible quantities;
- the procedure for confirming the special knowledge of the inspector on organic production and/or circulation of organic products in the field of organic production;
- the procedure for certification of organic production and/or circulation of organic products;
- the procedure for reviewing appeals against decisions of certification bodies;
- application form for inclusion in the Register of certification bodies in the field of organic production and circulation of organic products.

The Ministry of Economy, according to the requirements of the above-mentioned Law, is completing the preparation and approval of regulations relating to the following issues:

- requirements to the material and technical base and other infrastructure objects necessary for the performance of functions on certification of organic production and/or circulation of organic products;
- the procedure for reporting by certification bodies to the Ministry of Economy and the State Food and Consumer Service on the certificates issued by them;
- the procedure, periodicity of declaring and submitting consolidated materials on the volumes of organic products that are put into circulation by certification bodies to the Ministry of Economy and the State Food and Consumer Service (orders of the Ministry of Economy).

An important event for the organic movement in Ukraine was the adoption of the Law of Ukraine "On Amendments to the Law of Ukraine "On State Support of Agriculture of Ukraine" (2019) and other laws of Ukraine on the functioning of the State Agrarian Register and improving state support for agricultural producers products"(2020). The adopted Law provides:

- state support for producers of organic agricultural products is carried out by allocating budget subsidies per unit of arable land and/or one head of cattle;
- reimbursement of up to 30 percent of the cost of certification of organic production;
- reimbursement of up to 30 percent of the cost of purchasing permitted plant protection products and fertilizers, seeds, planting material, and fodder.

In accordance with the provisions of the new law, the authority to exercise state control (supervision) in the field of organic production, circulation, and labeling of organic products is given to the State Food and Consumer Service, which will inspect the activities of operators and certification bodies market for inorganic products labeled as organic (New requirements for organic production, circulation and labeling of organic matter are being introduced. (2019)).

The European integration processes of the agricultural sector, the adaptation to the requirements of European food legislation, and the signing of the Association Agreement with the European Union, the opening of borders for trade, including food, helped business leaders to think about how to establish sustainable trade with Europe. This requires compliance with the following conditions: first, it is the harmonization of Ukrainian food legislation with European; the second condition - methods and principles of activity of official state controlling bodies should correspond to methods and principles of activity of such bodies in the EU - according to the European legislation; the third is a requirement for the enterprises and suppliers of raw materials. Its implementation depends on many factors, ranging from the type of product and the type of technological processes that exist in production, and ending with the size of the enterprise. Compliance with these requirements will allow you to work in the EU market, in other markets.

Introduction of European standards in the economy of regional nature management, ecological innovations are recognized as an indicator of sustainable and balanced development in conditions of competition. This is confirmed by international policy documents and statistical reports in which environmental innovations are treated as innovations that increase the efficiency of natural resources from an economic point of view, reduce the negative impact of human activities on the environment or increase the resilience of the ecological system. The introduction of environmental innovations contributes to the development and expansion of the market for organic products. However, today in Ukraine there are no tools for managing environmental innovations, no effective mechanisms for regulating, and state incentives for innovative developments in nature management under the condition of decentralization (Martienko A.I., Bondarenko S.A. (2015)).

The strategic vision of Ukraine's sustainable development is based on ensuring environmental security, national interests and fulfilling Ukraine's international obligations regarding the transition to sustainable development. This development involves:

- overcoming imbalances in the economic, social, and environmental spheres;
- transformation of economic activity, transition to the principles of "green economy";
- building a peaceful and secure, socially cohesive society with good governance and inclusive institutions;
- ensuring partnership between public authorities, local governments, business, science, education, and civil society organizations;
- full employment;
- high level of science, education, and health care;
- maintaining the environment in a proper state that will ensure the quality of life and well-being of present and future generations;
- decentralization and implementation of regional policy, which provides for a harmonious combination of national and regional interests;
- preservation of national cultural values and traditions (Strategy of sustainable development of Ukraine until 2030. (2019)).

Based on the above, the main areas of regulation of organic production in the direction of environmental safety are:

- control of ecological quality and safety of agricultural products, ecological audit of the content of hazardous substances in agricultural products and natural environments, analysis of potential sources of pollution, forecasting and assessment of environmental risks;

- environmental monitoring, soil protection, protection of groundwater, rivers, and lakes;
- optimizing the impact of agriculture on climate change, reducing greenhouse gas emissions;
- implementation of concepts of ecological agriculture, ecological certification, and labeling.

Note that organic production offers an alternative food system that can increase agricultural productivity, ensure social justice and preserve the environment.

Organic production and environmentally friendly technologies should be considered as an innovative product that combines scientific and technical novelty, technological originality, industrial application, and commercial implementation. Taking into account the environmental component involves creating conditions for producers to access the market of organic products based on the principle of partnership between producer and consumer. According to experts, the decisive factor in achieving environmental safety is environmentally friendly technologies, rather than achievements in research and development. Because the progress of science in the field of organic production is due to the objective need to preserve the environment and is impossible without integration.

Conclusion

It can be argued that the development of the organic market is particularly important and promising for Ukrainian farmers, consumers, and the state as a whole, especially in the context of ensuring a healthy diet and preserving the environment. The creation of proper legal support for the activities of organic producers, as well as the introduction of a clear and effective system of state support, creates the conditions for further promising and competitive existence.

References

- About the statement of the state logo for organic production. Law of Ukraine. (2019). URL: <https://zakon.rada.gov.ua/laws/show/z0261-19#Text>
- About the state control over observance of the legislation on foodstuff, forages, by-products of an animal origin, health and well-being of animals. Law of Ukraine. (2017). URL: <https://zakon.rada.gov.ua/laws/show/2042-19#Text>
- Artish V.I. (2005). Comparative assessment of intensive and environmentally friendly agriculture. Economics of agro-industrial complex. № 10. P. 20–23.
- Artish V.I. (2014). Production of organic products in the countries of the European Union. Economics of agro-industrial complex. №2. P. 93-96.
- Basic Standards: approved by the IFOAM General Assembly. (2002). Victoria, Canada. URL: <http://www.ifoam.org>
- Badgley C., Moghtader J., Quintero E., Zakem E., Chappel, MJ, Aviles-Vazquez K., ...& Perfecto I. (2007). Organic agriculture and global food security. Renewable agriculture and food systems. P. 86-108.
- Buga N.Yu., Yanenkova I.G. (2015). Prospects for the development of organic production in Ukraine. Current economic problems. №2. P. 117-125.
- Chaika T.O. (2012). Development of organic production in the agricultural sector of Ukraine's economy. Bulletin of Agrarian Science of the Black Sea Region. Issue 2.. P.126-131.
- Dudar T.G., Dudar O.T.(2014). Development of organic agricultural production as a basis for ensuring the quality and safety of agricultural products in Ukraine. Scientific Bulletin of Mukachevo State University. Ser.: Economics. №1. P.11-15.
- ECO-MARATHON: Green Business Ukraine. (2019). Council of Entrepreneurs at the Cabinet of Ministers. URL: <http://www.sula.com.ua/>
- Guidelines for labeling of organic food and feed. (2019). Version as of August 2, 2019. URL: https://agro.me.gov.ua/storage/app/sites/1/organic/1567506098209_Organic.pdf
- Hvesik M.A., Stepanenko A.V. (2014). Ecological crisis in Ukraine: socio-economic consequences and ways to overcome them. Ukraine economy. № 1. P. 74-86.

- Ilyashenko S.M. (2013). Marketing principles of introduction of ecological innovations: monograph. Sumy: LLC "Printing House" "Papyrus". 184p.
- International Federation of Organic Agricultural Movement. (2021). URL: <http://organic.com.ua/ru/bibliotekaru/informacziornyj-vestnik-federaczii-organicheskogo-dvizheniya-ukrainy/>
- Jaenicke E., Dimitri C., Oberholtzer L.(2011). The retailer's decision to import organic goods and organic brands. American Journal of Agricultural Economics. № 93 (2). P.597-603.
- Jaime MM, Coria J., Liu X. (2016). Interaction between agricultural and agricultural subsidies, as well as their impact on the use of organic farming. American Journal of Agricultural Economics. № 98 (4). P.1114-1145.
- Lampkin N., Padel S., and Foster S. (2000). Organic farming. CABI Publishing House. P.221-238.
- Level of responsibility: Who and what fines will be paid in case of violation of organic law. (2020). Agroportal. URL:<http://organicstyle.agroportal.ua/riven-vidpovidalnosti-hto-i-yaki-shtrafi-platitime-u-razi-porushennya-organichnogo-zakonodavstva>
- Martienko A.I., Bondarenko S.A. (2015). Ecological innovations in the regional innovation system. Efficient economy. №8. C.20-25. URL: <http://www.economy.nayka.com.ua/?op=1&z=4232>
- Milovanov E.V. (2012). World best practices of state support of organic agricultural production and prospects for Ukraine. The mechanism of economic regulation. №2. P.14-33.
- New requirements for organic production, circulation and labeling of organic matter are being introduced. (2019). Government portal. URL: <https://www.kmu.gov.ua/news/vid-sogodni-vvodyatsya-novi-vimogi-do-organichnogo-virobnictva-obigu-ta-markuvannya-organiki>
- On amendments to some laws of Ukraine on the functioning of the State Agrarian Register and improvement of state support for agricultural producers. (2020). Law of Ukraine. URL: <https://zakon.rada.gov.ua/laws/show/985-20#Text>
- On the basic principles and requirements for organic production, circulation and labeling of organic products. (2019). Law of Ukraine №2496-VIII of August 2, 2019. URL: <https://zakon.rada.gov.ua/laws/show/2496-19#Text>
- Organic in Ukraine. (2021). International Federation of Organic Agricultural Movement. URL: <http://organic.com.ua/organic-v-ukraini/>
- Rudnytska O.V. (2007). Organization of marketing activities in the market of organic agri-food products. Scientific Bulletin of NAU. Vip. 110. Part 2. P. 339–342.
- Strategy of sustainable development of Ukraine until 2030. (2019). URL: http://search.ligazakon.ua/l_doc2.nsf/link1/JH6YF00A.html
- The basic principles of state supervision (control) in the sphere of economic activity. (2021). Law of Ukraine. URL: <https://zakon.rada.gov.ua/laws/show/877-16#Text>
- «The national security strategy of Ukraine». (2020). Decree of the President of Ukraine №392/2020 «Decision of the National Security and Defense Council of Ukraine» of September 14, 2020
- The procedure for certification of organic agricultural production. (2020). URL: <http://organic.com.ua/ru/sertifikacziya-ta-markirovka/>
- Ukraine took second place in the supply of its organic raw materials to the EU. (2020). URL: <https://agropolit.com/news/18811-ukrayina-zaynyala-druge-mistse-po-postavtsi-v-yes-svoyeyi-organichnoyi-sirovini>
- Zaychuk T.O. (2009). Domestic market of ecologically clean food and ways of its development. Economics and forecasting. № 4. P. 114-125.