1st National Debate Our planet – our Common Future

SUMMARY OF THE DEBATE

On December 5, 2023, the groundbreaking **1st National Debate, titled "Our planet - our Common Future", was held under the auspices of the University of Information Technology and Management in Rzeszów and the Climate Coalition.** With over 200 attendees, including renowned scientists, influential politicians, local government officials, agricultural sector representatives, non-governmental organizations, ecologists, activists, students, and high school students.

The Sustainable Development Strategy of the University of Information Technology and Management for 2022-2024 took a significant step towards climate protection and sustainable development. The event, organized in collaboration with the Climate Coalition, was aimed at initiating legislative work for the adoption of the Climate Protection Act within the first 100 days of the government's work after the elections of October 15, 2023. The theme of the event was carefully chosen to align with the demands of the Manifesto 100 days campaign, emphasizing the necessity of taking immediate action towards climate protection.

It's not too late to save the planet, **but we can't wait any longer!**







UNIVERSITY of INFORMATION TECHNOLOGY and MANAGEMENT in Rzeszow, POLAND



INTRODUCTION TO THE DEBATE

National Debate

Dr Tadeusz Pomianek, PhD, prof. UITM, President of the University of Information Technology and Management

Professor T. Pomianek, the initiator of the debate, opened it and shared the inspiration behind its organization. In Great Britain, Prof. P. Dasgupta's team from the University of Cambridge prepared a report for the House of Commons, which became the basis for formulating recommendations to the British government. The government had 2 months to address this. The debate participants would repeat the British variant. The idea is to meet every year and present a report on the state of affairs, indicate the actions that need to be taken, and check how the government responds to these challenges. This year's demands will help the newly formed government, and we hope that together we can achieve a lot.

"The world has focused its efforts to minimize, to stop the rise in temperature, and to protect our climate. However, far too little is said and even less is done when it comes to the ongoing degradation of the environment. This process is getting faster and faster. The main culprit is the industrial food production system. There is no better time to finally, with determination, say goodbye to the industrial food production system, to focus on the food that is produced while respecting the environment. We will win twice - we will save the natural environment and our health."

Dr Tadeusz Pomianek, PhD, prof. UITM

Therefore, the key challenge and topic of debate is to find a way to move away from industrial food production towards the production of high-quality food with respect for natural environment.

DEBATE AS PART OF THE UNIVERSITY'S SUSTAINABLE DEVELOPMENT STRATEGY

Dr Andrzej Rozmus, PhD, prof. UITM, Rector of the University of Information Technology and Management

During the opening of the debate, the Rector of the University of Information Technology and Management pointed out that in 2022 the University implemented the Sustainable Development Strategy for 2022-2024 and that theses and conclusions, that will be heard during the panel sessions, as well as the postulates that will be formulated during them, will help in establishing a list of the most urgent tasks, mainly in the food production system, which has a huge impact on biodiversity and our health.

SPEECH BY THE DEPUTY MARSHAL OF THE SEJM OF THE REPUBLIC OF POLAND

FULL SPEECH

Mrs. Dorota Niedziela, Deputy Marshal of the Sejm of the Republic of Poland

In her statement at the beginning of the debate, the Deputy Marshal of the Sejm of the Republic of Poland drew attention to the effects what climate change brings for Polish agriculture.

"The methods of not only breeding, but also agricultural production are destructive to the environment. I think changes in Polish agriculture are necessary, but the changes must concern not only farmers, but also the minds of the people who are producers, and also consumers. This is our challenge today. I don't know if you know these data, but for two seasons in 2018 and 2019, as a result of drought, Polish agriculture lost, it is estimated, PLN 20 billion, of which PLN 4.5 billion are compensation paid from the state budget. It's no longer just what we see and what interferes with production, but there are specific financial losses that we must try to reduce and adapt to their agriculture to climate change."

Mrs. Dorota Niedziela, Deputy Marshal of the Sejm of the Republic of Poland

SPEECH BY THE DEPUTY MINISTER OF AGRICULTURE AND RURAL DEVELOPMENT

Mr. Michał Kołodziejczak, Deputy Minister of Agriculture and Rural Development

Deputy Minister M. Kołodziejczak emphasized in his statement that supporting medium-sized farms and organic food producers is not enough, but it is necessary to recreate the entire infrastructure between the farmer and the consumer, which was destroyed in the 1990s, when International corporations specializing in cage breeding, as well as retail chains, entered the Polish market. He pointed out that in Western countries (e.g. Italy or France), which had much more time and opportunities, the process was more harmonized and maybe this is a good example for us.



SESSION I MAJOR RENOVATION FOR THE FOOD PRODUCTION SYSTEM

Content supervisor of the session: Dr Tadeusz Pomianek, PhD, prof. UITM

The current industrial food production system in Poland and around the world is causing soil degradation, insect extinction and deterioration of population health, and this situation is getting worse. Quick action must be taken to stop it. The session was devoted to discussing the initial state and the conditions that must be met to transform the current food production system into a system of agricultural crops and animal breeding in symbiosis with nature to be successful.



INTRODUCTORY SPEECH:



How to change the industrial food production system to protect health, climate and the environment? Dr Tadeusz Pomianek, PhD, prof. UITM

SPEECH BY A REPRESENTATIVE OF THE YOUNG GENERATION:

Do we use more water when we eat than when we drink? Gabriela Karaś, student of Management, UITM

Panelists' speeches

DIAGNOSIS:

• The soil will stop producing

The use of fertilizers, pesticides on such a large scale and the dominance of monoculture crops causes gradual destruction of the soil microbiome, which determines its fertility. As a result, soil degenerates at least 30 times faster than it can regenerate. Moreover, mono-culture crops mean that natural pollinators (including bees) have a poor diet, and attacks from all sides by artificial fertilizers and pesticides causes them to perish.

Humans won't be able to stand it

The health of people is deteriorating. This necessitates a continuous increase in health care spending. It's safe to say that there will never be enough and no country will be able to incur such expenditures to make the health service efficient. It is therefore a matter of time before the health care system collapses.

• We will suffocate

50% of oxygen is provided by forests, and 50% by phytoplankton. Unfortunately, forests are being cut down and replaced with monoculture crops. Additionally, chemical means such as artificial fertilizers and pesticides used in food production are not entirely absorbed by plants but instead flow into the oceans. This leads to a huge mass of toxic waste and ocean acidification, which harms ocean animals, including phytoplankton. Over 90% of the greenhouse effect is absorbed by the oceans, causing an increase in temperature that further harms the oceans. In summary, it is only a matter of time before we run out of oxygen. While we can estimate how long we have left with the forests, nobody can predict when we will no longer be able to rely on phytoplankton.

• We will stop reproducing

Microplastics, dust (especially PM2.5), pesticides, artificial fertilizer derivatives (N_2O), and heavy metals, particularly cadmium (which is a side effect of fuel combustion), have been found to reduce the level of male hormones, primarily testosterone, and increase infertility in men. However, it has been discovered that iodine can partially neutralize these harmful effects.

• Climate immigrants will collapse the socio-economic system of the Western world Forests are being destroyed at an alarming rate in the equatorial zone, spanning from Central America through Africa to far eastern Asia. This has resulted in an increase in monoculture cultivation, which in turn causes droughts and leads to a significant rise in temperatures. As a result, there are more places in the global South where life is becoming impossible. Furthermore, this has already resulted in migration problems, and we can expect to face even greater challenges in the future.

From the above points, it can be concluded that **monoculture crops + chemical agents** production + industrial breeding farms monopolized by international corporations and investment funds is an effective recipe for the end of civilization.

Prof. T. Pomianek proposed a solution to this key problem, and in a less drastic way than proposed by American and British scientists.

ASSUMPTIONS OF THE PROPOSED SOLUTION

- Meat consumption should be reduced from 75 kg to 25 kg/person per year, preferably within 5-10 years.
- Since industrial meat production devastates the environment so severely, its production should be limited to our needs, i.e., exports should be gradually abandoned.
- The abovementioned means a reduction in meat production from 5.3 million tons to 0.95 million tons, and milk production by approximately 15%.
- The decrease in meat consumption should be compensated by an increase in the consumption of plant protein and fish and seafood from deep-sea fishing grounds.

RESULTS OF THE PRESENTED SOLUTION

- It is estimated that the liquidation of meat and processed meat exports will result in a loss
 of approximately EUR 7 billion in revenues per year. However, there is also a positive aspect
 to this situation. Due to the decline in gas emissions, we will gain over EUR 6 billion in emission rights. Greenhouse gases above 70 million tons of CO₂ equivalent are a major concern.
 The EU is currently working on introducing an obligation for producers to purchase greenhouse gas emission rights for their food production.
- We are reclaiming over 8 million hectares, which is equivalent to 60% of arable land or a quarter of the country's area. This vast area can be utilized for the production of plant protein and other foods that are not only beneficial to humans but also have a lower impact on the environment.
- We will save over 30 billion tons of water annually- nearly 50% of our usage- crucial in light of the ongoing drought in Europe and Poland.
- We will transition towards a more sustainable method of breeding that takes the environment into consideration. This will significantly reduce the need for artificial fertilizers and pesticides. As a result, we will be able to reduce the pollution of rivers caused by nitrogen and phosphorus fertilizers that are not absorbed by crops. Additionally, we will limit the use of antibiotics in animal farming, which will help to stop the spread of drug resistance.
- We will be able to flood peat bogs covering an area of 1.2 million hectares that have become dry in recent years with water. This will help them absorb greenhouse gases instead of emitting them, resulting in a reduction of 34 million tons of CO₂ equivalent. Additionally, the biodiversity of the environment will greatly benefit from this.

NECESSARY CONDITIONS TO EFFECTIVELY IMPLEMENT THE PROPOSED TRANSFORMATION

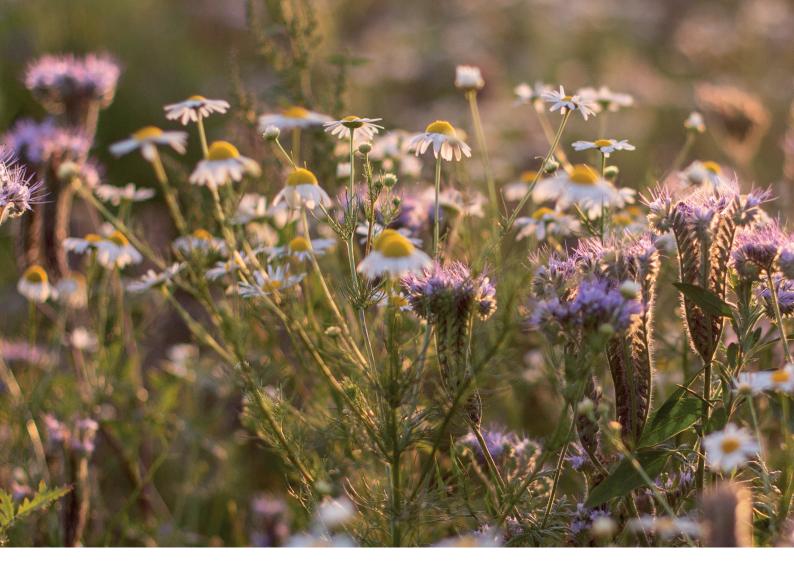
Such an ambitious transformation of food production and consumption requires fulfilling several conditions. First, we need to change the systems of organization and financing the agriculture and rural areas. In the next two points, prof. W. Misiąga's team presented the state of affairs and provided 54 specific recommended and necessary changes: **Brochure Recommen**dations from the conferences on the 19th of April (wsiz.edu.pl).

It is essential to factor in reliable economic calculations for food production. Currently, industrial methods tend to overlook indirect costs such as greenhouse gas emissions, environmental destruction, adverse effects on our health, or unhealthy eating habits.

Professor T. Pomianek presented a method for estimating indirect costs and identified specific sources of financing for the necessary transformation of the food production and consumption system. He emphasized that there are sufficient financial resources available, but they need to be addressed differently.

He emphasized that in addition to other prerequisites, it is vital to implement extensive education programs on the importance of transforming the food production system, adopting healthy eating habits, promoting dietetics, and preventing diseases. **A society that is well-educated and conscious can play a crucial role in urging politicians to take resolute actions.**

Finally, he stated that shifting towards agriculture and away from the industrial system would help solve the problems currently facing the agricultural industry. This new system would prioritize agricultural cultivation and breeding that works in harmony with nature, which is known as agroecology and food sovereignty. It would be based on knowledge of nature instead of solely focusing on profit. This would result in shorter supply chains, which would require local cooperation, small-scale processing, and the construction of markets with food quality control. It would also provide a significant development boost for villages and small towns. The village would no longer just be a place for the distribution of social funds from the EU and the state budget; instead, medium-sized and specialized small farms would regain profitability. Ultimately, the countryside would produce food in harmony with nature for our health and well-being, which is what it should have been doing all along.



SESSION II BIODIVERSITY – THE FUTURE AGRICULTURE OR UTOPIA?

Content supervisor of the session: Dr. Paulina Kramarz, PhD, prof. JU

The process of industrializing agriculture leads to several negative impacts, such as deforestation, pollution from pesticides and artificial fertilizers, excessive use of fresh water, and it has become one of the primary causes of the decline in biodiversity. However, scientific research and the experience of organic farms have confirmed that ecological intensification can provide enough good quality food for every person in the world. Not only does it support biodiversity, but it also contributes to improving the health of the society. The dedicated session aimed to find solutions that support the protection and restoration of biodiversity while ensuring the efficiency and quality of crops.



INTRODUCTORY SPEECH:

There is no food without biodiversity Dr. Paulina Kramarz, PhD, prof. JU

SPEECH BY A REPRESENTATIVE OF THE YOUNG GENERATION:

Small and medium-sized farms and biodiversity of rural areas

Iwona Stawarz, Student of Environmental Protection and Management, JU

Panelists' speeches



DIAGNOSIS:

- 80% of deforested areas are used for agriculture, mainly for cultivating feed and pastures, resulting in the loss of 70% of terrestrial ecosystem biodiversity due to agricultural activities.
- The European Union and the United Nations advocate for reducing the consumption of meat, eggs, and dairy products. However, there is a contradiction in their message as new permits for farming are being issued in Poland. For instance, more and more poultry farms are being constructed in the Lublin region, which has led to Poland being dubbed as Europe's chicken coop. Unfortunately, this trend of increasing farming activities is continuing despite the call for reducing meat consumption.
- The disappearance of small and medium-sized farms has a significant impact on biodiversity, particularly on wild species that are associated with traditional agricultural landscapes. Small and medium-sized farms are facing various challenges such as low purchase prices, intense competition from larger farms, a lack of sales markets, financial constraints, and losses resulting from climate change, such as increasingly frequent droughts and floods. Moreover, unfavorable demographic changes and generational shifts in the countryside have contributed to depopulation and aging, which is a common trend across Europe, including in Poland.
- Soil degradation is a major concern in Poland. Soil is a crucial ecosystem, whether it's natural or agricultural. The use of artificial fertilizers is harmful to soil microorganisms, which in turn damages the soil's structure and hinders its natural regeneration. Additionally, the mass production of animals and their feed, often sourced from outside the immediate vicinity of the farms, leads to an excess of excrement and further contributes to soil degradation.
- There is a decline in the biodiversity of ecosystems in freshwater reservoirs and streams. This decline is caused by water pollution from animal feces produced by industrial farms, as well as artificial fertilizers and pesticides. Additionally, there is a lack of wild vegetation strips that protect against water runoff from fields. Furthermore, industrial agriculture requires a large amount of water abstraction to meet the needs of large-scale farms, including concentrated animal breeding and monocultures.
- The regulation of rivers and the deforestation of natural forests, especially those that form rivers in the mountains, result in the faster outflow of water from our country. This is evident in the Subcarpathian region, where sudden and intense floods occur. These floods are caused by the cutting down of Carpathian Forest, the regulation of streams and rivers, and the effects of climate change. Due to changing weather patterns, atmospheric precipitation is becoming less frequent, but more violent when it does occur, leading to torrential rains.
- There has been a significant reduction in the population of common insect groups, including
 pollinators. These species, such as wild bees, butterflies, moths, and flies, are endangered.
 Pollinators play a crucial role in pollinating about three-quarters of crops, as well as wild plant
 species. Without them, crop production would suffer, and plant species would become extinct. Insects also serve as a source of food for other animals, which in turn would struggle to
 survive. Additionally, insect larvae and insects themselves help in the decomposition of dead
 organic matter. The absence of insects would significantly disrupt this process.

- The industrialization of agriculture has resulted in a decline in the diversity of our diet. At present, only 12 plant species and 5% of animal species fulfill 70% of the world's dietary needs. Although scientific data indicates that a varied diet is essential for good health and well-being, the majority of the world's population relies on cereals such as wheat, corn, and rice as their staple food.
- The ongoing changes in our environment are leading to the emergence of new diseases, including viruses. Around 80% of these new viruses come from animals. Two main sources of animal-borne viruses are industrial farms and wild species of birds and mammals. Due to the decline in their populations, these viruses spread to other, more numerous hosts, including humans.
- Agricultural productivity is often measured in the short term and based on the production of a limited number of products. However, in the long term, traditional agriculture, which takes into account the biodiversity of the agricultural landscape as well as the crops, their varieties, and the breeds of animals, is not only more resistant to climate change but also more efficient than large-scale industrial agriculture. This is particularly true because industrial agriculture is subsidized in almost all countries of the wealthy North under various policies. It is important to keep in mind that many products used in agriculture, as well as the food products consumed in richer countries, are produced by poorer countries in the South, such as soybeans in South America, palm oil in Indonesia, and cotton in India. The well-being of developed countries is based on the exploitation of poorer countries, which also comes at the cost of the biodiversity of the local areas.
- The level of biological and ecological education among farmers is currently quite low. In traditional agriculture, knowledge about the interdependence of humans and nature, as well as the functioning of agricultural ecosystems, was passed down from generation to generation. However, this practice has decreased significantly over time. As a result, modern organic farmers should prioritize learning about food production and seek guidance from people who are educated in this field, rather than focusing solely on biochemical concerns.





SESSION III **POLISH AGRICULTURE FACING CLIMATE CHALLENGES**

Content supervisor of the session: Dr. Zbigniew Karaczun, PhD, prof. SGGW

Agriculture is a sector that is highly sensitive to the impacts of climate change. Most of the factors that determine the success of agricultural production are affected by changing atmospheric conditions. Moreover, the agricultural sector is responsible for emitting a significant amount of greenhouse gases (GHGs), contributing 12-14% of the total anthropogenic emissions of these gases (with the entire food sector responsible for 25-35% of these emissions). Therefore, the agricultural sector needs to participate in climate protection activities. The transformation of the agricultural sector will be a significant challenge for Polish farmers. The session was dedicated to discussing the challenges and opportunities for coping with them, and finding ways to support farmers in taking action to protect the climate and adapt to the effects of this process.



INTRODUCTORY SPEECH:

How to support Polish farmers to get involved them to achieve the goals of climate policy? Dr. Zbigniew Karaczun, PhD, prof. SGGW

SPEECH BY A REPRESENTATIVE OF THE YOUNG GENERATION:

What the Youth Climate Strike expects from politicians regarding changes in Polish agriculture? Kacper Blok, Youth Climate Strike

Panelists' speeches

DIAGNOSIS:

- Polish farmers are already feeling the adverse impacts of climate change. The most severe consequence of this phenomenon is the increased uncertainty in agricultural production, which is causing some farmers to quit production. Climate change poses a significant threat to Poland's food security.
- In order to ensure the profitability of farms and the uninterrupted production of food, it is essential to adjust agricultural management practices to the impact of climate change, which includes changes in rainfall patterns, more frequent heat waves, and an earlier start to the growing season. It is the responsibility of public authorities to develop strategies to help Polish farms adapt to the effects of climate change.
- Polish agriculture is expected to play a significant role in achieving climate neutrality, as stipulated in the European Green Deal. Immediate actions must be taken to reduce greenhouse gas (GHG) emissions from this sector, as by 2030, the amount of GHG emissions produced by the agricultural sector in Poland must be reduced by 17% (compared to 1990 levels). Despite the fact that reducing GHG emissions from agricultural activities is a challenging task, the research findings indicate that it is both possible and feasible.
- The lack of support for farmers is a major obstacle in implementing climate adaptation and protection measures. Farmers struggle with bureaucracy and price instability in shopping centers. Moreover, there is insufficient support from agricultural advisory services due to underfunding. Additionally, farmers' representation and participation in legislative processes is poor, which further exacerbates the situation.
- The Polish farmers are facing multiple challenges, and the climate crisis is just one of them. They are dealing with high energy prices, rising production costs, inflation, and the inflow of cheap agricultural products. These issues have resulted in a polycrisis situation that has caused a decline in the prices of products produced by Polish farmers.
- Farmers are particularly vulnerable to the negative impacts of inflation, as they tend to sell their crops during autumn and purchase products during spring. Additionally, the agricultural sector heavily relies on loans, which become more expensive due to inflation. If inflation continues to rise, it will be challenging for farmers to implement measures that can help them adapt their farms to climate change and reduce greenhouse gas emissions.
- It is in our best interest to support Ukraine's containment efforts against Russian aggression and to help them win the war with Russia. Therefore, we should support Ukraine's aspirations to become a member of the European Union and to gain access to the EU market for their products. However, we cannot overlook the fact that allowing Ukrainian agricultural products into the Polish market poses a challenge to the Polish agricultural economy. Due to climatic and natural conditions, such as soil quality, Polish producers cannot compete with Ukrainian farmers in terms of quantity. The only chance for Polish producers is to focus on producing high-quality agricultural products. Therefore, it is important to provide more support for organic and regenerative agriculture while limiting support for industrial production.
- The most fundamental need of every human is to feel secure, and this includes having access to food. Unfortunately, food security is currently at risk due to various factors, including the climate crisis and other phenomena that adversely affect farmers and their ability to sustain their business. It is in the interest of not only farmers but also consumers to address these threats and take measures to ensure access to safe and sufficient food for everyone.

ASSUMPTIONS OF THE PROPOSED SOLUTION

- Financial support is needed for farmers to carry out adaptation and reduction activities for greenhouse gas (GHG) emissions. It is especially crucial to assist small-scale farmers in implementing ecosystem services, which can be maintained by family members. However, it is essential to make payments based on the results achieved by taking action, rather than just for taking steps.
- Many farmers do not actively participate in climate protection due to their lack of knowledge and awareness on the subject. Thus, it is necessary to create educational programs for them with proper guidance. The effectiveness of such programs will also depend on the improvement of the situation of agricultural advisors and better funding for the services they provide.
- Due to the lack of stability in the current agricultural policy and law, farmers in Poland distrust programs and plans presented by public authorities. Therefore, a Social Pact for Polish agriculture is necessary.
- The adoption of the Social Pact for Agriculture would allow for the establishment of the main objectives for activities in the agricultural sector. The financing of these objectives would enable the release of funds from the National Reconstruction Program (KPO). Income from sales of emission allowance units (EU ETS) should be utilized to improve energy efficiency in agriculture and establish renewable energy installations in rural areas. The development of robotics could also present an opportunity for Polish agricultural producers.

RESULTS OF THE PRESENTED SOLUTION

The proposed actions will have a positive impact on safety by improving it. Poland's food economy has benefited from the domestic farms' better adaptation to the effects of climate change. Agriculture will play a crucial role in reducing greenhouse gas emissions, which is essential for Poland to achieve its climate policy objectives. This will enable Poland to align with the European Union's policy, where climate policy and its goals are significant areas of activity.

The Social Pact for Agriculture's adoption aims to stabilize the situation of domestic agricultural producers in the medium and long term, reducing social tensions caused by farmers' uncertain situation. The goal is to include them in the process of developing the Pact. This will enhance the farming profession's prestige and prevent young people from leaving it.

FINAL CONCLUSIONS

A GOOD COMMON DENOMINATOR FOR THE DEBATE CONDUCTED IS THE STATEMENT:

The alternative of choosing between a healthy climate and environment, healthy food or personal satisfaction is not true. We are faced with a different choice: either we continue with our current consumption model and lifestyle, which will lead us unconsciously towards disaster or we can limit the consumption of animal protein and opt for plant protein in a disciplined and consistent way. By doing so, we can motivate ourselves with the awareness that we are securing a better future for our children and grandchildren.

CONCLUSION 1.

Financing the food production system on a large industrial scale is causing destruction to the natural environment and further deteriorating human health. As a consequence, more resources are being expended on healthcare. This is a path that leads to disaster. Investing in production can have better and more promising outcomes, such as producing food in harmony with nature and promoting health prevention. Therefore, **it is imperative to start the process of transform-ing the food production and consumption system without any unnecessary delays.** This presents an opportunity for our country, agriculture, and the rural areas.

CONCLUSION 2.

It is high **time to impose a moratorium on the construction of new industrial farms in Poland and gradually eliminate existing monoculture crops.** Instead, we should introduce agricultural crops and animal breeding in symbiosis with nature. This will lead to better environmental and human health, as well as a significant reduction in greenhouse gases and water usage.

CONCLUSION 3.

The inefficient use of PLN 60 billion per year in agriculture and the countryside from EU funds and taxes is a concern in Poland.

In the monograph <u>"Integrated system support for agricul-</u> <u>ture and rural development"</u>, Prof. W. Misiąg's team proposed an organized and rationalized system to improve the organization and funding of agriculture and rural areas.

Additionally, Prof. T. Pomianek presented a specific proposal for the transformation of the food production system, its effects, and the conditions and financing required for the entire process.

Prof. P. Kramarz showed that industrial food production systems are destroying biodiversity and that organic farming can produce enough food for people while preserving the environment.

Prof. Z. Karaczun highlighted how climate change affects agriculture in Poland, and how it threatens food security. He also discussed the challenges posed by climate change and proposed solutions to help farmers adapt to these changes.

CONCLUSION 4.

Starting in early 2024, the University of Computer Science and Management in Rzeszów, along with scientists and experts from various Polish universities and organizations, including the Coalition Climate Change, will begin working on developing detailed scenarios for transitioning from the current industrial food production system, which exploits natural resources, to a new system where knowledge about the environment will allow for it to be treated as an ally in producing healthy food. The project will take into account the different agricultural practices across Poland and will incorporate solutions from the eight European Union countries that have made the most progress in organic production.

CONCLUSION 5.

It is essential to develop a long-term agricultural policy that includes a plan for the development of organic farming. Such a plan should be implemented by subsequent governments, and it should ensure policy stability and legal goals. This will increase farmers' sense of security and willingness to invest. Additionally, it is crucial to build agricultural policies for each country's voivodeship, which involves local and regional initiatives, KPO funds, and ETS revenues.

CONCLUSION 6.

Systemic changes in the agricultural sector must accommodate both small and large farms. Various policy instruments should be developed to support both groups financially. Big farms require financing to transform their operations towards building the desired agricultural system. On the other hand, small farms need financial support to maintain biodiversity and other ecosystem functions. Funding provided to both groups should be dependent on the achieved results.

CONCLUSION 7.

Legal and financial measures should be taken to incentivize farmers to adopt farming methods that are beneficial for biodiversity, climate protection, and water conservation. These methods may include:

- agroforestry, which reduces the use of nitrogen fertilizers, minimizes wind and water erosion of soil, and promotes biodiversity while providing favorable conditions for animal breeding. For example, cows bred in an agroforestry system have better growth, produce more milk, emit less methane, and are in better well-being as they have diverse food,
- crop rotation is another effective method to fertilize the soil and reduce harmful organisms,
- it is also important to maintain the biodiversity of animals, breeds, and varieties.

CONCLUSION 8.

It is necessary to develop a program to improve the condition of Polish waters in Poland, including changes in regulations regarding the method water regulation, peat bog protection, water protection, actual enforcing the polluter pays principle.

CONCLUSION 9.

It is essential to make organic food more readily available to consumers and enable them to make informed choices. To achieve this, we need to help farmers establish a shorter route between the producer and the consumer. Both sides will benefit, and the Polish people will be encouraged to consume more unprocessed food. The following measures are necessary to achieve this goal:

- reconstruction of small-scale processing facilities, such as butcheries,
- creation of a network of local markets, such as in every commune,
- mandatory procurement of locally produced Polish food through large-format stores,
- increase in green public procurement to stabilize the production from organic farms.

CONCLUSION 10.

It is necessary to develop and implement an energy transformation plan in agriculture, due to energy consumption on farms and sensitivity to energy prices. Solution it may be agrovoltaics.

CONCLUSION 11.

The agricultural education system needs to be reformed to address the following issues:

 the core curriculum in agricultural schools needs to be updated to promote agroforestry and crop rotation, which support biodiversity and improve water retention. Currently, agriculture is mainly presented as something appropriate for mass production in textbooks, while ecological farming is portrayed as unprofitable,

- agricultural education should be intensified to include knowledge about the benefits of biological plant cultivation. We should follow the good patterns of our ancestors, while using modern knowledge,
- climate education should be introduced to discuss the effects of climate change on agriculture and farms. This will help identify ways to adapt to these effects and implement activities that can and should be adopted in agriculture for climate protection,
- agriculture should be linked with academic centers to implement knowledge in the production area to preserve biodiversity.

CONCLUSION 12.

It is crucial to create social awareness and promote a love for nature by addressing the following issues:

- educating people about the disastrous effects of mass food production on the planet, the poor quality of produced food, and the ethical issues related to its production. This can help promote a more healthy lifestyle,
- restoring respect for the hard work of farmers, who are one of the hardest-working professional groups. One manifestation of this respect should be to stop wasting food. Throwing away food means throwing away the hard work of farmers,
- · activities should be designed for all social groups,
- reformation of school education in the field of ecological education, including the introduction of outdoor trips and activities carried out in school gardens to showcase the beauty of nature,
- the Polish political class should take an interest in the catastrophic effects of mass food production on the planet and realize that introducing good social solutions is sometimes related to making unpopular decisions. It is worth mentioning that changes such as a ban on smoking in catering establishments or the obligation to wear seat belts were not supported by the public but were implemented due to the resulting conclusions from scientific research.

"Instead of a helpless march to hell, we are capable of saving ourselves and the future for our children and grandchildren, thus returning to the lost »Paradise«"

Dr Tadeusz Pomianek, PhD, prof. UITM

"If something is harmful to us, let's ban it, the first step is a moratorium on farms industrial activities that destroy biodiversity, but also our health."

Dr. Paulina Kramarz, PhD, prof. JU

"What do we need? Social pact for Polish agriculture, which includes: a secure future, a stable climate, healthy food, a clean environment, satisfied farmers and consumers, and joint decision-making."

PUBLICATIONS REGARDING THE DEBATE

wyborcza.pl	Prof. Tadeusz Pomianek: Trzeba pożegnać przemysłowy system produkcji żywności. Zatrzymanie wzrostu temperatury to za mało, żeby nas uratować (wyborcza.pl)
onet.pl	Polski system produkcji żywności do gruntownego remontu. "Nagle nie ma się czym leczyć" - Informacje (onet.pl)
NOIZZ.pl	To, co jemy, wpływa na naszą planetę. "Edukacja ekologiczna od przedszkola po uniwersytety" - Noizz "Nasza planeta – nasza wspólna przyszłość". I Ogólnopolska Debata dotycząca klimatu za nami - Noizz
Rzeczpospolita	<u>To nasza planeta – więc musimy działać wspólnie! - rp.pl</u>
Polityka	Polski system produkcji żywności do gruntownego remontu. "Nagle nie ma się czym leczyć" (polityka.co.pl)
TVP Rzeszów	"Na ratunek dla planety – jeszcze nie jest za późno" – ogólnopolska debata w Rzeszowie (rzeszow.tvp.pl)
Perspektywy	Debata o naszej planecie i współnej przyszłości - Portal edukacyjny Perspektywy
SmogLab	Polski system produkcji żywności do gruntownego remontu. "Nagle nie ma się czym leczyć" - SmogLab

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ul. mjr. Henryka Sucharskiego 2 35-225 Rzeszów Telefon: 17 866 11 11 E-mail: wsiz@wsiz.edu.pl



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