

UPRAWA

WP2 - Podnoszenie świadomości w zakresie zrównoważonych technik uprawy roślin

STUDIUM PRZYPADKU - EKSPERT

JAKĄ DZIEDZINĄ ROLNICTWA SIĘ ZAJMUJESZ I JAKIE MASZ DOŚWIADCZENIE?

My work covers a wide range of advisory services, from production planning, selection of appropriate cultivation technologies, resource management, to market analysis and agricultural economics. The advisory scope covers plant, animal and mixed production. The advice applies to both conventional and organic farms.

W JAKIM STOPNIU ZIELONY ŁĄD JEST STOSOWANY NA TWOIM OBSZARZE I JAKIE PRAKTYKI SĄ NAJCZĘŚCIEJ STOSOWANE?

Green practices are used in our area to an average extent. In the case of small farms (the area in question is very fragmented), green practices are often used unconsciously because they were taken over from previous generations as a typical way of running a farm. Larger farmers focus mainly on mixing straw with soil, conducting integrated production, and animal welfare.



ORGANIZACJA

- Agricultural Advisory Center Karniowice

KRAJ

- Poland

MIASTO

- Karniowice



JAKIE Z PUNKTU WIDZENIA EKSPERTA SĄ BARIERY WE WDRAŻANIU ZIELONEGO ŁADU W GOSPODARSTWACH ROLNYCH?

Some farmers introduce elements of sustainable agriculture due to maintaining subsidies for plant and animal production - complications arise when activities are properly documented. Additional paperwork alienates farmers and creates internal opposition and reluctance to use sustainable practices. Additionally, farmers fear a decline in yields if only environmentally friendly practices are implemented. Given the current market situation (low purchase price, problems with sales), farmers are less focused on saving the climate and more on financial security for themselves and their families.

JAKIE PRAKTYKI ZAUWAŻASZ, ŻE SĄ SZKODLIWE DLA ŚRODOWISKA?

Excessive use of plant protection products is certainly a harmful practice. Monocultures - growing the same species in succession for a longer period of time increases the infection of plants by diseases (mainly stink bug, snow mold), pests and weeds, which results in an increase in production costs.



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JAKĄ DZIEDZINĄ ROLNICTWA SIĘ ZAJMUJESZ I JAKIE MASZ DOŚWIADCZENIE?

My current job gives me the opportunity to contact farmers engaged in various types of agriculture - plant and animal production, organic farming, beekeepers. I serve 3.5 thousand beneficiaries using all programs implemented in ARIMR. I have 20 years of experience working with farmers.

W JAKIM STOPNIU ZIELONY ŁĄD JEST STOSOWANY NA TWOIM OBSZARZE I JAKIE PRAKTYKI SĄ NAJCZĘŚCIEJ STOSOWANE?

The most common manifestation of green practices is the use of crop rotation, plowing of straw, quick plowing of manure and simplified cultivation systems (no plowing).



ORGANIZACJA

- Agency for Restructuring and Modernization of Agriculture

KRAJ

- Poland

MIASTO

- Niepołomice



JAKIE Z PUNKTU WIDZENIA EKSPERTA SĄ BARIERY WE WDRAŻANIU ZIELONEGO ŁADU W GOSPODARSTWACH ROLNYCH?

The main barrier to the implementation of green practices for farmers is the fear of losing crops while increasing the workload. Farmers assess green practices as difficult and at the same time ineffective. The main barrier is therefore the lack of appropriate knowledge and preparation for activities. Farmers associate green practices mainly with organic farming. They assume that their application must be comprehensive and that individual actions do not bring any effect. An additional problem is the feeling that certain actions are being imposed on them. This involves the possibility of obtaining higher subsidies if you assume certain obligations. Farmers are afraid of sanctions for possible failure to meet all obligations. There are few meetings, information and promotional campaigns showing farmers the real benefits of using green practices.

JAKIE PRAKTYKI ZAUWAŻASZ, ŻE SĄ SZKODLIWE DLA ŚRODOWISKA?

The main practice harmful to the environment that I notice is water pollution with nitrates resulting from incorrect application of fertilizers. Another problem is the loss of biodiversity - long-term monocultures, lack of appropriate crop rotation, plowing of field margins, removal of mid-field trees





MINECROP

WP2 - Raising awareness of sustainable crop farming techniques

CASE STUDY - AGRICULTURAL REPRESENTATIVE 1



WHAT AREA OF AGRICULTURE ARE YOU INVOLVED IN AND WHAT EXPERIENCE DO YOU HAVE?

“The sector I am active in is “Environmental Economics and Natural Resources” and my focus within the field of agriculture revolves around the intersection of economic principles and environmental sustainability. My research and teaching activities are centered on analyzing the economic implications of agricultural practices, policies, and innovations with a keen emphasis on natural resource management and environmental conservation. I explore topics such as sustainable agricultural production, the economic valuation of ecosystem services, and the design of incentive mechanisms for environmentally friendly farming practices. My experience includes conducting empirical studies, publishing research articles in peer-reviewed journals, and actively engaging in academic and professional forums to contribute to the discourse on sustainable agriculture from an economic perspective. I am also involved in mentoring students, guiding research projects, and collaborating with fellow academics and industry experts to advance our understanding of the economic dimensions of environmental sustainability in agriculture.”

TO WHAT EXTENT IS THE GREEN DEAL APPLIED IN YOUR AREA AND WHICH PRACTICES ARE MOST OFTEN ADOPTED?

“We can see an increasing awareness of the economic benefits associated with adopting green practices, both in terms of resource efficiency and market competitiveness. The techniques adopted in our area include: farming techniques, renewable energy integration and improved waste management strategies. Farmers are recognizing in a good manner the economic viability of such practices and they are aligning their operations with the principles specified in the “green deal”. My research and teachings focus on addressing these challenges and highlighting the economic incentives that drive the adoption of green practices, contributing to the ongoing transition towards sustainability in our region.”

ORGANISATION

- Wageningen University & Research

COUNTRY

- Netherlands

CITY

- Wageningen





WHAT ARE THE BARRIERS TO IMPLEMENTING GREEN DEAL ON FARMS FROM AN EXPERT'S POINT OF VIEW?

One significant challenge lies in the economic dimension, where the financial constraints associated with transitioning to sustainable practices pose a major hurdle for farmers. The initial costs of adopting green technologies and modifying existing infrastructure can be substantial. Additionally, there are knowledge barriers as farmers may lack awareness or understanding of the economic benefits and potential returns on investment associated with sustainable practices. Regulatory complexities add another layer of challenge, with farmers navigating intricate environmental policies and standards. From an environmental economics standpoint, market dynamics and access to green markets can be hindered by the need for certifications and the associated costs. Overcoming these barriers requires a holistic approach that integrates economic incentives, educational programs, and policy frameworks to create an enabling environment for the successful implementation of the “Green” farms.”

WHAT PRACTICES DO YOU NOTICE THAT ARE HARMFUL TO THE ENVIRONMENT?

“One notable concern is the excessive use of chemical fertilizers and pesticides in conventional agricultural practices, which can lead to soil degradation, water pollution, and harm to biodiversity. Additionally, deforestation and land-use changes, often driven by agricultural expansion and urbanization, contribute to the loss of crucial ecosystems and biodiversity. Unsustainable water management practices, such as over-extraction and inefficient irrigation methods, pose threats to water resources and aquatic ecosystems. In the realm of natural resource extraction, activities like overfishing and deforestation without proper reforestation efforts can deplete ecosystems and compromise their long-term sustainability. These observations underscore the importance of promoting sustainable and environmentally friendly practices to address these challenges and mitigate their adverse impacts on the environment.”





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CASE STUDY - AGRICULTURAL REPRESENTATIVE 2



WHAT AREA OF AGRICULTURE ARE YOU INVOLVED IN AND WHAT EXPERIENCE DO YOU HAVE?

"I am a part of a Dutch Agricultural consultancy with a specialty on implementing and managing projects in agriculture and food, working for private clients, governments, international development organizations and financial institutions. Our projects involve a wide spectrum of activities, ranging from production and processing to marketing and distribution, taking into account the latest quality requirements, food safety, and environmental and institutional aspects."

TO WHAT EXTENT IS THE GREEN DEAL APPLIED IN YOUR AREA AND WHICH PRACTICES ARE MOST OFTEN ADOPTED?

"The Netherlands has made strides in renewable energy, especially in agriculture. Most of the businesses focus on sustainable practices including precision farming and initiatives to reduce the environmental impact of livestock farming. Embracing a circular economy, most of the areas of the Netherlands are actively working to minimize waste and promote recycling, with initiatives targeting product design and reducing single-use plastics. While the specifics of implementation may vary, these practices collectively reflect the Dutch commitment to environmental sustainability and align with the overarching principles of the "Green Deal". "

ORGANISATION

- Agriculture Consultancy

COUNTRY

- Netherlands

CITY

- Zoetermeer





WHAT ARE THE BARRIERS TO IMPLEMENTING GREEN DEAL ON FARMS FROM AN EXPERT'S POINT OF VIEW?

“There are a lot of issues regarding the implementation of green deal on farms and in agriculture businesses. The main problem as per our experience on the field lies on the lack of technical knowledge and resistance to change among farmers, emphasizing the need for comprehensive training and education programs. The complexity of evolving environmental regulations can be daunting, requiring constant vigilance to ensure compliance. Limited access to green technologies, especially for smaller farms, and challenges in meeting certification standards for sustainable agriculture practices further impede progress.”

WHAT PRACTICES DO YOU NOTICE THAT ARE HARMFUL TO THE ENVIRONMENT?

“What we have witnessed as a consultancy, regarding this matter and regarding the businesses we have encountered with, is bad management practices which lead most of the times to pollution, soil degradation and general harm to the ecosystem. Energy-intensive agriculture reliant on fossil fuels contributes to greenhouse gas emissions. Improper waste management, lack of sustainable practices, and inadequate water management, further compound environmental challenges. Addressing these issues necessitates a transition towards sustainable and regenerative agricultural practices, incorporating technology and policy support for long-term environmental resilience alongside agricultural productivity.”



MINECROP

WP2 - Raising awareness of sustainable crop farming techniques

CASE STUDY - AGRICULTURAL REPRESENTATIVE



WHAT AREA OF AGRICULTURE ARE YOU INVOLVED IN AND WHAT EXPERIENCE DO YOU HAVE?

I'm involved with an agricultural cooperative, supporting local farmers in selling and enhancing their crops. We provide updates on new fertilizers and necessary product specifications for market sale, along with information on funding and educational programs. My background is in business administration, and I've accumulated four years of experience with the association.

TO WHAT EXTENT IS THE GREEN DEAL APPLIED IN YOUR AREA AND WHICH PRACTICES ARE MOST OFTEN ADOPTED?

In recent years, there's been a shift towards green and sustainable practices in our area. Despite initial skepticism, farmers become more open to these methods after discussions and seeing positive outcomes. There's a growing trend in adopting Green Deal practices, with solar panels, efficient irrigation systems, and sustainable packaging being the most popular. This indicates a promising increase in the acceptance and implementation of environmentally friendly farming techniques.

ORGANISATION

- Agricultural cooperative of Larissa

COUNTRY

- Greece

CITY

- Larissa



WHAT ARE THE BARRIERS TO IMPLEMENTING GREEN DEAL ON FARMS FROM AN EXPERT'S POINT OF VIEW?

Barriers to implementing the Green Deal on farms include a lack of clear information and guidance on how to participate, initial skepticism from both farmers and consumers towards new sustainable practices, and the challenge of gaining trust in these methods. Financial constraints and the need for significant initial investments in technology and infrastructure, like solar panels and efficient irrigation systems, also pose challenges. Additionally, navigating the administrative and regulatory landscape to access support and funding can be complex and time-consuming.

WHAT PRACTICES DO YOU NOTICE THAT ARE HARMFUL TO THE ENVIRONMENT?

Common practices harmful to the environment in agriculture include excessive chemical fertilizer and pesticide use, leading to soil and water issues. Over-irrigation causes water scarcity and soil problems, while deforestation for farming and heavy machinery use damage soil structure and contribute to erosion.

In addition to the mentioned environmental issues, extensive waste generated from agricultural practices, including packaging, unused crops, and livestock by-products, poses significant problems. This waste contributes to pollution and inefficient use of resources.



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CASE STUDY - AGRICULTURAL REPRESENTATIVE



WHAT AREA OF AGRICULTURE ARE YOU INVOLVED IN AND WHAT EXPERIENCE DO YOU HAVE?

The Farmers Association represents a diverse range of agricultural activities within the Tallinn region. Their members are involved in various aspects of agriculture, including crop cultivation, livestock farming and horticulture. They have extensive experience in advocating for the interests of local farmers, providing support and resources, and fostering collaboration among members to promote sustainable agricultural practices.

TO WHAT EXTENT IS THE GREEN DEAL APPLIED IN YOUR AREA AND WHICH PRACTICES ARE MOST OFTEN ADOPTED?

In the area, the principles of the Green Deal are increasingly being embraced by farmers. Many of their members are actively adopting practices that promote sustainability and resource efficiency. Additionally, practices such as crop rotation, cover cropping, and integrated pest management are becoming more common as farmers seek to reduce reliance on chemical inputs and enhance soil health.

ORGANISATION

- Tallinn Farmers Association

COUNTRY

- Estonia

CITY

- Tallinn



WHAT ARE THE BARRIERS TO IMPLEMENTING GREEN DEAL ON FARMS FROM AN EXPERT'S POINT OF VIEW?

The expert states that one significant challenge is the lack of access to suitable technology and infrastructure, particularly in rural areas. In fact, the limited availability of advanced agricultural machinery, such as precision farming equipment, can hinder the adoption of sustainable practices. In addition, another barrier is the complexity of regulatory frameworks and administrative procedures, which can be difficult especially for smaller farmers with limited administrative capacity. Furthermore, there may also be social and cultural barriers, such as resistance to change or lack of awareness about the benefits of sustainable practices, which can hinder adoption.

WHAT PRACTICES DO YOU NOTICE THAT ARE HARMFUL TO THE ENVIRONMENT?

In terms of harmful practices to the environment, they are particularly concerned about intensive farming practices that can have detrimental effects on biodiversity and soil health. For instance, practices like growing the same crop repeatedly on the same land, can lead to a loss of biodiversity and soil degradation over time. These practices not only compromise soil health but also increase the demand for inputs such as fertilizers and water, creating a cycle of soil degradation and depleting water resources.



MINECROP

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CASE STUDY - AGRICULTURAL REPRESENTATIVE



WHAT AREA OF AGRICULTURE ARE YOU INVOLVED IN AND WHAT EXPERIENCE DO YOU HAVE?

ETKL is committed to defending the interests of farmers and promoting sustainable agriculture. Their goal is to promote competitive, resource-efficient local food production and the prudent use of land. They aim to support agriculture and forestry with environmentally friendly practices. Additionally, they facilitate local production and marketing of agricultural and forestry products based on joint activities, fostering cooperation between farmers.

TO WHAT EXTENT IS THE GREEN DEAL APPLIED IN YOUR AREA AND WHICH PRACTICES ARE MOST OFTEN ADOPTED?

In the area of Saku the principles of the Green Deal are essential to the agricultural practices. Some of the most adopted practices in this area include optimizing resource use and organic farming methods to reduce chemical inputs and promote natural ecosystems. Additionally, there is a growing interest in renewable energy sources and technologies to promote energy efficiency in Saku.

ORGANISATION

- ETKL

COUNTRY

- Estonia

CITY

- Saku



WHAT ARE THE BARRIERS TO IMPLEMENTING GREEN DEAL ON FARMS FROM AN EXPERT'S POINT OF VIEW?

Some of the main barriers to implementing the Green Deal on farms include the lack of funds, the limited access to technology and information, and the need for better infrastructure and support services. In fact, many Estonian farmers face challenges when looking for financing in order to adopt more sustainable practices. Hence, the need to invest in new equipment and adopting new technologies are big barriers for farmers in Estonia. Additionally, some farmers lack information on how to become more sustainable, so it could be beneficial to improve access to information through training programs and awareness campaigns.

WHAT PRACTICES DO YOU NOTICE THAT ARE HARMFUL TO THE ENVIRONMENT?

The expert considers that there are several agricultural practices that they identify as detrimental to the environment. For example, using too many chemicals like fertilizers and pesticides can pollute water and hurt wildlife. Also, if farmers don't take care of the soil properly, it can erode away, making it harder to grow crops and endangering future generations. Another problem is when farming expands into areas where plants and animals live naturally. This can disrupt their homes and make it harder for them to survive. So, it's important for farmers to use fewer chemicals, take good care of the soil, and be careful not to disturb natural habitats.





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MARGA - FROM ASOCIACIÓN ALCACHOFA VEGA BAJA



WHAT AREA OF AGRICULTURE ARE YOU INVOLVED IN AND WHAT EXPERIENCE DO YOU HAVE?

Marga works at Agro Verduras 2000, a group of fruit and vegetable producers and traders from the Vega Baja of Alicante, who formed a mixed warehouse dedicated to on-site sales (auctions). After more than 10 years, Agro-Verduras 2000 has grown, expanding its production areas (Alicante, Albacete, Murcia) and opening its market to the whole of Europe.

TO WHAT EXTENT IS THE GREEN DEAL APPLIED IN YOUR AREA AND WHICH PRACTICES ARE MOST OFTEN ADOPTED?

Marga maintains that in her area, practices from the Green Pact are adopted, such as the use of only approved pesticides. However, the issue lies in their high cost.

ORGANISATION

- ASOCIACIÓN ALCACHOFA VEGA BAJA

COUNTRY

- SPAIN

CITY

- VEGA BAJA



WHAT ARE THE BARRIERS TO IMPLEMENTING GREEN DEAL ON FARMS FROM AN EXPERT'S POINT OF VIEW?

The main challenges they must face are the high prices involved in keeping crops free of pests, as there is now a requirement to use pesticides that comply with current regulations on climate change and sustainability. Another issue is related to water availability. The uncertainty of whether water will be available or not leads to a decrease in planting and production. This water scarcity problem has also led to an increase in the price of other products and processes related to artichoke production, such as wages or packaging.

WHAT PRACTICES DO YOU NOTICE THAT ARE HARMFUL TO THE ENVIRONMENT?

Some products have even increased by 500%. Items that could previously be used to control pests or address situations can no longer be used, and those that are permitted come with high costs. Furthermore, climate change also affects the situation. Temperatures reaching up to 40 degrees Celsius have even forced the planting to be delayed until September.

The main issue identified by this expert is the drought affecting Spain, especially this southeastern region of the country.



MINECROP

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PATRICIA - AGRICULTURAL ENGINEER



WHAT AREA OF AGRICULTURE ARE YOU INVOLVED IN AND WHAT EXPERIENCE DO YOU HAVE?

I work as an agronomic engineer for Estrella Levante, where I am involved in various areas of agriculture, focusing on water reduction, emissions reduction, and biodiversity, as well as circular economy and the use of renewable energies.

ORGANISATION

- ESTRELLA LEVANTE

COUNTRY

- SPAIN

CITY

- VALENCIA

TO WHAT EXTENT IS THE GREEN DEAL APPLIED IN YOUR AREA AND WHICH PRACTICES ARE MOST OFTEN ADOPTED?

In our area, we apply the Green Deal primarily in water reduction, emissions reduction, and biodiversity promotion. We adopt practices such as efficient water resource usage, implementation of renewable energies, and promotion of biodiversity in crops.



WHAT ARE THE BARRIERS TO IMPLEMENTING GREEN DEAL ON FARMS FROM AN EXPERT'S POINT OF VIEW?

From my perspective as an expert, I see the main barriers to implementing the Green Deal in agricultural farms as resistance to change, lack of economic incentives, and lack of access to appropriate technologies and knowledge.

WHAT PRACTICES DO YOU NOTICE THAT ARE HARMFUL TO THE ENVIRONMENT?

Regarding harmful practices to the environment, I highlight intensive crops that reduce biodiversity and degrade soil, as well as excessive plowing that leads to soil erosion and CO2 emissions. These practices increase the need for inputs such as fertilizers and water, perpetuating the cycle of soil degradation and depleting water resources.



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CASE STUDY - AGRICULTURAL REPRESENTATIVE



WHAT AREA OF AGRICULTURE ARE YOU INVOLVED IN AND WHAT EXPERIENCE DO YOU HAVE?

I am an expert at USAMVB Timis and I have extensive experience in agriculture and ecological studies. I teach agronomy students about General Agronomy: Fundamentals of agricultural practices, including tillage, crop management, planning and crop rotation, fertilization and irrigation. But also aspects related to the management of farms and agricultural businesses.

TO WHAT EXTENT IS THE GREEN DEAL APPLIED IN YOUR AREA AND WHICH PRACTICES ARE MOST OFTEN ADOPTED?

Green deal is applied in my area more through sustainable mobility: promoting sustainable transport, such as public transport, bicycles and electric vehicles, and reducing transport pollution. But also through sustainable agriculture and food: encouraging sustainable agricultural practices, and promoting a healthy diet that is less harmful to the environment.

ORGANISATION

- University of Agricultural Sciences and Veterinary Medicine of Banat

COUNTRY

- Romania

CITY

- Timisoara



WHAT ARE THE BARRIERS TO IMPLEMENTING GREEN DEAL ON FARMS FROM AN EXPERT'S POINT OF VIEW?

The implementation of the Green Deal on farms can be hindered by several barriers, both of a practical nature and of an economic or social nature. Some sustainable agricultural technologies and practices involved in the Green Deal, such as installing energy-efficient equipment or implementing more precise irrigation and fertilization systems, may involve high upfront costs for farmers. Implementing sustainable agricultural practices may require access to advanced technologies and specialized knowledge.

WHAT PRACTICES DO YOU NOTICE THAT ARE HARMFUL TO THE ENVIRONMENT?

From my experience and point of view the excessive use of pesticides and fertilizers is a major harmful practice. Excessive application of pesticides and fertilizers can lead to soil and groundwater pollution, affecting soil quality and biodiversity. Also, the extensive cultivation of a single crop in a given area (monoculture) can lead to loss of biodiversity, soil degradation and increased vulnerability to diseases and pests. It is important to adopt sustainable agricultural practices and aim to reduce these negative impacts in order to protect the environment and ensure sustainable agriculture in the long term.



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CASE STUDY - AGRICULTURAL REPRESENTATIVE



WHAT AREA OF AGRICULTURE ARE YOU INVOLVED IN AND WHAT EXPERIENCE DO YOU HAVE?

I offer specific knowledge, skills and competences for the specialization and improvement of specialists in the field of sustainable agriculture, respectively in the issue of sustainable exploitation of resources in the agricultural production process, of alternative (ecological) agricultural systems, environmental conservation and ensuring the sustainability of agricultural exploitation.

TO WHAT EXTENT IS THE GREEN DEAL APPLIED IN YOUR AREA AND WHICH PRACTICES ARE MOST OFTEN ADOPTED?

The Green Deal is supported by promoting a circular economic model, where resources are used efficiently and are recycled, reused and remanufactured, instead of being discarded. But also by adopting efficient management practices regarding the consumption of energy, water and natural resources in university campuses. This involve reducing waste and promoting recycling.

ORGANISATION

- University of Agriculture and Veterinary Medicine

COUNTRY

- Romania

CITY

- Bucharest



WHAT ARE THE BARRIERS TO IMPLEMENTING GREEN DEAL ON FARMS FROM AN EXPERT'S POINT OF VIEW?

Many farmers are used to traditional practices and may be reluctant to adopt new technologies and practices or make significant changes to the way they operate. This resistance to change can be a barrier to implementing the Green Deal, especially if there is not enough awareness or support for these changes. Implementing sustainable measures such as reforesting agricultural land, switching to organic farming methods or switching to more energy-efficient production systems can require long-term investment and careful planning. For many farmers, this can be a worrying prospect, especially if they are facing short-term financial pressures.

WHAT PRACTICES DO YOU NOTICE THAT ARE HARMFUL TO THE ENVIRONMENT?

My experience as an agricultural expert has always shown me that overburdening agricultural land through practices such as intensive farming or overgrazing can lead to soil degradation, erosion and loss of soil fertility.

The use of agricultural machinery that runs on fossil fuels also leads to greenhouse gas emissions and air pollution. I have also noticed that a harmful practice is the excessive processing and packaging of agricultural products that can lead to the generation of waste and excessive use of resources.

