



**HOW CAN I PRESERVE THE
ENVIRONMENT IN AGRICULTURE AND
ANIMAL FARMING**

HOW MUCH AGRICULTURE POLLUTES

- **Agriculture is one of the most important sources of income for every sector of the country's economy and for rural areas around the world.**
- **In agriculture, long-term productivity of agro-ecosystems has been pursued, but changes in agricultural production over the last 50 years have caused significant environmental pollution.**
- **Agricultural pollution is caused by substances that:**
 - **deliberate release into the environment - agrochemicals (pesticides, fertilizers), sewage sludge, etc .;**
 - **waste from agricultural production processes (silage or farm effluents);**
 - **occurs due to the activation of natural processes (nitrogen oxides in arable soils).**

Veiksniai

Azoto ir fosforo perteklius

Amoniakų emisijos

Šiltnamio efektą
sukeliančių dujų išmetimas

Pesticidų
pardavimas

Antibiotikų
vartojimas

Dirvožemio
tankinimas

Vandens
naudojimas

Pagrindiniai šaltiniai ir veikla

Tręšimas

Mėšlo tvarkymas

Galvijai

Pesticidų
naudojimas

Gyvulininkystėje naudojami
veterinariniai antibiotikai

Sunkiosios
mašinos

Drėkinimas

Poveikis

Vandens telkinių tarša

Eutrofikacija

Biologinės įvairovės nykimas

Vandens išteklių poreikio mažėjimas

Dirvožemio derlingumo ir (arba) kokybės mažėjimas

Atsparumas antimikrobinėms medžiagoms (AAM)

Klimato kaita

Oro tarša

Pernelyg didelis **azoto** trąšų naudojimas sukelia vandens ir sausumos ekosistemų eutrofikaciją. Jei panaudojama daugiau **fosforo** trąšų nei sunaudoja augalai, gali būti užterštas, pvz., požeminis ir gėlas vanduo, sukeliant eutrofikaciją.

Dėl **amoniakų išmetimo**, pvz., tvarkant mėšlą, teršiamas oras ir gali būti daroma žala pažeidžiamoms ekosistemoms.

Dėl, pvz., gyvulininkystės, žemdirbystės, trąšų naudojimo ir žarnyno fermentacijos **išmetamos šiltnamio efektą sukeliančios dujos** prisideda prie klimato kaitos.

Daugumoje šalių **pesticidai** daugiausia naudojami žemės ūkio reikmėms. Pesticidai yra susiję su poveikiu biologinei įvairovei ir žmonių sveikatai.

Parduodami veterinariniai **antibiotikai** daugiausia naudojami gyvūnų veisimui. Perteklinio ir nepritaikyto naudojimo atveju gali atsirasti atsparumas antimikrobinėms medžiagoms (AAM).

Dėl **dirvožemio tankinimo** gali sumažėti dirvožemio derlingumas ir gebėjimas sulaikyti vandenį ir kaupti anglį.

Žemės ūkio sektorius yra pagrindinis gėlo vandens išteklių naudotojas. Dėl **poreikio** gali sumažėti požeminio vandens lygis, druskingo vandens prasiskverbimas ir gali būti prarastos šlapynės.

WHAT IS
EUROPEAN
POLICY
BECAUSE
OF
POLLUTION
IN
AGRICULTURE

European political pollution in agriculture such, that it is aimed at:

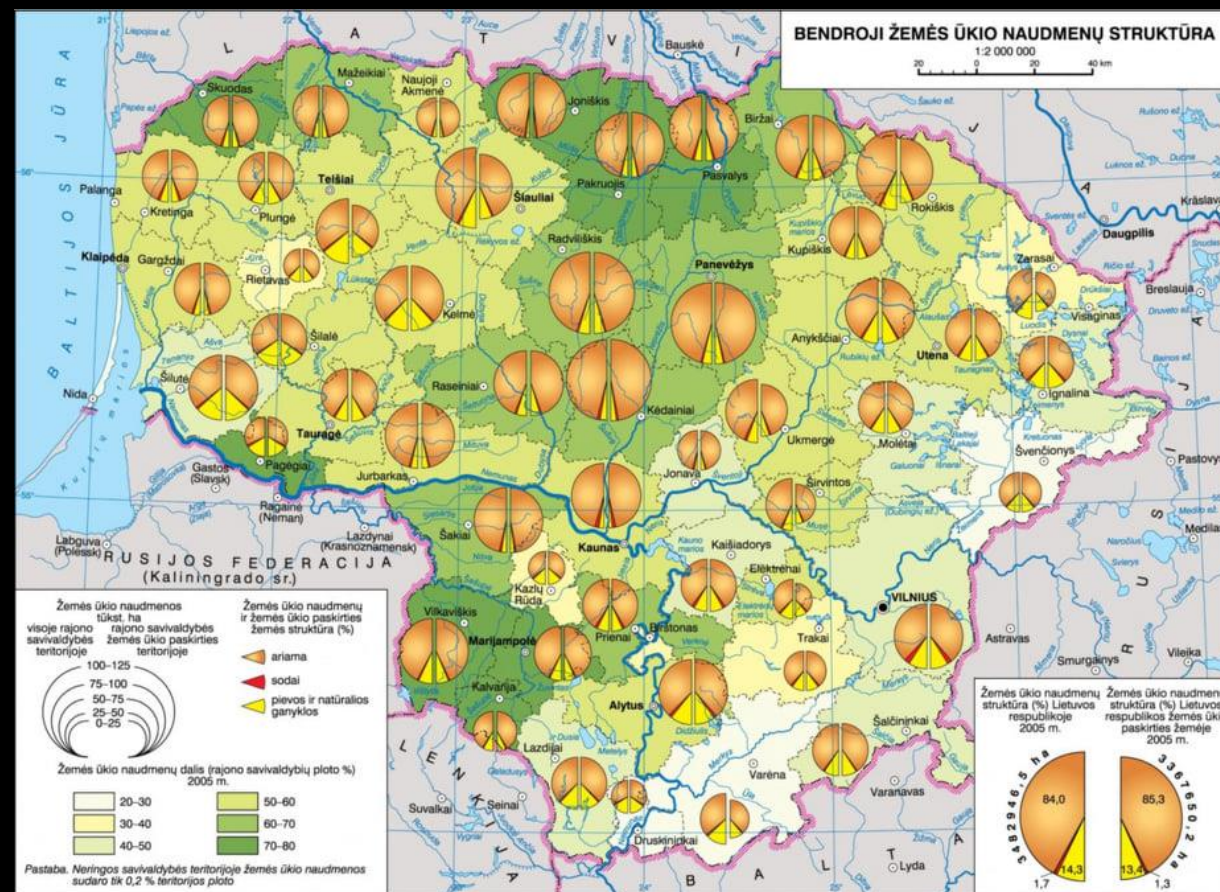
To support farmers, increase agriculture productivity and thus ensure continuous supply food available prices

To ensure a fair standard of living for farmers in the European Union

To help combat climate change and manage natural resources sustainably

Preserve the EU's rural areas and landscape

To preserve the rural economy by promoting job creation in the agricultural, agro-food, and related sectors



VISITS TO HIGHLY DEVELOPED SITES TO ANALYZE THE SOIL AIR AND WATER IN THESE AREAS

The main soil analyses performed are the following:

determination of nutrient content in the soil

determining the extent to which nutrients can supply plants

Determination of the type and amount of fertilizer for soil

Determining the cause of malnutrition in the soil

Determining the areas of salt and sodium in the soil and ensuring their improvement

Determining the species of plants to be grown

Identifying and Solving Soil Drainage Problems



**POOR AIR QUALITY AFFECTS US
ALL: SHE HURTS OUR AND
ENVIRONMENT HEALTH, AND IT
DETERMINES ECONOMIC LOSSES**


<https://www.eea.europa.eu/lt/signalai/signalai-2013/straipsniai/oras-kuriuo-kvepuojame>

- **Water is one of the most important components of human life. we have about 70% of it in adults, and in old age, only about 50% of water remains in the human body.**
- **Water performs important functions in the human body:**
 - **transports essential substances to cells, namely oxygen, vitamins, minerals, and glucose;**
 - **removes unnecessary substances from the body, such as toxins;**
 - **participates in the biochemical breakdown when we eat and transport nutrients;**
 - **regulates body temperature;**
 - **lubricates the joints, it also acts as a shock absorber for our eyes, brain, and spinal cord.**

WE WENT TO
THE
ILZENBERG
FARM IN OUR
REGION



- **The Ilzenberg farm has more than 500 ha of productive fields and pastures. It is an exceptional place in Lithuania, where on one farm you can see both grazing cows, feeding hens, fields of waving grain and a manor garden.**



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PRINCIPLES
OF
AGRICULTURE

- **1. It is not contaminated with herbicides, sweeteners, enhancers, or other chemicals. An organic farm is allowed to use the least harmful types of pesticides (e.g., the British certifier has approved four of them). Given the fact that non-organic farming allows for more than 300 types of pesticides, their harmful residues are commonly found in conventional foods. Besides, a common organic industry employs food additives (so-called human health-friendly and technologically required additives).**
- **2. The Ilzenberg farm food production standards do not allow the use of any genetically modified organisms or their ingredients.**
- **3. The Ilzenberg farm products are more energetic, since man-produced, with love and devotion.**

- **4. The products are healthy and have a gentle and delicate flavour. Composition of products grown in a Ilzenberg farm is also different in terms of nutrients: more proteins and vitamins, essential minerals such as calcium, magnesium, iron, chromium, and antioxidants that fight cancer. Our receptors, for a long time exposed to poor foods with strong additives (sweeteners, flavour enhancers, various sauces), loose the capability of distinguishing high quality food from poor one. Nevertheless, our body feels the difference and, after a certain time, “warns” us through diseases. A longer consumption of products solely from a natural farm will help you to sense much richer, but not so sharp, taste and smell.**
- **5. By virtue to natural farming, we protect nature and the environment, reduce environmental pollution, maintain biodiversity, do not impoverish the soil; we are more friendly to plants, insects, and animals around, release less carbon dioxide, decrease water pollution, and leave less garbage behind. We use the least polluting packaging and plan the production with the maximal use of local resources.**
- **6. By fostering natural farming traditions, we care for animals. The standards of natural farming draw special attention to the welfare of farmed animals, thus, ensuring a high food quality.**

7. We farm and, thus, restore soil fertility: Ilzenberg farm complies with crop rotation requirements, whereby field plants “rotate”, i.e., the same species of plants return to the same field not oftener than every four years. Further, we pick the best suitable “neighbour” for each species of vegetables. Such methods prevent soil impoverishment, protect vegetables against weeds, pests, and diseases much more effectively.

8. You will get your foods from the reliable sources. Ecological and/or natural farm certification procedures are expensive, time-consuming, and more quite complicated than the ones of organic farms. Therefore, such a farm strictly adheres to applicable standards and the status acquired.

9. Natural production imposes no additional hidden costs to society. E.g., taxpayers keep paying for the removal of chemicals from drinking water, which is mostly contaminated through the use of pesticides by farmers.

10. “Ilzenbergas” farm which practices ecological and natural principles promotes a healthy and active lifestyle which is beneficial to society and makes a life of farmers more meaningful.

HOW CAN AGRICULTURE CHANGE?

Lithuanian farms are changing rapidly: the old farming practices are being replaced by new, increasingly more active are installed innovations, and sustainable Green course ideas are no longer new to many.





THANKS FOR YOUR ATTENTION

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