



"Innovative agricultural techniques to boost entrepreneurial skills of future farmers" nr. ref. 2020-1-IT01-KA202-008505

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How much does agriculture pollute?





## The main aspects of environmental pollution caused by agricultural activities in Romania

- Intensive agriculture based on mechanization, chemicalization, irrigation, concentration and specialization has led to the emergence of the phenomenon of pollution in agriculture.
- Poluation in agricultural activitie and animal husbandry is a global issue.



## Pollution caused by agricultural activities

1. Disposal of several million cubic meters of wastewater, untreated or incompletely treated, from pig, poultry and cattle industrial complexes, surface water and the drainage system. To these is added the infiltration of deep wastewater during the period of storage in ponds, battles and basins, affecting the quality of groundwater used as a source of drinking water in many rural localities.







2. The use on agricultural land, for dual purposes, of fertilization and irrigation, with sludge and wastewater from animal husbandry, containing harmful salts and contaminants for soil, plants, animals and humans.







3. The administration on agricultural lands adjacent to the zootechnical complexes of exaggerated norms of manure (over 100 t / ha), at intervals of 2-3 years, which far exceed the needs of the plants and determine the accumulation of nitrates in the fodder, as well as the leaching of nitrates in groundwater.







4. The use of chemical fertilizers (especially nitrogen) in too high doses and at times not related to consumption in different stages of development of cultivated plants. Often, their application is made on frozen ground with a thick layer of snow, which is why, when melting suddenly and favored by the slope of the land, they reach, by washing, the running water used as sources of drinking water.





## Erasmus+

5. The affect of poulotion with nitrates in the underground water is represented by the reduction of drinking water In Romania, the percentage of the population who use as a source of drinking water the water coming from the free phreatic aquifer (water from the wells) is significant.









6. The application of chemicals (pesticides) to control diseases, insects, rodents, nematodes and weeds in agricultural crops and apple orchards by poorly trained persons. Applying too many amounts and concentrations at inappropriate times and using products with a high degree of toxicity and long-lasting residue has multiple negative effects on plants, animals and humans.







7. The uncontrolled storage of manure and the lack of manure collection basins from animals belonging to many private households have as negative effects their runoff into running water, as well as nitrate infestation of groundwater.







8. Aggravation of soil erosion on sloping lands, due to the practice of an inadequate agricultural system, respectively: poor organization of the territory, execution of soil works from hill to valley, crop weeds with a high share of weeds, lack of organic fertilization.







9. Burning fuels for agricultural work. Possible reductions in pollution in the fuel burning sector for agricultural works can be achieved by using modern equipment, which burns fuels as completely as possible.













Thank you for your attention