

Romania Rural Pollution Prevention and Reduction Project - RAPID

Knowledge Transfer Networks for Farmers:
Instruments to Prevent and Reduce Soil and Water Pollution
in Rural Areas



Lavinia Todorova
Knowledge Transfer Coordinator
Ministry of Environment, Waters and Forests in Romania

MAIN CHALLENGES

Romania faces several challenges in terms of **pollution** related to soil and water, impacting agricultural productivity and environmental sustainability:

- ✓ ***Chemical Runoff (for N, P, K)*** : Excessive use of pesticides and fertilizers results in chemical runoff, contaminating local water sources – **nitrogen efficiency 60%**;
- ✓ ***Limited Access to trainings***: Farmers lack access to information related to CAP implementation, including to pollution prevention techniques – SMR 1 – Nitrates Directive – **14,47% sanctioned farmers (y. 2022)**;
- ✓ **Input dealers are the main consultants for farmers**;
- ✓ **700 LAU -2 – waters with more than 50 mg nitrates/l, or 40-50 mg nitrates/l**;
- ✓ **Nitrous oxide – emissions grew with 40% from '80 to 2020 (worldwide)**.

Knowledge Transfer Networks (KTNs)



Knowledge Transfer Networks

How Farmer Discussion Groups (FDGs) worked?

- ✓ Facilitator;
- ✓ **Host – farmer – member of a farmer organization;**
- ✓ 3 trainings per farmer in an informal settings (theoretical and practical);
- ✓ Trainings organized per farm type and agriculture subsector;
- ✓ Materials easily to be accessed by farmers;
- ✓ Trainings organized at community level/in the community at mayoralty;
- ✓ Compensation for host-farmer;
- ✓ Presence of the authorities representatives;
- ✓ Advisory Hub for farmers – 24 h.

Phase 1. 2019-2023



National Awareness Campaign targeting farmers – Facebook page, website.

Integrated Nutrient Pollution Control Project

Knowledge Transfer Networks

How it works - photos?



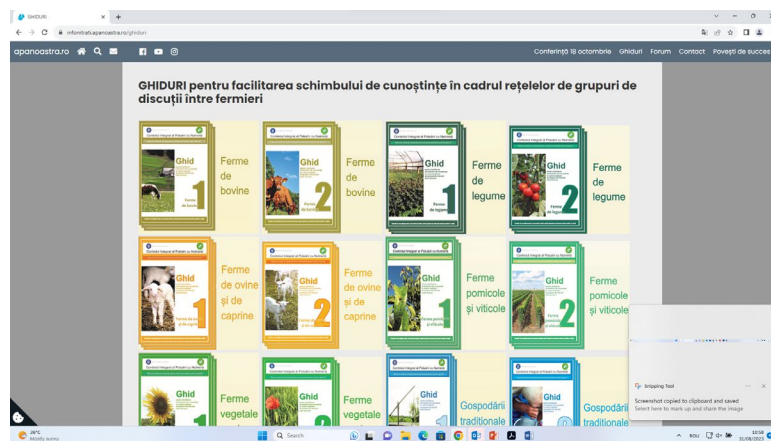
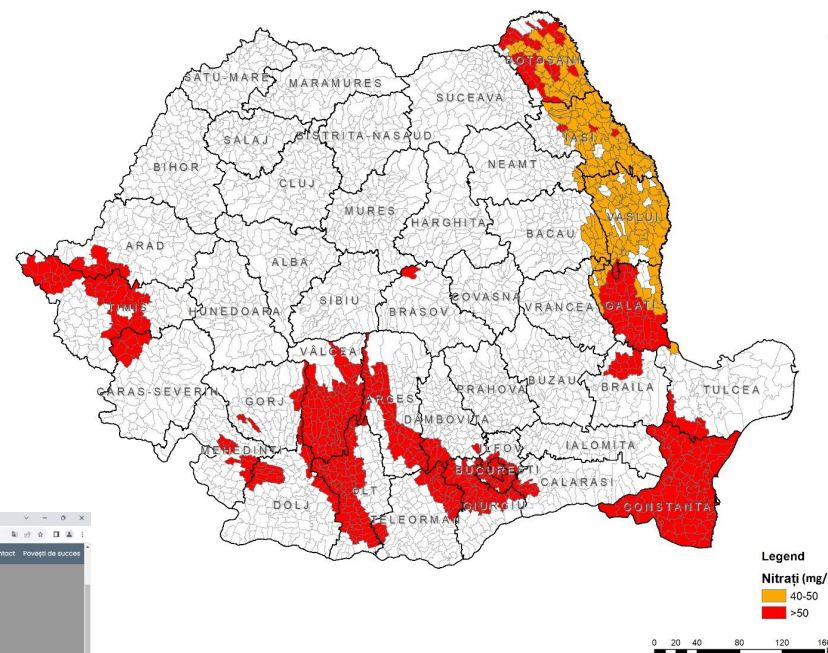
Phase 1. 2019-2023



Knowledge Transfer Networks

Phase 1. 2019-2023

How it worked - photos? Additional trainings in nitrate hot-spots areas – Nitrate Directive – 91/676/EEC



Knowledge Transfer Networks

Phase 1. 2019-2023

Results

- ✓ Number of farmers trained through Knowledge Transfer Networks on the Code of Good Agricultural Practices – **7,400 farmers.**
- ✓ Number of women farmers trained through Knowledge Transfer Networks on the Code of Good Agricultural Practices – **2,827 women farmers.**
- ✓ Land users who adopt sustainable land management practices as a result of the project – **48,300.00 pers.**
- ✓ The area of land where sustainable land-management practices have been adopted as a result of the project (hectares) – **43,756.00 ha.**





The expected operating model of future Knowledge Transfer Networks

*70 representative model farms in the agriculture sector and in
the area where they operate*

Extended environmental topics to:

- ✓ Plant Protection Products;
- ✓ Ammonia and nitrates;
- ✓ Antimicrobials;
- ✓ Organic farming + agri-environment;
- ✓ Natura 2000.

Indicators:

- ✓ Focus on the adoption of good practices (50% of participants);
- ✓ Inclusion of a minimum percentage of women farmers participating (35%);
- ✓ 8,000 trained farmers;
- ✓ 400 FDGs organized;
- ✓ National and international workshops and conferences.



Functional links between KTNs, the awareness campaign, and model farms

- ✓ The awareness campaign will have a component dedicated to KTNs (including model farms);
- ✓ Model farms will be host farms with a set of responsibilities related to KTNs and the awareness campaign.

Presentations for interested farmers / representatives of local/central public authorities regarding:

- ✓ The necessity of environmental investments imposed by national legislation;
- ✓ The opportunity to adopt good practices that lead to the efficient use of resources at the farm level;
- ✓ The anticipated environmental impact, based on pre-established environmental indicators;
- ✓ Feasibility studies and technical solutions identified for construction works, part of the farm's environmental infrastructure;
- ✓ Hosting discussion groups for farmers;
- ✓ Conducting publicity activities by promoting the Project's activities;
- ✓ Participation in actions to promote environmental investments within farmer organizations they are part of (workshops/conferences);
- ✓ Monitoring data – information regarding operating and maintenance costs, efficiency of input use (e.g., chemical and/or organic fertilizers/ PPP/ antibiotics / diesel).

Romania Rural Pollution Prevention and Reduction Project – RAPID

Phase 2. 2024-2028

Investments funded through model farms:

- ✓ Efficient use of inputs (N), PPP, antimicrobials;
- ✓ A reduction of consumption in terms of (N), PPP, antimicrobials at least with 20% from the baseline;
- ✓ Minim tillage, no tillage equipment and other investments in terms of climate change adaptation and mitigation;
- ✓ Animal welfare;
- ✓ Investments that contribute to biodiversity conservation, AEC & AE implementation.

Scientifically proven

- ✓ Conservation evidence;
- ✓ INMS* Nitrogen Measures Database;
- ✓ Nitrogen Opportunities for Agriculture, Food and Environment - document.

* International Nitrogen Management System (INMS)
= an international process that provides science based support to policy makers – recognized by UNEP





Thank You!



Lavinia Todorova
lavinia.todorova@mmediu.ro
www.apanoastra.ro

Knowledge Transfer Network Coordinator

