



March 2017



PRE-CALL DISCUSSION PAPER:

Using Knowledge Transfer Networks to promote good agricultural practice and reduce the risk of nitrate pollution

"The future of food and farming is knowledge intensive, but not only research and advisory services are important. Peer-to-peer exchange of knowledge and experience between farmers is a very powerful approach and knowledge networks are relevant to all aspects of agricultural production"

European Commission DG Agriculture and Rural Development

1. Background information

Romania has received a loan from the International Bank for Reconstruction and Development (IBRD) and a Grant from the Global Environment Facility (GEF) for the implementation of the **Integrated Nutrient Pollution Control Project (INPCP)** (www.inpcp-campanie.ro). The overall objective of the project is to support the Government of Romania to meet the requirements of the EU Nitrates Directive by a) reducing nutrients discharges to water bodies, b) promoting behavioural changes at the communal level, and c) strengthening institutional and regulatory capacity.

The current period of funding for the INPCP ends on May 31, 2017. However, the Ministry of Waters and Forests has received Additional Financing to continue project activities for another 6 years, with a particular emphasis upon scaling-up the project's existing activities in selected localities to working at a national level. Amongst the project activities planned for the period until 31 March 2022, a specific need has been identified to support farmers nationwide with knowledge, training and practical demonstrations to ensure their compliance with the "Code of Good Agricultural Practices for Water Protection against Pollution with Nitrates from Agricultural Sources" (CoGAP)¹.

Compliance with the CoGAP is mandatory in the whole territory of Romania for all farmers "who own or operate farms", as well as "local government authorities of communes, towns and municipalities on whose territory there are farms"². Furthermore, compliance with the CoGAP forms an important part of both the ecoconditionality and greening rules for those farmers receiving area-based financial support from European funds³.

¹ http://www.mmediu.ro/app/webroot/uploads/files/2016-10-04_GP%20_04.12.2015_MMMap_%20COD.pdf

² In accordance with Ordinul MMAP/MADR nr. 990/1809/2015

³ All relevant documents for 2016 are available here: <http://www.apia.org.ro/ro/materiale-de-informare/materiale-de-informare-anul-2016>. Documents for 2017 are not all available at the time of writing this concept note



In the view of i) the importance of the *CoGAP* and ii) the great diversity of farm types that must comply with the *CoGAP* in Romania, it is proposed to:

1. Establish in **each** of the seven main development regions of Romania⁴ a permanent **Regional Knowledge Transfer Network** through which farmers, trainers, relevant inspectors⁵ and local and regional authorities can go to see, learn and discuss practical demonstration of the successful interpretation and application of the *CoGAP* in the **specific context of the broad range of farms and socio-economic conditions that are characteristic of their region**, and;
2. Establish at national level a **Special Interest Knowledge Transfer Network** to address issues of nationwide interest and relevance to the *CoGAP*, but which are not related to the specific characteristics of the seven development regions. For example, this might include issues of specific interest to large-scale producers who have arable or livestock farms in more than one region and who are using more sophisticated, capital intensive technologies for optimizing crop nutrient management and minimizing the risk of air and water pollution.

2. What do we mean by a Knowledge Transfer Network?

Approaches to knowledge exchange, learning and innovation in European agriculture are evolving rapidly. The **traditional, top-down 'linear model' of knowledge transfer is increasingly outdated**. Knowledge no longer flows one-way from researchers, trainers and technical experts only. Direct, peer-to-peer learning between farmers and other key actors is increasingly important, whilst new forms of media and information technology also provide exciting new possibilities for working together and exchanging knowledge.

There are a **growing number of practical 'knowledge transfer networks'** being used by farmers in many countries. These range from EU-level thematic networks financed by Horizon 2020 that focus on compiling and disseminating best practices and research results to farmers in easily-understandable language, to farmer-led "platforms" exchanging new knowledge and innovations for practical uptake and further adaptation. Some typical examples of the 'knowledge networks' being used by farmers in other EU Member States are listed in **Annex 1**.

A common feature of all these examples is the use of the "Discussion Group" format to **create an interactive learning environment for farmers**. Farmer Discussion Groups are a well-established methodology used by agricultural advisors around the world. A **Farmer Discussion Group** is a group of farmers from a specific region or production sector who have a common interest in gaining knowledge or exchanging experience about a specific issue. A Group may have a single focus (e.g. a particular problem) which it addresses in a short time frame or it may cover many topics over a longer, on-going period of time.

In Ireland, Farmer Discussion Groups have become the main method used by the national farm advisory service for the transfer of new technologies to farmers



⁴ Due to its relatively low agricultural profile, the București-Ilfov development region will be combined with the neighbouring Sud-Muntenia region

⁵ Relevant inspectors include the Agency for Payments and Intervention in Agriculture (APIA) and Garda de Mediu



It is widely acknowledged that, compared to more classical training or advisory formats, there are many benefits associated with the interactive learning environment created by a Discussion Group:

- **Increasing contact between farmers** - Discussion Groups bring farmers together who might otherwise not have the opportunity to meet. They allow farmers from different backgrounds and with different experiences to interact, discuss and solve practical day-to-day problems in a friendly, open environment.
- **Effective learning through practical demonstration** - Discussion Groups are an excellent format for farmers to gain new skills and experience through practical demonstration. Groups are usually organised on a farm with new technologies etc. demonstrated in the specific context and working environment of that farm.
- **Facilitating peer-to-peer learning** - Discussion Groups create the opportunity for farmers to interact with and learn from each other. The skills and knowledge of all the farmers participating in the Group are "pooled". Experiences can be compared and contrasted. Mistakes made, and lessons learned, by individual farmers can be shared.
- **Enabling innovation** - Discussion Groups encourage new ideas and innovation. People are more creative in groups! This process can be further enhanced by inviting other people, including advisers and researchers, to participate in the Group Discussions.
- **Dealing with complex issues** - Discussion Groups are very effective for dealing with complex issues faced by farmers. Different ideas, perspectives and experiences can be explored and appropriate responses to specific problems or opportunities can be identified together.

Farmer Discussion Groups are clearly not a classical training format. They are participatory and interactive. Information, knowledge and experience within the Group does not only flow one-way (e.g. from a trainer to trainees), it flows in multiple directions and dimensions. This is a process that needs to be **guided by individuals with some basic facilitation skills** - skills which are very easily learned / developed.

3. How do we propose to establish the Knowledge Transfer Networks?

The eight Knowledge Transfer Networks outlined in Section 1 above will be established via a series of competitive tenders launched by the Ministry of Environment, Water and Forests. Expressions of Interest and then full proposals will be invited from potential **Service Providers** to establish and operate each of the networks according to a common methodology proposed by the Ministry and outlined in this document.

Currently it is anticipated that the networking processes and exchange of knowledge within each of the eight Networks will focus upon activating and facilitating **Farmer Discussion Groups** that connect participating farmers (plus relevant advisers, researchers and local authorities) with so-called **CoGAP Champions** who have successfully interpreted and profitably applied the obligations of the *CoGAP* on their farms or in their communities.



It appears that the economic and environmental costs of practices, such as spreading manure and slurry on frozen and snow-covered land in mid-winter, are not understood by many farmers - both large and small. The Knowledge Transfer Networks will need to overcome such misunderstanding to clearly demonstrate the benefits of complying with the CoGAP



Each of the eight (seven regional plus one national) Knowledge Transfer Networks will consist of **three main elements**:

1. A **network hub** that is responsible for the **overall development and support** of the Knowledge Transfer Network, including all reporting obligations to the INPCP Project Management Unit.

The primary function of each of the eight network hubs will be to put in place and then co-ordinate the **network facilitators** that will have the hands-on responsibility for organizing the formation and running of the Farmer Discussion Groups. The number of facilitators supporting each network will depend upon factors such as the specific characteristics of each region, the seasonal programme of Farmer Discussion Groups that is proposed etc. Slightly different arrangements may be needed for the national Special Interest Knowledge Transfer Network.

To enhance the overall learning processes, it is proposed that each network hub will also have two additional specific functions that must be fully and effectively implemented:

- The **initial preparation and dissemination of information and training materials** to support the specific activities of the Knowledge Transfer Network. These materials must be "farmer-friendly" and tailored either to the specific characteristics of the region or (in the case of the national network) to the national context. For example, some regional Networks will clearly have a significantly greater number of small farms as a target group than others;
 - The **on-going collection of regional / national "success stories"** for dissemination via the other Knowledge Transfer Networks and the INPCP Project Management Unit. These "success stories" should include a full-range of practical examples of the effective and profitable implementation of all key obligations of the CoGAP. In the case of manure management, for example, this might range from traditional practices found on family small-holdings (*gospadaria*) to investment in innovative new technologies on large-scale intensive livestock enterprises.
2. A carefully selected **network of (mainly) on-farm demonstration facilities** managed by so-called "**CoGAP Champions**". These **CoGAP Champions** may be any physical or juridical person who has:
 - a) the interest and enthusiasm to engage with (other) farmers;
 - b) successful practical examples of the interpretation and profitable application of key obligations of the CoGAP which they are willing to demonstrate, and;
 - c) reasonable access and basic facilities for the regular hosting (during certain seasons) of Discussion Groups of around 15 farmers (see below).

The CoGAP Champions should be farmers and agricultural enterprises of varying types and sizes that are typical of the regional context (or the special interests that are selected at national level).

It is anticipated that many (but certainly not all) of the CoGAP Champions will already have participated in / benefitted from INPCP project activities. Some are also likely to have benefitted from European / national funding for rural development (e.g. investment in manure storage facilities or handling equipment).

Other potential CoGAP Champions might include local authorities (e.g. those managing communal manure stores) and researchers (e.g. with relevant field trials).

Good practice is not only associated with new ideas or new technologies. Where appropriate it is also important to identify and refresh understanding of traditional good practices





Note that it is anticipated that the CoGAP Champions will be offered appropriate compensation for their engagement with the Knowledge Transfer Networks via a simple service agreement.

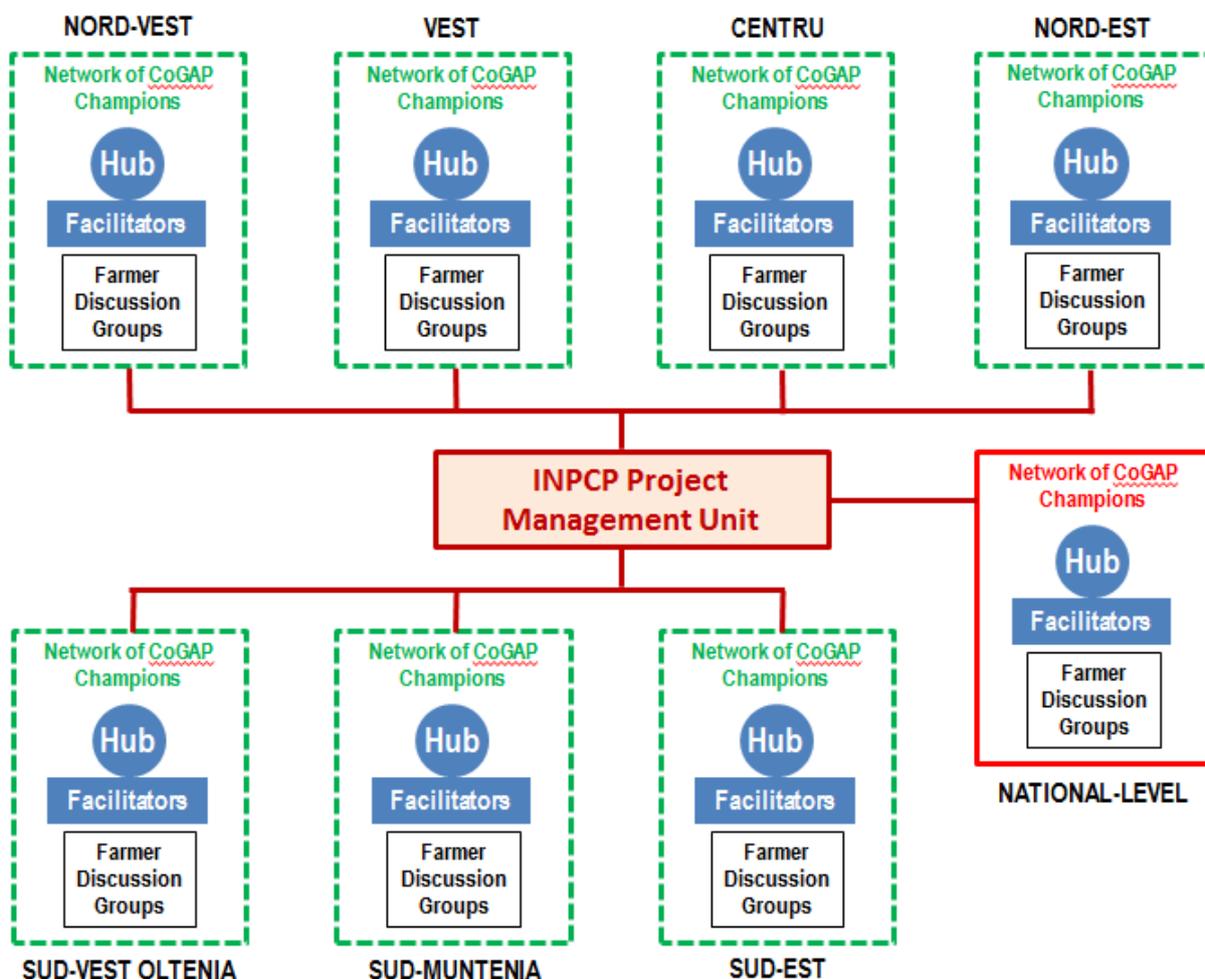
- The final very important element of each Knowledge Transfer Network will be a **seasonal programme of Farmer Discussion Groups** (sectoral / thematic) to promote / demonstrate the benefits of compliance with the CoGAP at different times during the farming calendar.

For example, each Discussion Group might meet three times beginning with a one half-day training event to kick-off the Discussion Group, followed by two full days of practical on-farm demonstrations at different times of the year. In the case of the Regional Knowledge Transfer Networks, the Discussion Groups will be organised at local level and farmers will not be expected to travel more than 30-45 minutes from their home to participate in a Discussion Group. Different arrangements will be needed for the national-level Special Interest Knowledge Transfer Network.

All meal and travel costs will be paid for participating farmers, but they will not be financially compensated for their time.

Farmers participating in the Discussion Groups will be expected to sign a simple "letter of commitment" in which they agree to attend all three meetings. Individual Discussion Groups will not be initiated until at least 12 "letters of commitment" are signed. The size of the Groups will be limited to 18 farmers, with a target size for each Group of 15 farmers. Farmers that participate in all the meetings of a Discussion Group will receive an official 'certificate of attendance' from the INPCP.

Schematic diagram of the seven Regional Knowledge Transfer Networks, plus one national-level Special Interest Knowledge Transfer Network





The CoGAP is not only about the storage and application of organic manure and mineral fertilisers. Nitrogen fixing crops, including those grown under the new CAP greening rules, must be managed in accordance with the CoGAP to avoid the risk of causing nitrate pollution

4. Your feedback is appreciated

Prior to finalising the details of the call we are inviting feedback and comment on the concepts outlined in this document.

Providing feedback will not prejudice your eligibility to participate in the call, nor will it provide any advantage in the selection process. We are simply committed to ensuring that the final Terms of Reference are as clear and appropriate as possible.

Please respond to the following questions:

1. Has the concept of a Knowledge Transfer Network been clearly explained in this document?
2. In your experience, do you think that farmers will actively participate in the Farmer Discussion Groups that are proposed?
3. Do you think that a sufficient number of CoGAP Champions can be identified / engaged in order to make the Knowledge Transfer Networks viable?
4. In your opinion, will specific activities / resources be needed to enhance the on-farm demonstration value of the CoGAP Champions? For example, to purchase some additional equipment or establish field plots
5. In your experience, are there individuals who already have the necessary skills to be effective network facilitators? Do you think that additional specialist training will be needed?

Many thanks for your interest and assistance.



Anexa 1: Exemplele tipice de "rețelele de cunoaștere" din alte State Membre ale UE

Exemplele tipice de "rețelele de cunoaștere", care sunt utilizate de agricultorii din alte State Membre ale UE sunt:

- **Innov'Action** (Franța) - o rețea de Fermă Deschisă, care folosește un amestec larg de instrumente/canale de comunicare pentru demonstrarea practicilor inovatoare în 18 regiuni din Franța. Pentru mai multe informații, consultați:
<http://ec.europa.eu/agriculture/cap-communication-network/awards/winners/2014/pdf/nominees-communication-to-stakeholders-1.pdf>
- **Școli stabile** (Germania) - o nouă formă de grup de fermieri, cu scopul de învățare comună și de rezolvare a problemelor în mod creativ. Implementate inițial în fermele de lapte ecologic din Danemarca și, experimentate recent, în Germania, pentru a ajuta la îmbunătățirea sănătății și bunăstării caprinelor de lapte. Pentru mai multe informații, consultați:
[https://www.ti.bund.de/en/ol/Proiect s/goat-keeping/stable-schools-for-goat-farmers/](https://www.ti.bund.de/en/ol/Proiect%20s/goat-keeping/stable-schools-for-goat-farmers/)
- **Set de instrumente agricole de reducere a emisiilor de carbon** (Regatul Unit al Marii Britanii) - o rețea condusă de agricultori, care folosește diferite abordări pentru schimbul de cunoștințe, de experiență și de întrebări de la om la om, în ceea ce privește reducerea emisiilor de gaze cu efect de seră (GES) și consolidarea capacității de rezistență a energiei în agricultură. Pentru mai multe informații, consultați:
<http://www.farmcarbontoolkit.org.uk/>
- **Testarea grupurilor de discuții ale agricultorilor** (Finlanda) - o inițiativă de consultanță privată proiectată pentru a ajuta agricultorii finlandezi să-și îmbunătățească practicile de gestionare și să obțină rezultate mai bune prin compararea rezultatelor diferitelor celor mai bune practici ale agricultorilor din grupurile de discuții. Pentru mai multe informații, consultați:
<http://www.proagria.fi/en/development-activities/small-group-activities>
- **Laboratoare de teren** (Regatul Unit al Marii Britanii) - mai mult de 750 de agricultori din Marea Britanie s-au întâlnit din 2012 pentru a testa și dezvolta instrumente și tehnici noi în "laboratoare de teren" practice. Această abordare este extinsă acum la o rețea mai largă de grupuri de cercetare și de discuții conduse de agricultori numite "Agricultori inovatori". Pentru mai multe informații, consultați:
<https://www.innovativefarmers.org/>