

ANNEX 1 – DOCUMENTS FOR THE ELABORATION OF THE CASE STUDY MATERIAL TO BE INCLUDED IN THE E-LEARNING COURSE (IO2).

1.A - Case-studies by country: Romania

Disclaimer: *"The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein".*

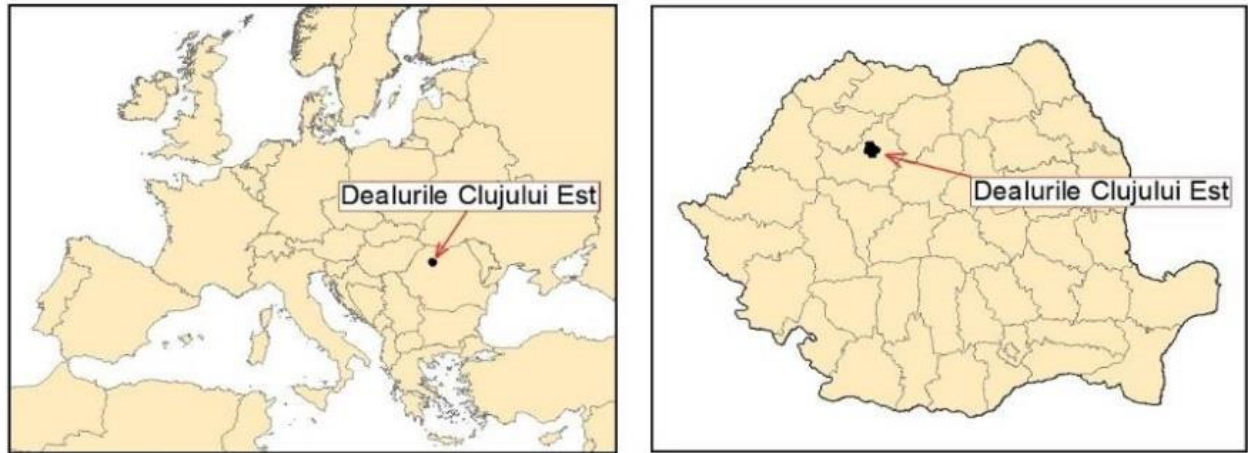
Case-Studies on innovative development in Peripheral Rural Areas
Template Part A – INTRODUCTION TO PRA – BASELINE ASSESSMENT
corresponding to Module 2 – e-learning course

Title: Introduction to Dealurile [Clujului Est, Romania](#) Peripheral Rural Area



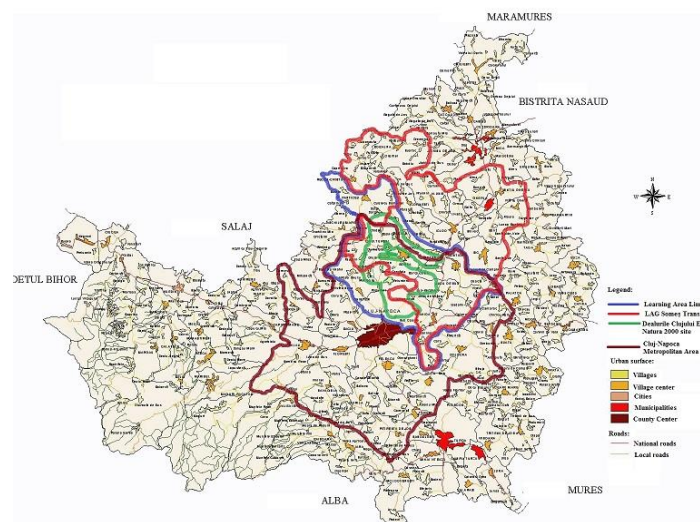
Part 1 / INTRODUCTION TO Dealurile Clujului Est, Romania

Dealurile Clujului Est is located in the North-Western Romanian Development region (Map 1). The site is situated in the middle of the historical region of Transylvania that borders to the North-East with Ukraine and to the West with Hungary.



Map 1. Location of Dealurile Clujului Est study area

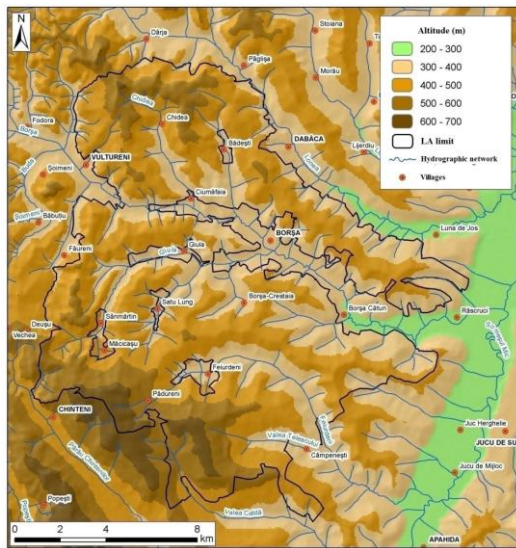
Administratively, the region is divided in eight communes located in the peri-urban area of Cluj - Napoca City, the biggest Transylvanian City in terms of population and GDP per capita (Map 2). 18,889 ha of the territory were recognised in 2007 as a Natura 2000 site under the name Dealurile Clujului Est (ROSCI0295). It covers around one third of the territory and population (Map 2). The area also incorporates two protected natural reservations “*La Copârșia*” and “*Butterflies Maculinea nausithous reservation*”.



Map 2. Administrative boundaries of Dealurile Clujului Est Peripheral Rural area

The landscape is shaped by geography and its particular farming techniques. There is a network of rivers that flows from North-West to South-East into Someș River (Map 3). These small rivers formed a string of consecutive valleys that edge the hills no higher than 700 m altitude. The villages are located on the bottom of the valleys being usually surrounded by arable land (between 300 to 500 m altitude). The next layer (between 500 to 600 m) is a mixture of arable land permanent natural pastures and meadows. Above 600 m altitude is the area covered with meadows and in some areas with forests. 50% of the area is situated between 300 and 400m altitude. The specific landscape of the permanent HNV meadows and pastures is probably unique in nowadays Europe (Picture 1). It is a mosaic of parcels

that are farmed using different agricultural techniques and in different times of the year. Some parcels are still manually mowed, and others are used only for summer grazing.



Map 3. LA – Altitude map in Dealurile Clujului Est Natura 2000 site



Picture 1. Traditional land use in Luna de Jos, Dabâca Commune (2014) Source: @ Roșian George;

Part 2 / Dealurile Clujului Est, Romania FEATURES AND TRENDS

- Environmental values (services):

The outstanding biodiversity of the permanent natural meadows and pastures is explained by the low – intensive traditional farming techniques applied from generation to generation. They use extensive farming practices, with no or little chemical inputs. Several botanical studies showed the existence of **282 different vascular plants** that characterise the spontaneous flora of the permanent natural meadows and pastures (Management Plan, 2016). Some of them are listed among the **priority species** under the EU "Habitats" Directive (Council Directive 92/43/EEC/1992) like: *Serratula lycopifolia* (Picture 2.a) in (Map 4); *Crambe tataria* (Picture 2.b); *Echium Russicum* (Picture 2.c); *Pulsatilla patens* (Picture 2.d); *Iris aphylla* (Picture 2.e);

Picture 2.a. *Serratula lycopifolia*

It is a plant species that characterised the well preserved meadow-steppes grasslands. It is very sensitive to overgrazing (Badarau, 2017).

Source:
<http://www.floraofromania.transilvanica.net>

Picture 2.b *Crambe tataria*

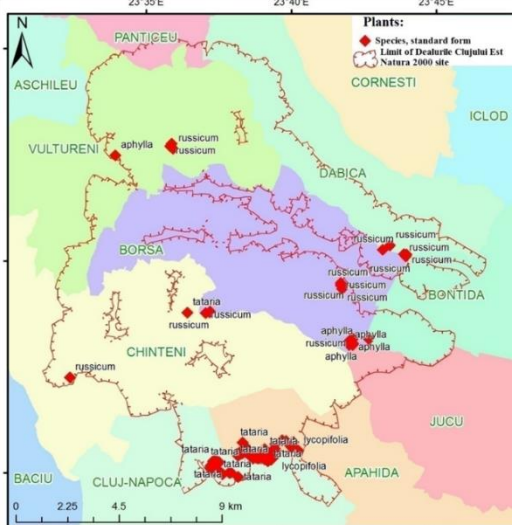
The species is protected by law in Czechia, Slovakia, Hungary, Serbia and Romania. The leaves are eaten as a vegetable, the root has a taste similar to horseradish.

Source:
<http://www.floraofromania.transilvanica.net>

Picture 2.c *Pulsatilla patens*

Is a rare plant species that manifest a special preference for the top area of the high hills

Map 4. Distribution of the protected plant species identified in the LA



Source: Management Plan Natura 2000 site Dealurile Clujului Est

Picture 2.d *Echium Russicum*



Its presence show a good conservation status of natural permanent meadows. *Echium russicum* is not tolerant to overgrazing and intensive use of fertilizers (Badarau, 2017).

Source:
<http://www.floraofromania.transilvanica.net>

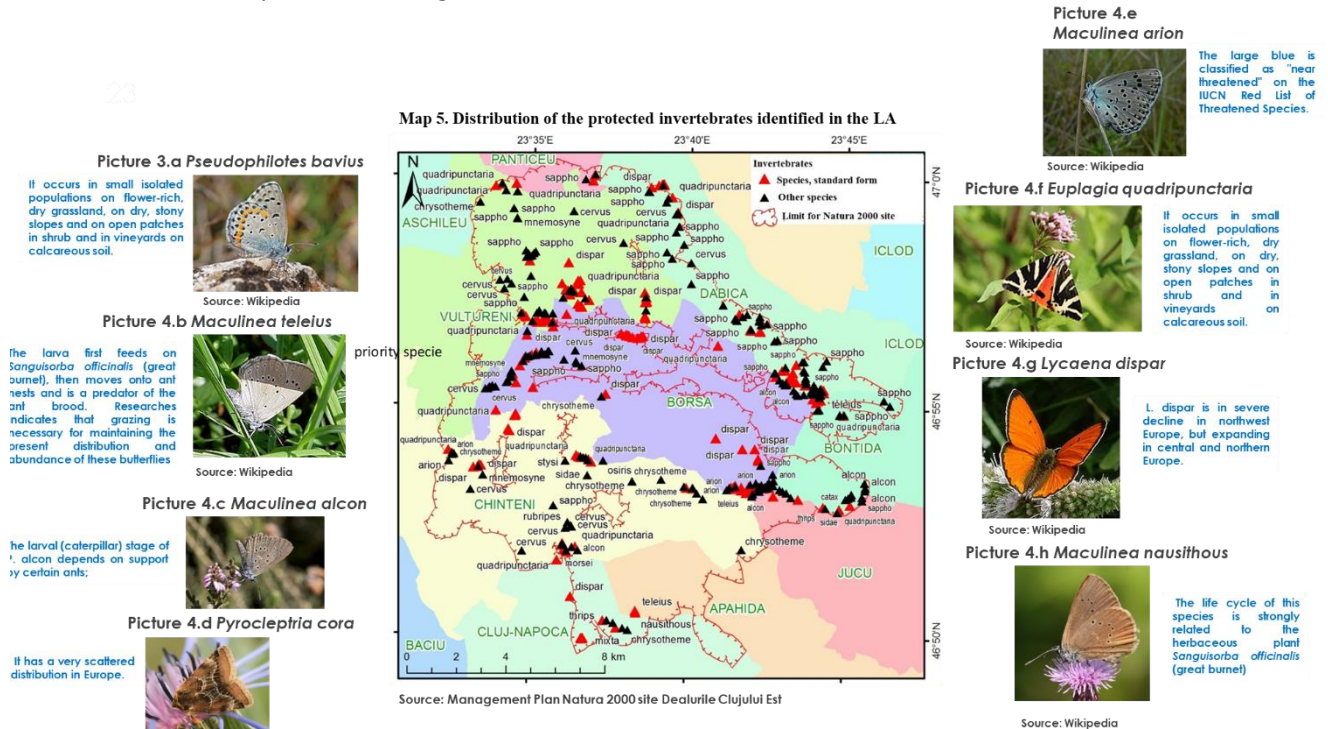
Picture 2.e *Iris Aphylla*



Is listed on many red data books and plant lists in Europe

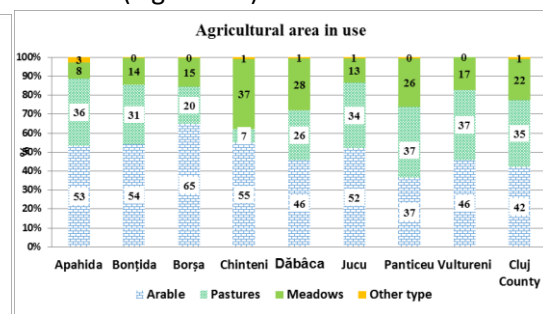
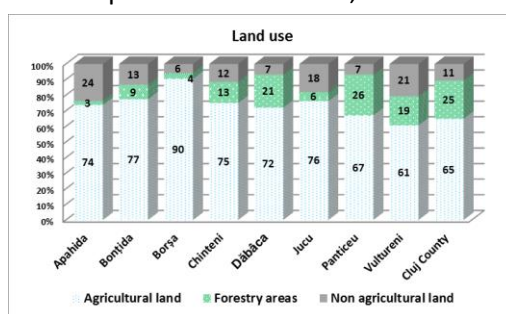
Source: Wikipedia

Systematic **lepidopterological research** has been carried out in the region since the early '60s. In 1997, a list of microlepidopteras identified in the Natural Reservation Fanatele Clujului was compiled and. The list includes no less than 608 species, some of them are rare and/or endemic. Ten of them are protected by the EU Habitat Directive: *Lycaena dispar*; *Cucullia mixta*; *Callimorpha quadripunctaria*; *Catopta thrips*; *Nymphalis vaualbum*; *Pseudophilotes bavius*; *Leptidea morsei*; *Maculinea nausithous*; *Maculinea teleius*. *Coleopter: Pilemia tigrina*;

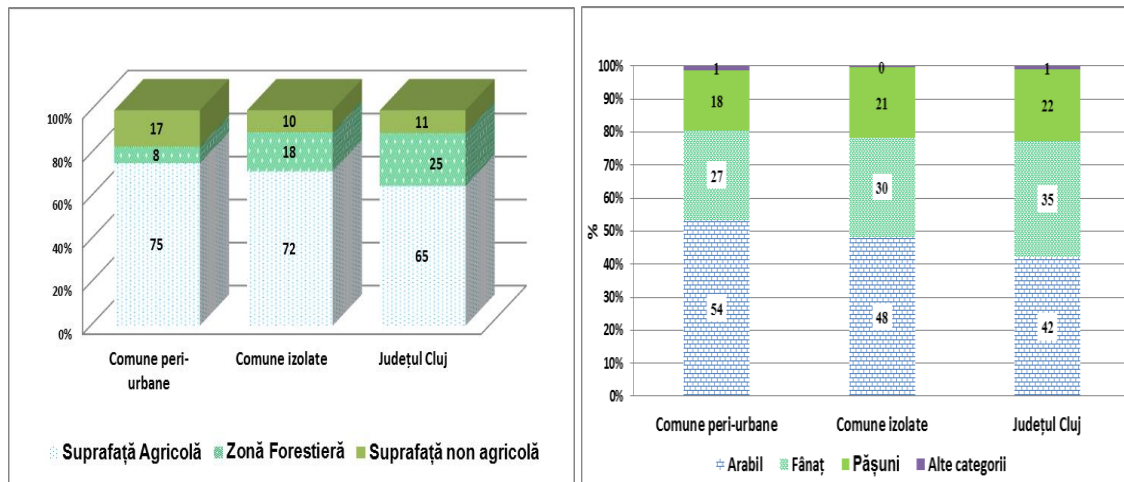


- Agricultural values (agro-economical values):

Agriculture plays an important role in the region. There are communes with agricultural land shares above the county levels (Borșa, Jucu, Chinteni etc) (Figure 1.a). Only Panticeu and Vultureni have forestry areas comparable with the county averages. The agricultural land is used mainly as permanent natural meadows and pastures in Panticeu, Dăbâca and Vultureni (Figure 1.b).



The analysis of statistical data was performed at the level of two categories of communes: communes located in the peri urban area of Cluj-Napoca city and the national road DN1C Cluj-Napoca - Dej (respectively Apahida, Bonțida, Chinteni and Jucu) and remote communes (respectively Borșa, Dăbâca, Panticeu and Vultureni communes).

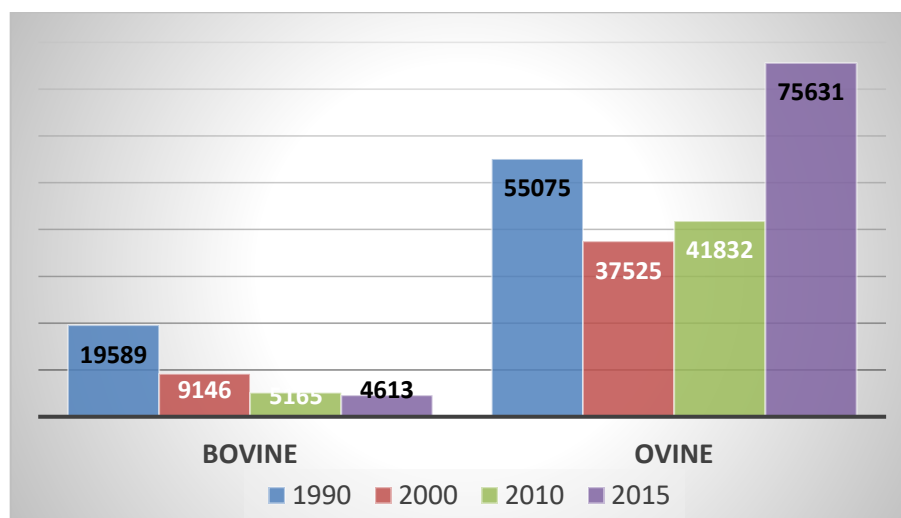


Source: INSE, TEMPOOnline.

Figure 3. Comparative analysis of agricultural resources in remote and peri-urban communes

The share of meadows and pastures is higher compared to the county averages in the communes located in relatively isolated areas (figure 3). The statistical data about the evolution of the number of animals and farms also reveals other important major trends:

- between 1990 and 2015 there was a sharp decrease in the number of cattle (only 25% remaining as compared to the level recorded in 1990). The number of sheep is about 35% higher than in 1990 (Figure 4);
- between 2012 and 2016, the number of households receiving CAP subsidies was reduced to half of them (Figure 5). The number of other types of farms (PFA; companies, etc.) has not increased visibly. Basically, there was a phenomenon of land consolidation.



Source: INSE, TEMPOOnline.

Figure 4. The evolution in the number of animal (1990 – 2015)

These key trends identified using the statistical data were complemented by results from qualitative research (questionnaire; working discussions):

- a sharp reduction in the number of animals that are breed under the traditional household system. Common grazing of the permanent pastures has become almost an exception in the last years;

- the HNV meadows and pastures are summer grazed by specialized sheep farms. The subsidizing method, the lower sanitary-veterinary requirements and the lower investment needs favoured the development of this agricultural business. This specialized sector is owned by capital from outside the rural communities. There has been a deterioration of the agri-environment and the traditional grazing system because of the existing rupture between newcomers in the rural community and the traditional farming system.

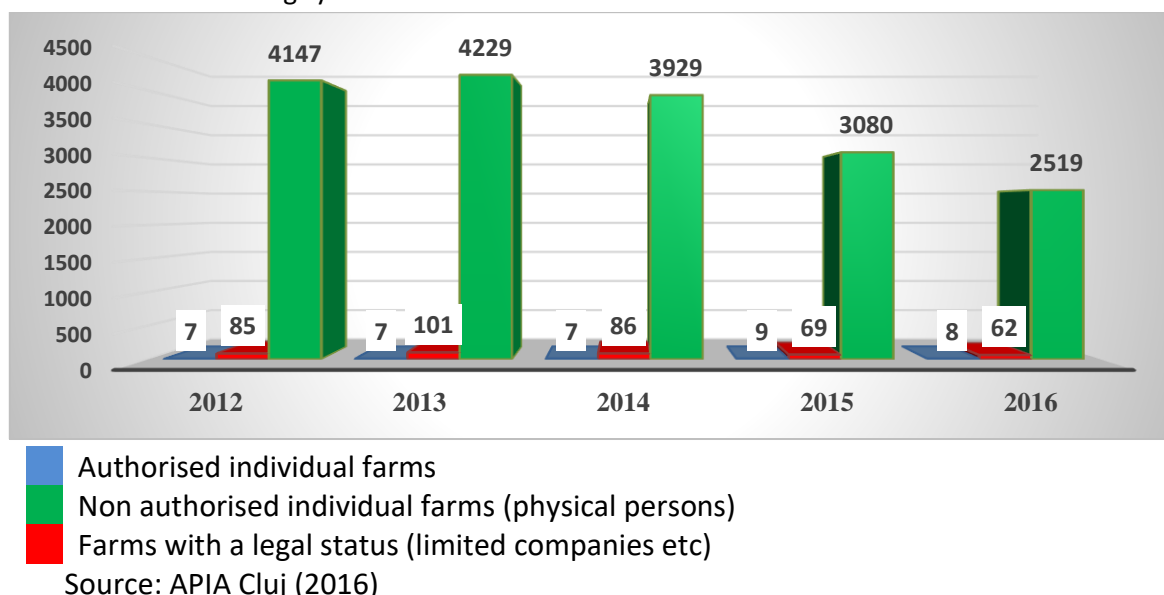
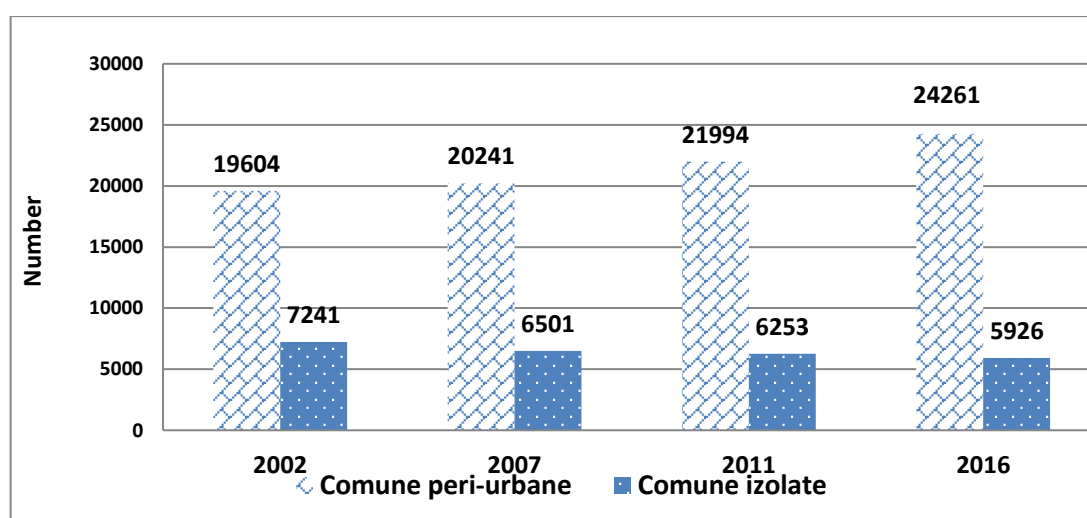


Figure 5. The evolution of farm numbers according to different juridical status (2012 – 2016).

- Socio-economical values :

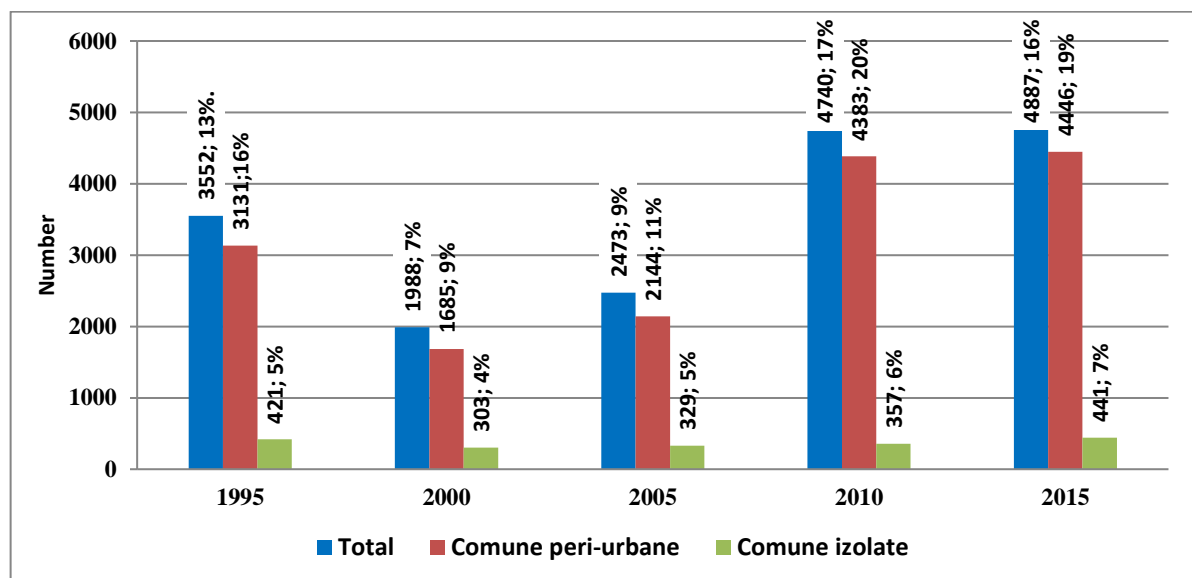
The communes located in the peri-urban area of Cluj-Napoca city took over an important number of people working in the urban area. Especially in these communes, the price of real estate has sharply increased in the recent years. The traditional lifestyle has been replaced by the urban habits of newcomers. On the other hand, in the more remote communes, the number of the population decreased permanently.



Source: INSE, TEMPOOnline.

Figure 6. Population trend in comparison (peri-urban/remote communes) (2002-2016)

The share of active population is low. There are mainly people having a retirement age. In peri-urban areas, the share of the active population has had an increasing trend. This positive trend was also supported by the development of industrial parks where factories of multinational companies (Tetaron Jucu; Apahida) operate. In contrast, the number of active population was and still is very modest mainly in communes located in more remote areas (Figure 7).



Source: INSE, TEMPOOnline.

Figure 7. The evolution of the number of active population in comparison (peri-urban/remote communes) (1995 – 2015).

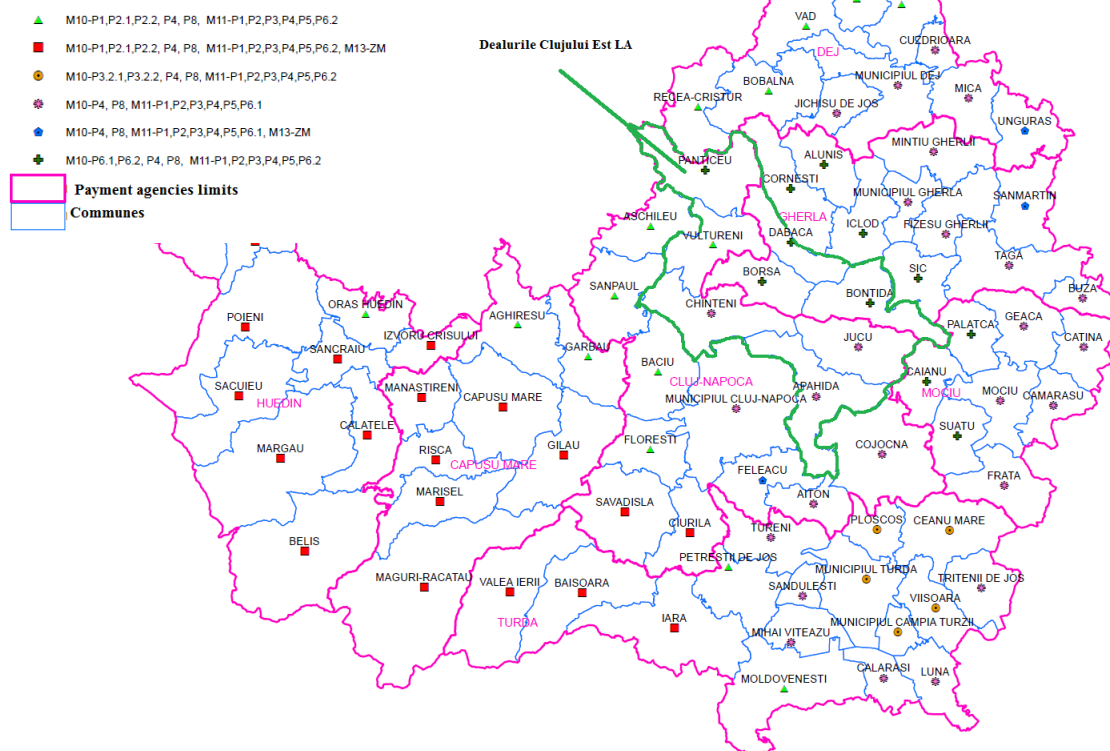
- Institutional frame:

There are a variety of situations regarding the eligibility for different CAP agri-environmental measures:

- Borșa, Dăbâca, Bonțida and Panticeu communes are eligible for the agri-environmental package supporting butterflies' conservation of the HNV meadows. Applying for such subsidies requires a voluntary commitment from the farmer for a period of at least 5 years regarding the maximum load of animals per hectare (0.7 LWM / Ha); the type of work performed; the mowing starting period (after August 25);
- Vultureni commune is eligible for the agri-environmental package of HNV meadows. The commitment involves a maximum load per hectare of maximum 1 UVM / Ha; mowing after June 15; the type of works performed, etc.;
- Chinteni commune is not eligible for any agri-environment package.

The territorial inconsistency has caused and still causes significant farmer's dissatisfaction. The qualitative research has shown that these agri-environment packages are perceived by farmers as unattractive due to the high bureaucratic burden and the lack of real information. In the future there is the need for better correlation of the eligibility areas of the agri-environmental measure with the area delimited by the Natura 2000 Site.

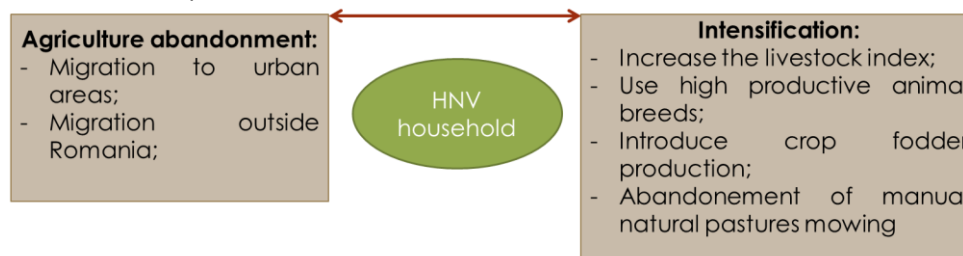
Agro-environment measures 2014 - 2020



Source: Romanian National Program for Rural Development 2014 – 2020;
Figure 8. CAP agri-environment package implementation in the study area

Part 3 / Dealurile Clujului Est, Romania Weakness, Issues and Challenges

The **HNV farming** system is based on low-intensive traditional family households' techniques that used a mosaic of natural pastures in grazing and mowing. In the last years the HNV **agri-environment resources** had known a process of degradation caused by the alteration of the traditional agricultural practices and intensification. The traditional farming system based on common grazing and family labour is threatened and abandoned nowadays due to low-incomes and due to high alternative incomes outside the peripheral rural areas. There is an increasing aging trend especially for the rural communities that have important HNV resources.



➤ Explaining factors: market food chain; inadequate sanitary local policy; high income opportunities outside agriculture;

Figure 9. Alternatives in the future HNV households' development

Due to inefficiency and high consumption of time, **manual mowing became an exception in the last years**. That caused important degradations of the permanent pastures.



Picture 4.a Comparison between mowed and not mowed pastures



Picture 4.b Aged farmers applying archaic techniques

In the field of **good governance**, there exist inconsistencies both in the administrative organization (communes belonging to different administrative associative structures with specific objectives and instruments) and in the implementation of agricultural policies and for the agri-environment measures (not all communes eligible for such measures although they belong to a Natura 2000 site).

The **value chain** of the HNV products is currently based on low-value-added products. On-farm processing (cheese/meat) and direct sales cannot be developed due to rigid rules and bureaucracy. There is a lack of product differentiation. Basic rural infrastructure is poor especially in the remote HNV areas.

Part 4 – Strengths and Opportunities

Strengths

- There are some initiatives to support farmers who use manual or light machinery for mowing the HNV grassland;
- There are some attempts to improve the marketing of local products (on-line baskets) but this is not directly linked to HNV farming (but, it is a good example for HNV products as the system works);
- LAGs actively involved;

Weaknesses

- The existing innovations are not in the benefit small farmers, as some are struggling to comply with the eligibility criteria for agri-environment measures or/and not interested in HNV farming;
- Acquisition of a light mowing machinery is very expensive for small farmers;
- On-line baskets for HNV products would be successful only if farmers are cooperating under a farmer association and create a brand representative for LA;
- The examples of innovation do not address the main challenges facing HNV farming: lack of cooperation; lack of processing capacities under a local brand; lack of specific agri-environment support for the communities belonging to the Natura 2000 site; lack of consistency among all communes as regard to CAP agri-environmental Package 6 (butterfly measure);

Part 5 / Dealurile Clujului Est, Romania Current and Future challenges (Business as Usual vs sustainable PRA future)

The region has a long history that can be traced from the Neolithic period. Village life gravitated around family farms agriculture, that was the main income source. Each household had some arable plots located immediately near the household. The family, usually composed by three generations (children, parents and grandparents), worked the land using extensive labour resources to produce for family needs.

In the socialist years the number of inhabitants decreased in all communes due to land collectivization and the policy of urbanization. The region was affected by the collectivization process. In total there were 48 different types of socialist farms. Some agricultural land located near the households and in remote areas (arable and pastures) were still worked by the individual owners.

After 1989 Romania has encountered an important political shift from a centralized state economy to one dominated by the market forces. This process allowed to start the negotiations with the EU that was achieved at the beginning of 2007. It was a challenging period in which almost all state companies activating in the industry collapsed and finally got bankrupted. That explains the increasing number of the population living in the study area (1990 to 2007). The population remained relatively balanced in terms of gender structure, although the share of female population started to increase. The population became more aged during the same period especially in the communes that have the most important HNV areas.

An overview of the time line

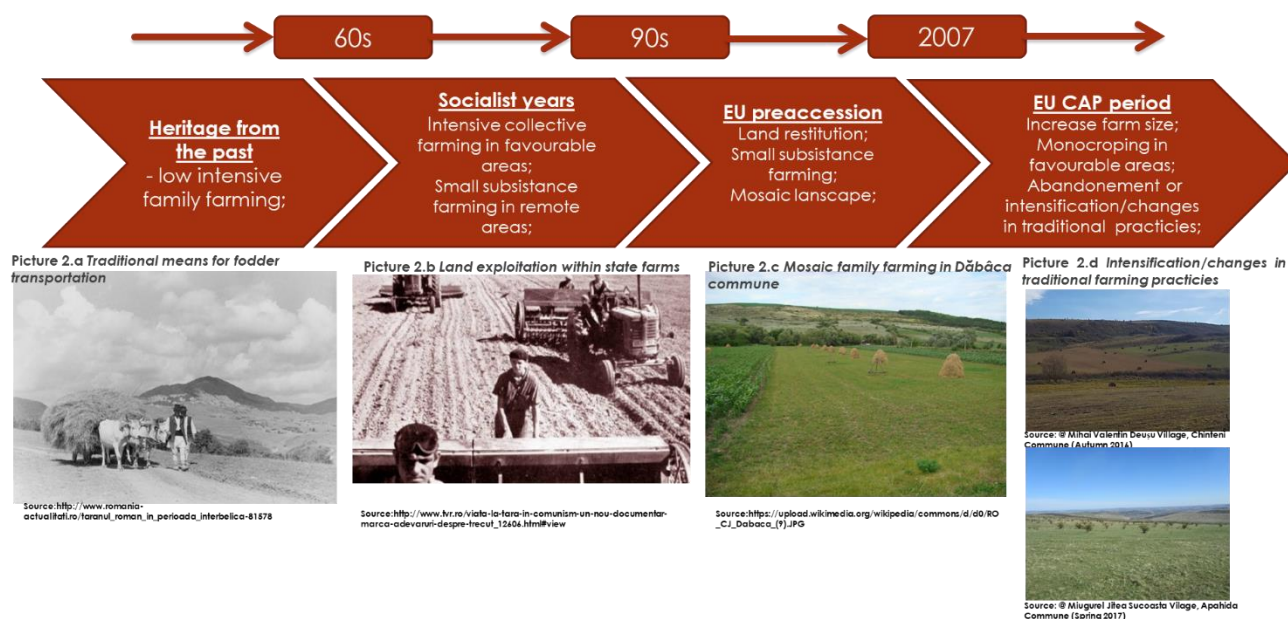


Figure 10. The main changes produced by the shifts of the public policies

In the future, a drastic reduction of the traditional agricultural production system and an increase in the importance of intensive practices are anticipated. These phenomena will lead to the drastic reduction of the HNV resources. The **alternative vision for the sustainable development of HNV farming** propose the development of **medium-sized farms** operating in an **associative structure** through which **high value-added products** are marketed under a **local brand**. The main barriers to this

vision have been prioritized by the key local actors: in the **economic area** there is an acute shortage of processing capacities; in the **social dimension** there is the need for information and entrepreneurship skills; In the **technical** area, innovations are needed to establish small processing facilities adapted to the needs of HNV agriculture, veterinary regulations and farm investment capacity; good governance asked for innovative farming associative solutions and better cooperation between different state institutions and local actors. Starting from these barriers, a number of innovations have been identified at local and national level. Innovative solutions for selling agricultural products have been developed locally; several machines that allow ecological mowing were tested locally; Innovative governmental tools have been developed in the form of agri-environment packages or management plans.

Sources:

<http://www.hnvlink.eu/download/RomaniaBaselineAssessment.pdf>;

Statistical data:

<https://ec.europa.eu/eurostat/web/agriculture/data/database>

<http://statistici.insse.ro:8077/tempo-online/>

Secondary data:

http://www.hnvlink.eu/download/InnovationSeminar_Report_Romania.pdf

Further information / Sources:

Jitea MI, Mihai VC, Arion FH, Muresan IC, Dumitras DE. Innovation Gaps and Barriers in Alternative Innovative Solutions for Sustainable High Nature Value Grasslands. Evidence from Romania. Agriculture. 2021; 11(3):235. <https://doi.org/10.3390/agriculture11030235>

Case-Study on innovative development in Peripheral Rural Areas
Part B – BUILDING A COMMON VISION FOR THE PERIPHERAL RURAL AREA: THE
PARTICIPATORY PROCESS AND THE IDENTIFICATION OF SOLUTIONS AND
INNOVATIONS FOR THE SUSTAINABLE DEVELOPMENT OF THE PRA
corresponding to Module 3– e-learning course

Title: Building a common vision for Dealurile Clujului Est Peripheral Area, Romania



Prof. dr. Mugurel JITEA USAMV Cluj (mjitea@usamvcluj.ro).

Part 1 / Mapping the Participatory Process

1.1. Who is leading – the organisation responsible of the “starting point”

HNV-Link project started in Dealurile Clujului Est with relatively limited information especially about the sustainable development challenges (see Module 1, part 2 presentation) faced by the small households and rural communities. The management plan of the Natura 2000 site Dealurile Clujului Est (2015) comprised an extensive environmental assessment of the territory. Prior academic research conducted by different NGOs (Romanian Lepidopterological Society; MOZAIC association etc) and researchers (Babes-Bolyai University) established the role of the permanent grasslands in preserving local rich biodiversity. This role was also acknowledged by the public policies through the development of an agri-environment payment for *Maculinea Buterflies* conservation. However, the rest of the communities were left outside the assessments. Moreover, the Natura 2000 site covers only one third of the territory and population.

An integrated social, economic, and agri-environmental assessments of the territory was mainly missing as the beginning of the HNV Link project as a conclusion.

1.2. What are the links that the leading organisation has with others actors

The leading organisation was the University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca (www.usamvcluj.ro). It had already developed strong links with the key actors from the territory: farmers by engaging in the creation of AgroTransilvania Cluster (<https://agrocluster.ro/>). One of the Cluster's members is a farmer's cooperative that use important land resources in the territory; NGOs through the Mozaic project (<http://www.efncp.org/projects/projects-in-romania/mozaic-project/>); town-halls and other local organisations (CAP payment agencies etc).

1.3. Which actors participate and for which purpose (mapping actors)

The mapping actors was a key starting step in the participative process of developing an alternative development vision of the territory. The key actors (figure 1) have different goals and problems. Understanding their needs means to better engage them in the participative process.

The farmers but also the **local rural inhabitants** and landowners want to obtain decent incomes. **Environmental NGOs and the Natura 2000 site administrator** (Lepidoptera Association) mainly want to protect the vulnerable habitats. They created a management plan for the Natura 2000 site. Its outcomes are strongly conditioned by the degree of acceptance in the rural communities. **The local administrative units** (city halls; city's councils; county's councils) created different development strategies. Some of them recognized the HNV meadows as an important asset that deserves to be better valorised. There are opposite views across these actors about how to use the HNV resources – promoting only through tourism or a mix between the development of local products and agri-tourism.

Type of actor	Internal	External
Arbitrator	Collective 1. LAG Someș Transilvan (https://galsomestransilvan.ro/) ; Mayors and local councils. 2. Someș Arieș Cooperative (https://ro-ro.facebook.com/somes.aries); 3. The Association of Sheep Breeders "Someșeana" 4. Churches communities	Arbitrator 1. Public bodies: Agency for Payment; National Government. 2. Research bodies: USAMV Cluj-Napoca (rural development; environment; food industry); University Babeș Bolyai (environment); Sapiența University (environment);.
Private	Private 1. Farmers, local entrepreneurs; 2. Local households. 3. Environmental NGOs - Romanian Lepidopterological Society (custodian of the Natura 2000 site and the creator of the Management Plan for the Natura 2000 site)	External 1. Environmental NGOs Mozaic Association (www.mosaic-romania.org); Association for Nature Conservation and Landscape Ecology (NaLa) ; ADEPT. 2. Agri Food clusters: Agrotransilvania Cluster. 3. National farmer association 4. Consultants: Civitas Foundation; 5. Other related research projects: Salsa Project; AgriSpin project; AgriLink project; Staccato Project http://www.staccato-project.net/ 6. Food/ tourism consumers.

Figure 1. Actors involved in the development and implementation a sustainable HNV development vision

1.4. Which process to follow to build the Vision of the PRA

The research team engaged all key local actors using several participatory approaches like interviews, focus groups and seminars. It ran interviews with: farmers' associations (Someș Arieș Cooperative for cattle breeders, Someșeana Association for sheep breeders, AgroTransilvania Cluster for food industry and farmers); Local Action Group Someș Transilvan; mayors or local council members from all communes (Apahida, Bonțida, Borșa, Chinteni, Dăbâca, Jucu, Panticeu and Vultureni); and NGOs (such as Lepidopterological Association – Custodian of the Natura 2000 area, Civitas NGO and others).

Table 1. An overview of the participative process used to build the Vision of the Peripheral Rural Area

Activities	Date	Number of participants
Interviews	Oct 2016-Feb 2017	24
Workshops	Jan and May 2017	80
Field study	Jan and May 2017	130
Innovation seminar	June 2017	24

Together with the LAG Someș Transilvan representatives, the project team organized workshops in all eight communes to identified existing HNV innovations and innovation gaps for the sustainable development of the territory. It was also used a field study that implement a questionnaire to better understand the level of knowledge and the perception of the rural population around the HNV farming sustainability. A total of 132 respondents representing farmers, employees in the rural communities,

members of the local households, NGOs, non-agricultural business, food-industry, local politicians, took part. Results showed that 76 % of the participants are aware of HNV farming resources. However, awareness was lower in the remote communes, which host the most valuable farmland in the Natura 2000 site.

Finally, the team organised an **innovation seminar** to refine the vision for the HNV sustainable development and to decide on the innovation priorities for the next phase of the project.



Photo 1.a;1.b;1.c Working groups in the innovation seminar.

Also, there was organised a regional meeting – "The Future of High Nature Value farming in Romania" in April 2018. The meeting was part of the AGRARIA Fair - the biggest agri-food fair in the country. Among the invited speakers were representatives of the European Commission (EIP Agri), Romanian ministries (Agriculture and Rural Development; Forestry and Water), Government Representative - Prefect of Cluj County, Local Action Group Somes Transilvanian, farmers, NGOs, consultants, researchers and students. Some presentations available at econ.usamvcluj.ro/cercetare/proiecte-de-cercetare/hnv-link-2/. Over 100 people attended the conference on HNV farming, and many more visitors of the AGRARIA Fair got to hear about the HNV farmland.



Photo 2.a;2.b;1.c Q&A session in the Regional Meeting Conference

Part 2 / implementation and Assessment of the participatory process

2.1. Which risks / difficulties have the actors encountered and how those have been overcome

The initial phase of the project was devoted to collect information about the needs of the key local stakeholders (farmers; NGOs; policy makers; researcher etc) and to build trust by presenting alternative innovative solutions identified in/or by the HNVLink network. Based on the trust created in the first part of the project most of the existing tensions accumulated between environmentalists and farmers were transformed in potential comparative advantages.

2.2. Assessment on the participatory process and main conclusions

The cross-visits and the deliverables of the HNVLink project (HNV Innovation Atlas; Innovations research tool etc) allowed to some of the key stakeholders to move forward in implementing the local HNV vision by: developing a local brand; creating local cooperatives such as to improve the value added of the local products; implementing HNV technological innovations like a mobile slaughterhouse etc. In the process of implementing the HNVLink vision the network of “innovation brokers” increased with at least 20 local stakeholders that participated in the cross-visits and 4 former students that after internships in the Local Action Group and in one local farmers association are working now at the local level. The success of the “innovation broker” process is explained by the HNVLink methodology that left enough freedom to the local project team to adapt to the local realities but also by the capacity of the local project team to communicate accordingly to the local stakeholders’ level of understanding. The future is for those stakeholders that are willing to change and not for those that are only complaining by the existing needs. The number of the stakeholders belonging to the first group is unfortunately small, but they are the key enablers for a bright HNV future!

Part 3 /Creating the vision of the Dealurile Clujului Est Peripheral Rural Area

The socio-economic and environment dynamics underlined in part A – Base line assessment suggests that the future of the HNV resources in Dealurile Clujului Est arrived in a key moment. There are driving forces (market; social; policy; conflicts between stakeholders etc) that have putted the traditional HNV household farming under pressure. On the other hand, the new farming structures are orientated towards profit maximization. This reality started to alter the HNV resources. That is why the different stakeholders must cooperate one to assure a safe future for the HNV areas. The key challenge is to identify common interest points for the different actors such as to make them to work together.

3.1. Taking knowledge on the strengths

Innovations were found in the **regulations and policy** dimension, related to the introduction of the agri-environment CAP measures for butterflies conservation and in the development of the management plan for the Natura 2000 site Dealurile Clujului Est. The management plan intends to support HNV farming, however there are some inconsistencies with the eligibility criteria of the agri-environment measures (Figure 2). In the area of **farming techniques and management**, the main innovation consists in using adequate light machineries for HNV grasslands mowing that maintains the biodiversity and their habitats. The on-line basket with organic vegetables was found as an innovation in the area of **products and markets**.

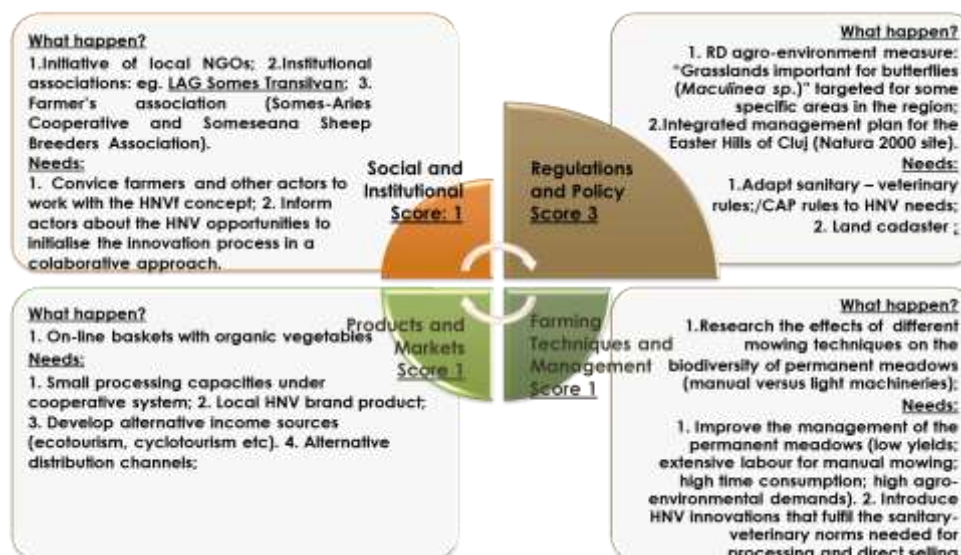


Figure 2. Innovation scores in Dealurile Clujului Est Peripheral Rural Area

3.2. Taking knowledge on the vulnerability factors and challenges

Due to these main socio-economic and environment trends, **the key HNV habitats started to decreased after 2007** (Figure 3.a). The common EU market almost destroyed the household traditional farming practices. These changes produced several agri-environmental consequences: 1. **arable land** is mainly exploited in private farms organized as enterprises and not based on family labour; some arable lands remain farmed in small family plots near the villages; 2. **forestry areas** increased in terms of size; 3. the area corresponding to the **permanent pastures** manually mowed sharply decreased; permanent meadows and some parts of the pasture started to be used by **specialized sheep farms**. A **HNV household** is now in between two extreme decisions: **one is to abandon land** and to obtain incomes from other activities; or to **intensify production** such as to survive on the EU common market. The **relatively highly intensive farms** (specialized in sheep and cow breeding and in crop production) are now undergoing an **intensification process**. Without offering **alternative markets for high value-added products** the intensification process will continue. The **HNV habitats** will remain only islands in the Natura 2000 site (Figure 3.b).

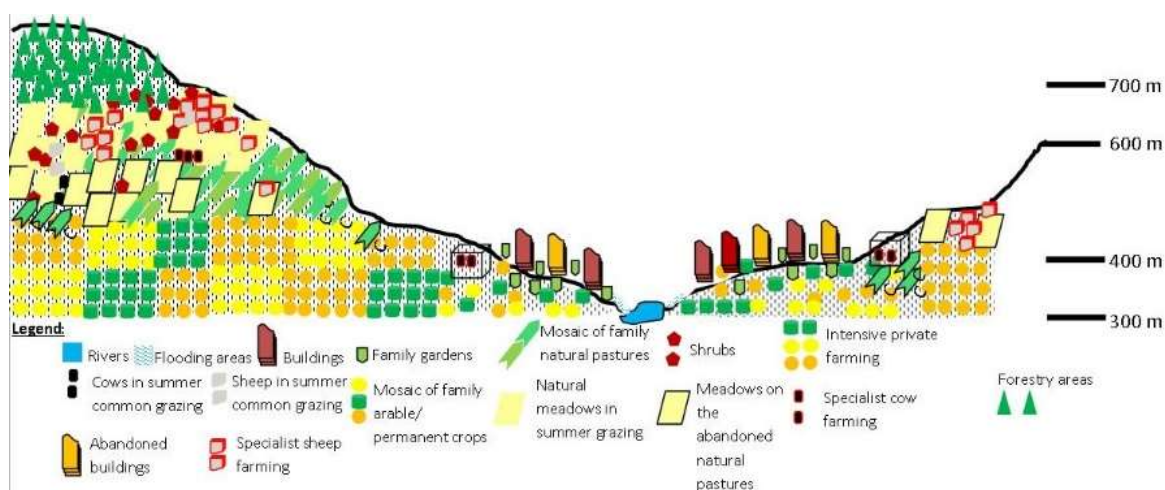


Figure. 3.a. Transect for the post accession EU period (2007 – present)

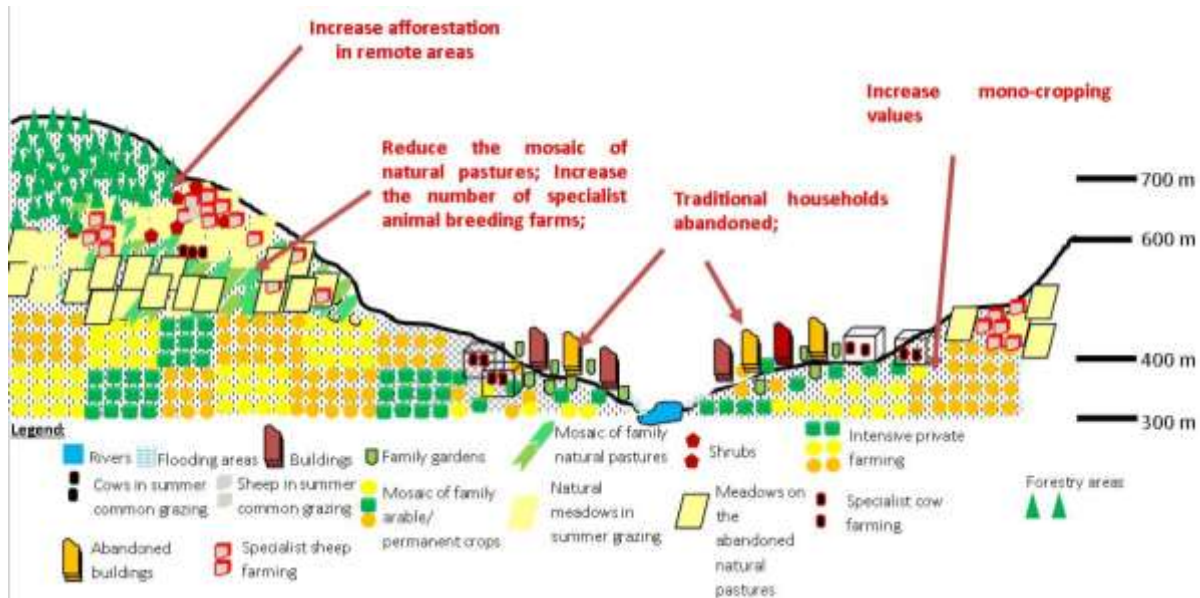


Figure 3.b. Business as usual scenario (2030)

3.3. What needs to be done

Specific Objectives

Priority 1. Social and institutional

- promote HNV common project sustained by different stakeholders (NGOs; farmers; research institutions);
- identify and promote good case examples in the region that can solve the HNV innovation needs;
- identify HNV innovation opportunities for the farmer's associations/cooperatives.

Priority 2. Product and market:

- offer information about how to develop value added-products.
- identify farmers willing to develop a HNV product brand in an associative approach;

Priority 3. Regulations and policy:

- identify burdens/opportunities in the current acquis related to the agri-environment and sanitary-veterinary regulations.

Main Actions

Actions for priority 1. Social and institutional: identify common HNV projects promoted by different stakeholders.

For this specific priority there were identified local actors (researchers, farmers, NGOs) that started the process of creating an Operational Group. The group wanted to find research solution that can link the final product (milk; cheese) to the meadow's characteristics. Unfortunately, the financing process that demanded spending supported by the applicants at the beginning of the project that are only later reimbursed by the RD funds have acted as a barrier.

- visit good-case examples in Romania or in other LAs that will address the issues from priority 1 & 2. Organise cross-visits with representative stakeholders (farmers; NGOs; researchers; LAGs; consultants etc) in Romania and abroad to learn from practical innovative solutions.

- inform the regional/national public about the importance of the HNVf techniques and landscapes.

Action for priority 2. Product and market: educate/inform farmers about how to sell high value-added HNV products

- create guides for good-case examples of farmers that sell high-value added HNV products. Present alternative distribution channels and niche markets;

- inform/educate farmers about how they can use the good-case scenario in their farms;

Organise cross-visits with representative stakeholders (farmers; NGOs; researchers; LAGs; consultants etc) in Romania and abroad to learn from practical innovative solutions. Prepare a guide where to present the market/niche solutions.

Action for priority 3. Regulation and policy:

- create guides presenting the management practices needed to fulfil the agri-environment requirements from the national RDP (HNV meadows; HNV meadows important for butterfly protection); Present the minimum management practices needed to achieve the requirements presented in the Management plan of the Natura 2000 site Dealurile Clujului Est.

- inform/educate farmers about the minimum management requirements.

Organise cross-visits with representative stakeholders (farmers; NGOs; researchers; LAGs; consultants etc) in Romania and abroad to learn from practical innovative solutions. Prepare a guide where to present the regulation and policy demands.

3.4. The Vision

The **HNV Vision** means to introduce **innovations** that allow the development of **high value-added HNV products**. That means to sustain **average size commercial farms** in cooperative/associative structures to developed **better income sources** and **to transform the HNV resources in comparative advantages** (Figure 4). To implement the HNV vision means to work with the key local stakeholders such as to overcome the **conflicting states** that seems to exist between environmentalists (Natura 2000 site administrator; NGOs), administrative bodies (Payment Agency; Governmental Regulations in the agri-environmental payment definitions and in the area of sanitary-veterinary regulations) and farmers.

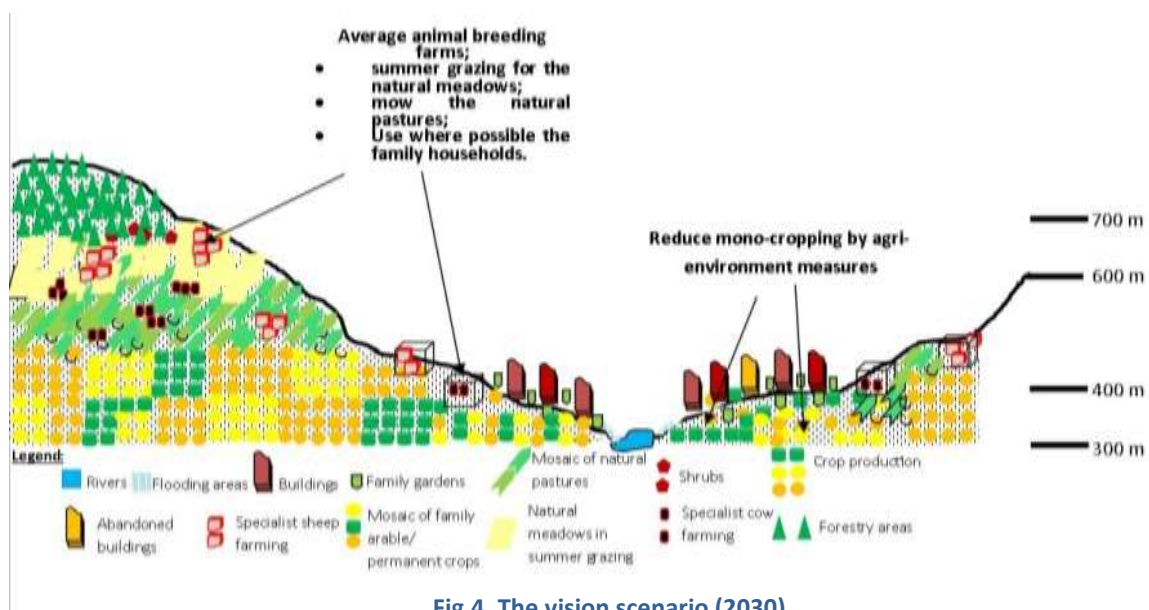


Fig.4. The vision scenario (2030)

Sources:

1. HNV Link (2018). Report from the Innovation Seminar
http://www.hnvlink.eu/download/InnovationSeminar_Report_Romania.pdf;
2. HNV Link (2018). Participatory approach report in Dealurile Clujului Est;
http://www.hnvlink.eu/download/RO_Cluj_ParticipApp_FINALAPPROVED.pdf;
3. HNV Link (2018). Action plan for the multi-actor participatory approach in Dealurile Clujului Est.
http://www.hnvlink.eu/download/P05-HNV-Link_LA_ACTION_PLAN_DealurileClujului_V20190220.pdf.
4. Jitea MI, Mihai VC, Arion FH, Muresan IC, Dumitras DE. Innovation Gaps and Barriers in Alternative Innovative Solutions for Sustainable High Nature Value Grasslands. Evidence from Romania. Agriculture. 2021; 11(3):235. <https://doi.org/10.3390/agriculture11030235>



Case-studies on innovative sustainable development in Peripheral Rural Areas
Template Part D – INNOVATION EXCHANGE, TRANSFER AND DISSEMINATION
corresponding to Module 5 – e-learning course

Part D: Innovation exchange, transfer and dissemination

Introduction to Dealurile [Clujului Est, Romania](#) Peripheral Rural Area



Part 1 / Engaging communication and dissemination actions for a sustainable development of the PRA

The HNV-Link project was implemented in several rural Romanian communities, where a lot of changes were observed in the few last years. These changes included: strong shifts in the agricultural practices due to the new Common Agricultural Policy Rules and the Common Market pressures causing agricultural intensification or land abandonment; high environmental demands due to the Natura 2000 site recognition producing tensions between farmers/rural community and the environment dwellers and rural populations started to lose some of the local traditions due to newcomers that moved into the peri-urban areas. The initial phase of the HNV-Link project was devoted to collect information about the needs of the key local stakeholders (farmers, NGOs, policy makers, researchers etc.) and to build trust by presenting alternative innovative solutions identified in/or by the HNV-Link network using different communication actions (Table 1).

Based on the trust created in the first part of the project, many of the tensions built up between environmentalists and farmers were transformed into potential comparative advantages of the region. The cross-visits and the deliverables of the HNV-Link project (HNV Innovation Atlas; Innovations research tools etc.), allowed to some of the key stakeholders to move forward in implementing the local HNV vision by developing a local brand, creating local cooperatives to improve the value added to local products, implementing HNV technological innovations, e.g., mobile slaughterhouse.

Table 1. Communication channels used for different stakeholders needs

<i>Communication actors</i>	<i>Communication channels</i>
<i>Local/regional actors</i>	<i>Local meetings/Workshops</i> <i>On-line/print materials</i> (guides for valorising HNV value-added products, guides to assess agri-environment measures, to fulfil the agri-environment requirements from the local Natura 2000 management plan, guides for sanitary-veterinary rules for certifying small-processing facilities). <i>On-line information platform</i> – create and then sustain an on-line platform where farmers can ask questions about the HNV problems to obtained answers from researchers/other farmers. Other communication activities: Social media communication, Press releases etc.
<i>AKIS</i>	<i>Regional meeting</i> <i>On-line information campaign</i> (HNV innovation needs, HNV regulatory gaps). <i>Television/Press release.</i> <i>Collaborate with other national projects e.g. Agri-Link project</i>
<i>Broader audience</i>	<i>Regional meeting</i> <i>Online information campaign</i> (HNV concept, HNV public goods). <i>Television/Press release.</i>

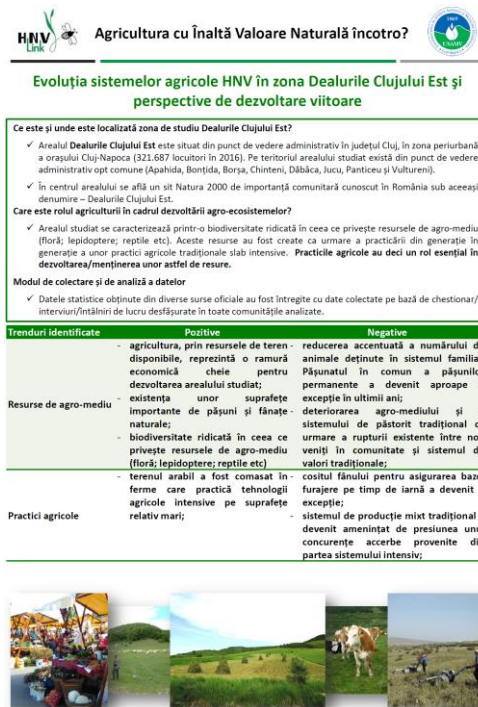


Photo 1. Printed materials



Photo 2. Registration desk of the regional meeting

Part 2 / Focus on Cross-Visits

Dealurile Clujului LA – Romania, cross-visit to LA Western Stara Planina, Bulgaria

Visiting LA: Dealurile Clujului Est

HNV-Link partner: USAMV Cluj-Napoca Romania

Host LA: Western Stara Planina Region

HNV-Link partner: STEP Foundation Bulgaria

Dates: 04th-07th of July 2018

The objectives of the cross-visit were:

- To promote good case scenarios in social and marketing innovation
- To give stakeholders the possibility to learn from other experiences
- To see and understand inspiring HNV innovations shared by a motivated group of farmers, LAG members, NGOs, veterinary and advisory experts in the visited region.

1st Day of the cross-visit: 04th of July 2018

The host and visiting groups met in the later afternoon in Slatina village. The meeting began with an introduction of all participants, a brief on the Dealurile Clujului Est region in Romania and the visited LA Western Stara Planina Region, Bulgaria. Our hosts made a briefing of the Stara Planina area regarding the socio-economic aspects and history, a summary of the innovations proposed for the visit. A presentation of the programme of the cross-visit was made and the objectives pursued in the framework of the visit were also discussed.

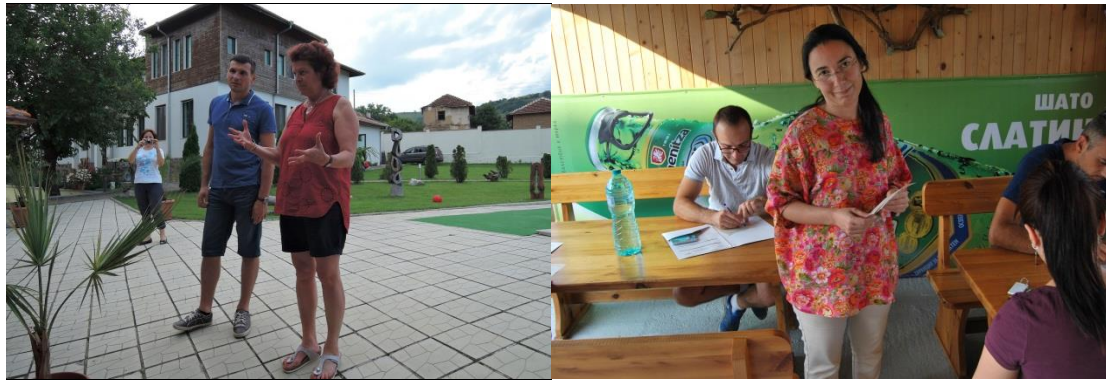


Photo 3. LAG Dealurile Clujului Est meeting their hosts in Slatina Village. Briefing process

2nd Day of the cross-visit: 05th of July 2018

We organised two groups in the morning due to the remote location of the Linbul Farm (top of mountains) and the restrictive access to the area (only off-road cars). The first group was composed mainly by farmers from the Dealurile Clujului LA and two HNV-Link members. Linbul farm represents new innovative farming system for the region (beef grass-fed cows). It uses smart management techniques of the HNV grasslands (rotational grazing), on-line marketing of the meat products and participation in HNV agri- environment schemes and Natura 2000 measures.

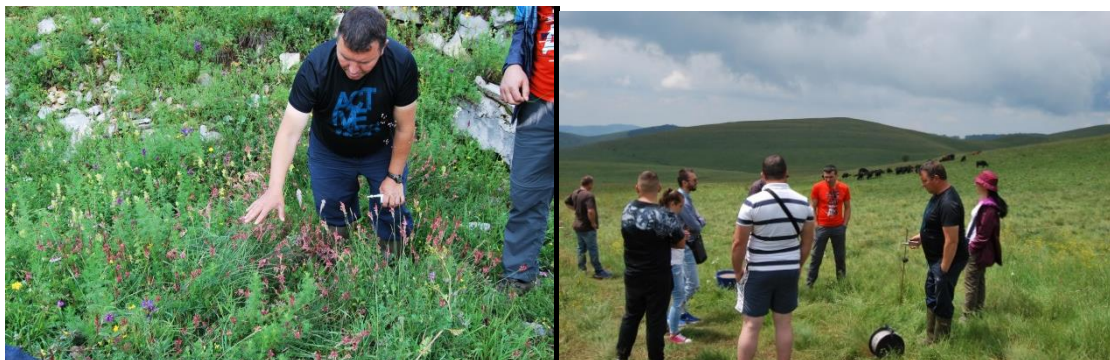


Photo 4. Learning rotational grazing techniques in the Linbul farm. See the positive effects on grass composition.

The second group was made up of NGOs and advisors. These individuals discussed the activities of LAG “Berkovitză – Godech”.



Photo 5. LAG “Berkovitză – Godech” visit.

In the early afternoon the two groups visited the Varshets dairy factory. They saw and tested new innovative dairy products (yogurts and honey, cheese with fruits inside etc.)



Photo 6. Visit to Varshetsz dairy

In the late afternoon the group visited a goat farm in Yagodovo village. The farmer had 60 goats grazing on HNV grasslands and produced Italian type of cheese: caciota and ricotta. The farm was recently equipped with a visitors' area for wine and cheese tasting, barbecues etc.



Photo 7. Visit the goat farm in Yagodovo village

3rd Day of the cross-Visit: 06th of July 2018

The early morning of the third day was devoted to visiting a local hand-crafts museum and atelier. The Romanian stakeholders learned how to find alternative income sources and how to link handcraft business with the HNV local resources (Photo 8).



Photo 8. Identifying the link between local handcrafts business and the HNV landscape.

The cross-visit continued with the "Food from the mountain" farmers' association initiative (<https://bg-bg.facebook.com/hranaotbalkana/>). This is a farmers group that sells its products each Saturday in an open farmers market in Sofia. Facebook and online advertising, realization of economy of scale when ordering packaging, such as jars, cheese containers, etc. Visit to jam and lutenitza producer ("Sinevka") in Prevala (gathering and processing of wild berries and fruits from HNV grasslands, guidelines for

nature friendly fruit production). Presentation of the establishment and management of the Mobile advisory teams (MAT) will be done by the project coordinator Mira Dikova. MAT were set up mainly to consult farmers on the following issues: new knowledge and skills for HNV farming practices; funding opportunities; preparation of business plans; compliance with the EU standards in the dairy sector (good hygiene practices; production practices, storage and use of manure; good agricultural practices, etc.); marketing activities (direct sales; advises on design and standardization of the jars' shape and labelling; linking farmers and consumers, organization of joint visits at fairs and exhibitions, etc.).



Photo 9. Food from the mountain association

Further information / Sources:

Dealurile Clujului LA – Romania, Cross-visit to the Burren, Ireland

Visiting LA: Dealurile Clujului Est

HNV-Link partner: USAMV Cluj-Napoca Romania

Host LA: Gort & Kinvara, Co. Galway, The Burren, Ireland.

Dates: 24th -28th of October 2018

The objectives of the cross-visit were:

- to learn from the Burren experience how to associate different stakeholders around the HNV farming concept
- to see and to understand how to develop regional/local HNV Life projects
- to learn from the Irish experience about the management of the environment-result based payment schemes (Pillar 2)
- to see and understand inspiring HNV innovations (alternative income sources)

1st Day of the cross-Visit: 24th of October 2018

8:30pm – 10pm: An informal meeting with local facilitators and other HNV Link cross-visit participants (France and Sweden). Our hosts introduced the area, the actors involved and some innovations around stakeholder engagement from the Burrenbeo Trust.

2nd Day of the CROSS-Visit: 25th of October 2018

9.30am -4pm the Romanian stakeholders participated to the Teagasc National Agri-environment conference with the main topic: *From Burren Beginnings to Locally Led EIP's* (Photo 10, from the left).

7.30- 9.30pm Session 1: HNV LINK – sharing European innovations in the Burren Winterage School

A brief presentation of the Dealurile Clujului Est LA with some HNV innovations that have worked for the region, and the challenges that the Romanian LA most urgently need to address in future (Photo 10). The presentations from France, Sweden, Romania and other visiting regions were followed by a chaired discussion.



Photo 10. Participation in Teagasc National Agri-environment conference and the HNV LINK session in the Burren Winterage School

3rd Day of the CROSS-Visit: 26th of October 2018

Meeting farmers and other stakeholders from the Burren Programme. It is a 'locally led' agri-environment schemes that include a results-based payments approach. The Romanian stakeholders learned about the history of the programme, the management process but also the main challenges that had to be tackled by farmers. Some innovative HNV farming techniques were presented (watering systems; shrubs management etc) (Photo 11).



Photo 11. Visiting the Burren locally led agri-environment scheme

In the afternoon the Romanian stakeholders were hosted by the *Hen Harrier Life Project*. Some of the pasture's management practices were explained in a grass-based meat cow farm. There was also presented a feed supplement innovation that improves the grass-based system efficiency.



Photo 12. Visiting the Hen Harrier locally led agri-environment scheme

7.30pm -9.30pm: Farming for Nature Innovation Fair. It was a farming meeting that aimed to look at innovations in animal health, breeding and nutrition as well as discussion and demonstrations on the use of new technologies in managing livestock on high nature value farmland. Main innovations: Livestock breeding and management for rough pastureland; Animal nutrition – supplementary feeding options to optimise foraging ; High Tech solutions to livestock management on HNV farmland (Photo 13).



Photo 13. Visit the Farming for Nature Innovation Fair

4th Day of the CROSS-Visit: 27th of October 2018

Participation in session 4 Burren Winterage School: Farming for Nature: the broader context. In the morning there were several interesting presentations:

- Annabelle Williams (RISE Foundation) – A Safe Operating Space for Livestock Farming in Europe
- Kevin Hanrahan (Teagasc) – Brexit: Potential Implications for High Nature Value farmers
- John Sweeney (NUI Maynooth) – Winners and Losers in Agriculture as Climate Changes.
- Liam McHale (Irish Farmers Association, Brussels Office): Global trade deals, evolving CAP discussions and the potential impact for HNV farmers



Photo 14. Burren Winterage School: Understanding farmers' views about things.' & Networks for Nature

Between 11.30 - 1pm the Romanian stakeholders participated to Session 5: 'Understanding farmers' views about things.' Speaker: Frank Vanclay, Department of Cultural Geography, Faculty of Spatial Sciences, University of Groningen, The Netherlands. Followed by a Q&A with Frank Vanclay and a panel of invited guests, chaired by Dr. Aine Macken Walsh (Teagasc).

2 – 3pm Session 6: Farming for Nature – Stories from the land

Chair: Brendan Dunford (Burren Programme) Format: Five short films on farming for nature followed by a chaired Q&A session with some 2018 Farming for Nature Award Nominees.

3.15 – 4.45pm Session 7: Networks for Nature (Photo 14)

Chair: (Burren Farmer). Speakers: Fabrice Gouriveau (HNV LINK Project) – HNV-Link: Networking for High Nature Value farming innovation, Liam Lysaght (National Biodiversity Data Centre (NBDC)) – How the work of the NBDC can support farming for nature, Tilman Disselhoff (European Land Conservation Network- ELCN) - Farmers and conservation organisations as partners – lessons from two continents

8 - 9:30pm Bord Bia National Farming for Nature Award 2018 (Photo 15).



Photo 15. Bord Bia National Farming for Nature Award 2018

During the cross-visit in Burren (Ireland), Irina Muresan (manager of the Local Action Group Somes-Transilvan, Cluj County) shared during an interview that “it was an excellent opportunity to participate to this event to see examples of good practice in sustainable agriculture and rural development. We will communicate to the local actors and farmers that their actions have a great impact on biodiversity and environment. Moreover, we will also communicate the importance of cooperation between all stakeholders in the area.”