

CARPATHIAN CONVENTION

Working Group on Sustainable Agriculture and Rural Development

4th Meeting: September, the 27th 2018 Vatra Dornei, Romania.

High Nature Value Farming in the Carpathians

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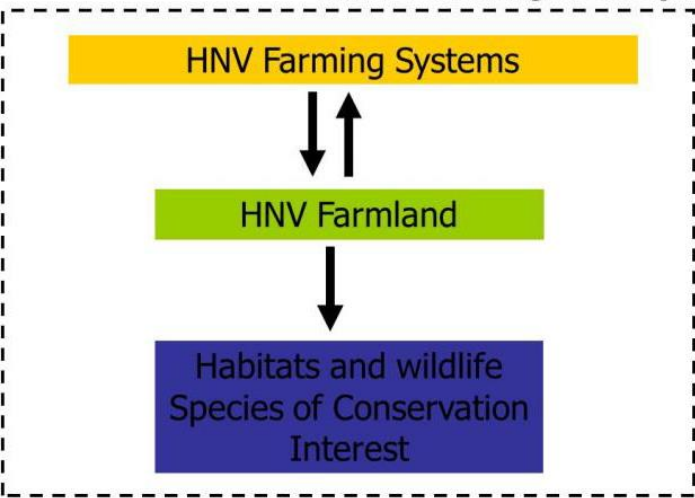


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HNV Concept and Area

HNV Farming concept



Source: (Redman, 2014).



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HNV Concept and Area

Table 1: HNV Areas according to various statistical data

	UAA max HNVf (1000 Ha) ¹	UAA min HNVf (1000 Ha) ¹	UAA total (1000 Ha) ²	HNV % total	
				Max	Min
Austria	1,138	288	3,266	34.8	8.8
Belgium	435,153	151	1,385.5	31.4	
Bulgaria	1,630		2,729	59.7	
Czech Republic	550		3,557.7	15.5	
Estonia	531.5		828.9	64.1	
Finland	1,268.9	259.7	2,299	55.2	11.3
France	7,000	4,000	27,590.9	25.4	14.5
Germany	2,201		17,035.2	12.9	
Denmark	191.2	130	2,707.6	7.1	4.8
Hungary	1,935.4	900	4,266.5	45.4	21.1
Ireland	1,154.4		4,219.3	27.4	
Italy	6,227.9	3,064.3	12,707.8	49.0	24.1
Latvia	913.5	640.2	1,701.6	53.7	37.6
Lithuania	569.5		2,792.	20.4	
Netherlands	288.2		1,958.06	14.7	
Poland	4,488.8		14,754.8	30.4	
Portugal	3,810.8	3,260.1	3,679.6	103.6	88.6
Romania	5,221.2	3,320	13,906.7	37.5	23.9
Serbia ³	1,187		5,112	19	
Slovakia	772.4	364.4	1,879.4	41.1	19.4
Slovenia	473.1	441.7	485.4	97.5	91.0
Spain	25,000	14,500	24,855	100.6	58.3
Sweden	1,166	844.4	3,219	36.2	26.2
UK	7,910	6,590	16,045	49.3	41.1

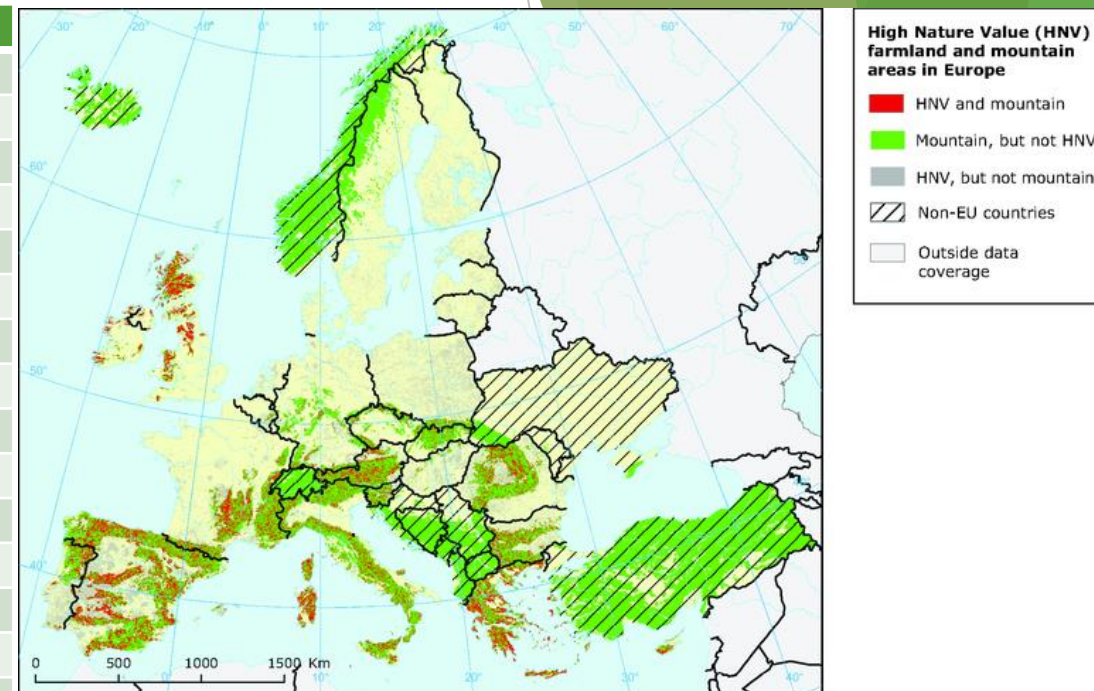


Figure 1: HNV farmland and mountain areas in Europe
Source: European Environment Agency (EEA) (2010).

Table 1 sources: 1: (Keenleyside et al., 2014); 2: 2013; Eurostat (2016); 3: (Arcotras, 2006); (EFNCP, 2006);



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Sustainability and Trends: Abandonment

Table 2: Research reporting land abandonment in the Carpathians

Locations (study site)	Country	Farmland abandonment (%)	Reference
Carpathians	Slovakia, Poland and Ukrania	20.7–13.3	Kuemmerle et al. (2008)
Arges County	Romania	21	Muller and Kuemmerle (2009)
Mazovia, Podkarpackie and Podlaskie	Poland	17.6	Keenleyside and Tucker (2010)
Several sites	Estonia	10–30	Peterson and Aunap (1998)
Latgale and other regions	Latvia	10.3–50	Nikodemus et al. (2005)
Vidzeme	Latvia	25–35	Ruskule et al. (2013)
Beskid Maly (Carpathians)	Poland	33	Kozak et al. (2004)
Carpathians and surroundings		30–56	Hostert (2010)

Table 3: Factors of land abandonment

Agro-ecological or biophysical	Socio-economic	Agricultural holdings features
Poor soils	Lack of competitiveness of the product	Low proportion of an active population in the place where the farmland is located
Climate limitations	High cost of land	Low proportion of farmers
Steep slopes	Small size of farmlands	Population emigration
Small plots	Difficulty to rent fields	Lack of succession in the farmland
Difficulty mechanizing fields	Competitiveness of the land departing from other economic alternatives	Family dispute of the inheritance
Bad accessibility to fields	Urbanization	Difficulties in farmland capitalization
Fields far from the village or the farm	Extensive/intensive management	Competence for the work force
Soil degradation: erosion, salinization		

Source: (Lasanta et al., 2017);



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Sustainability and Trends: Intensification

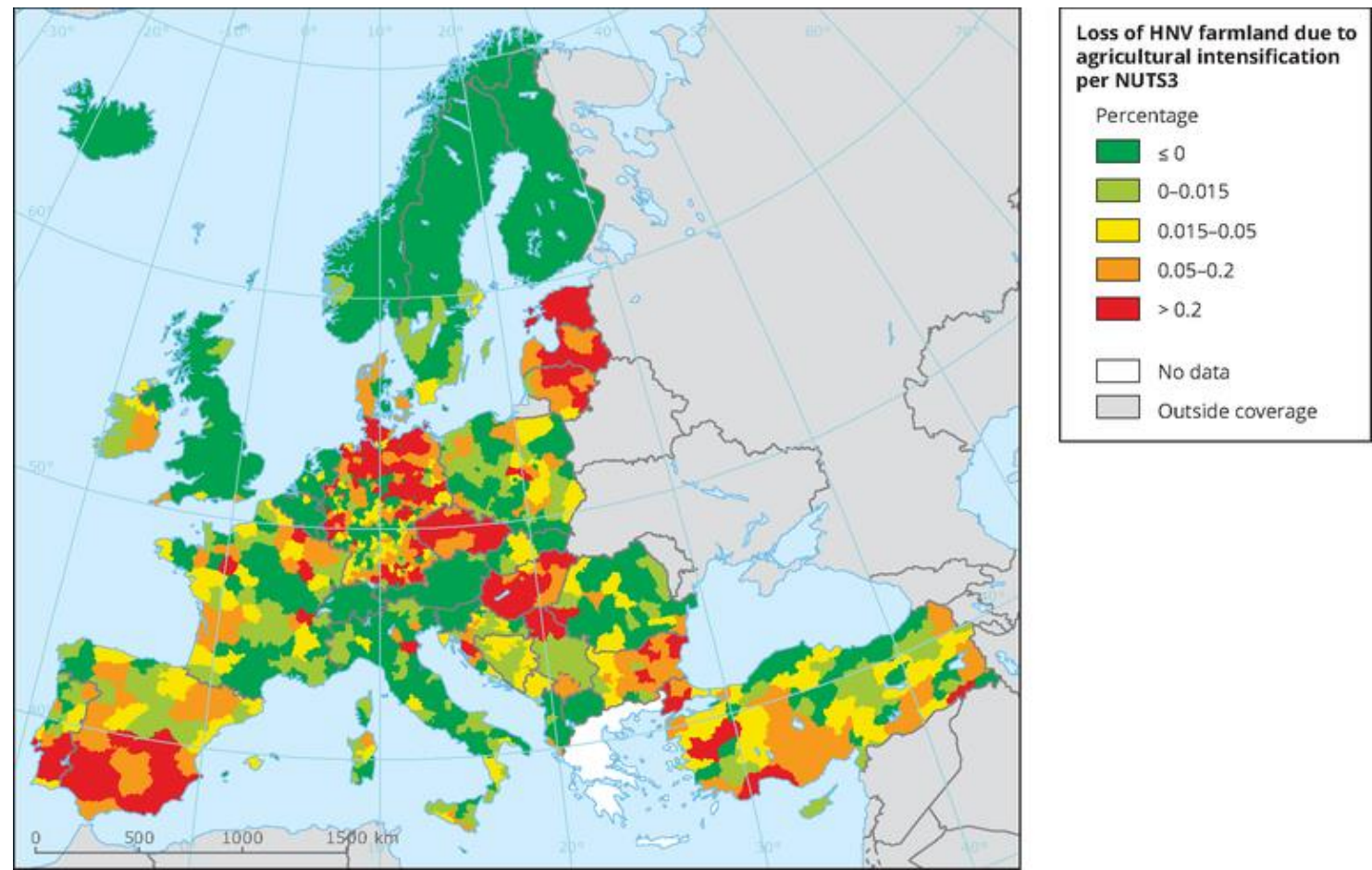


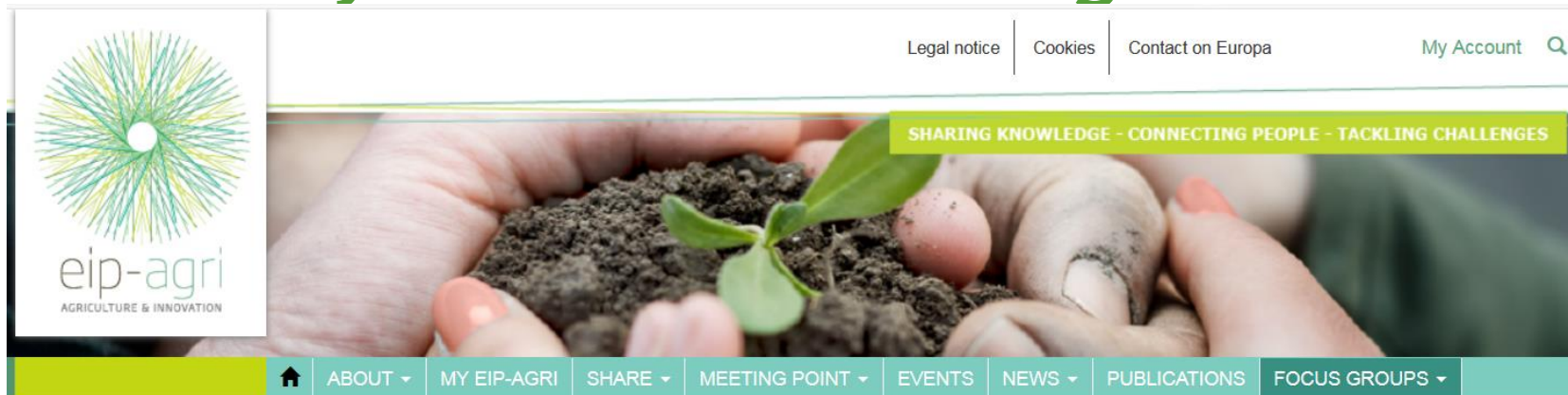
Figure 2: Loss of HNV farmland due to agricultural intensification
Source: European Environment Agency (EEA) (2010).



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Sustainability and Trends: EIPAgri Focus Group



European Commission > EIP-AGRI > Focus Groups > High Nature Value (HNV) - Farming profitability

Agroforestry: woody vegetation

Animal husbandry

Benchmarking farm performance

Carbon storage in arable farming

Circular horticulture

Dairy production systems

Diseases and pests in viticulture

Ecological Focus Areas

Fertiliser efficiency

Forest biomass

High Nature Value (HNV) - Farming profitability

How to make HNV farming more profitable without losing the HNV characteristics?

The **final report** of this Focus Group has been published.
Get all the information at a glance in the **High Nature Value Farming factsheet**.

Tasks:

- **Clarifying** the main socio-economic threats to the continued existence of HNV farming and the main opportunities. Use examples to illustrate these threats and opportunities.
- **Identifying** research/examples of methods/projects that result in economically viable or improved HNV farming systems (for example: use of specific machinery, alternative crops and livestock species, developing special products, small scale food)



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Sustainability and Trends: EIPAgri Focus Group

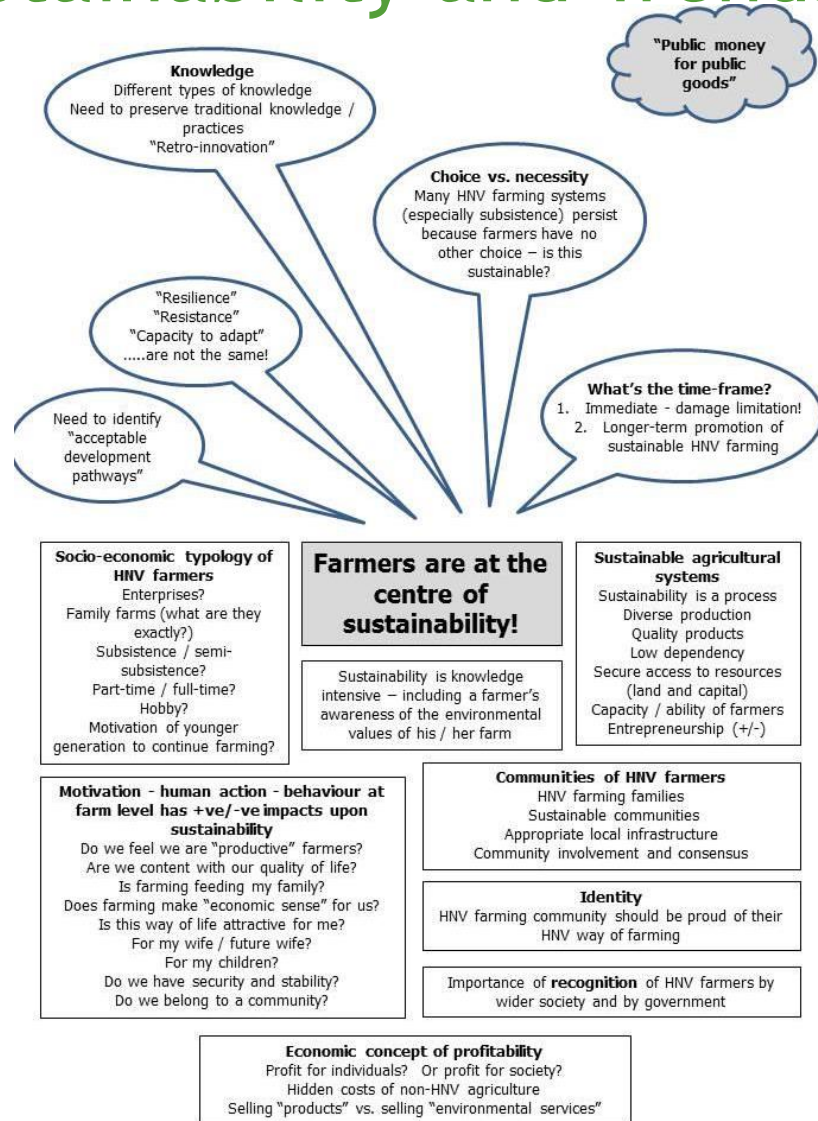


Figure 3: Relevant elements of 'sustainable HNV farming'?

Source: EIP-AGRI Focus Group Sustainable High Nature Value farming (2016)



Pathway 1: Networking and cooperation

Pathway 2: Farm diversification

Pathway 3: Increasing the selling price of HNV products and improving access to markets

Pathway 4: Adopting new technologies

Pathway 5: Increasing the physical output of the farm (within specific constraints)

Figure 4: Successful development pathways for HNV farming

Source: EIP-AGRI Focus Group Sustainable High Nature Value farming (2016)

1. The need to develop better understanding of HNV farming systems;
2. The need to understand the role of innovation in HNV farming systems;
3. The need to develop better technical and management solutions for HNV farming;

Figure 5: Enabling conditions / research needs

Source: EIP-AGRI Focus Group Sustainable High Nature Value farming (2016)

HNVLink Results: Trends. Innovations and Needs

Learning Areas

- 1) Dartmoor (GB)
- 2) Sitio de Monfurado (P)
- 3) Dalmatian Islands (HR)
- 4) Dealurile Clujului Est (RO)
- 5) Western Stara Planina (BG)
- 6) Västra Götaland (S)
- 7) The Burren (IR)
- 8) Thessalia (GR)
- 9) Causses et Cévennes (FR)
- 10) La Vera, Extremadura (ES)

Project management:

- A) Ciheam-IamM (FR)
B) AScA (FR)
C) EFNCP (ES)
D) UH (FI)

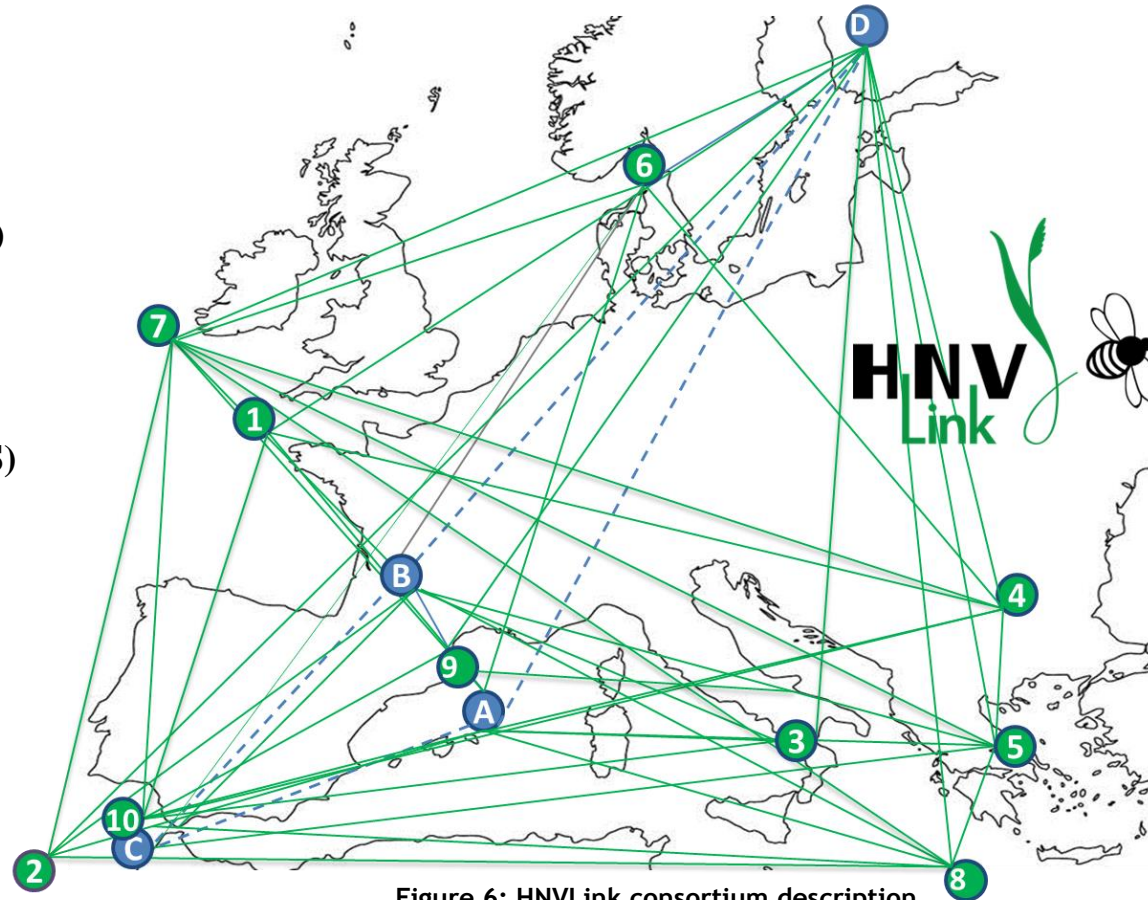


Figure 6: HNVLink consortium description

High Nature Value farming: Learning, Innovation and Knowledge: www.hnvlink.eu & info@hnvlink.eu

This project has received funding from the European Union Horizon 2020 research and innovations program under Grant Agreement No. 696391



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HNVLink Results: Trends. Innovations and Needs

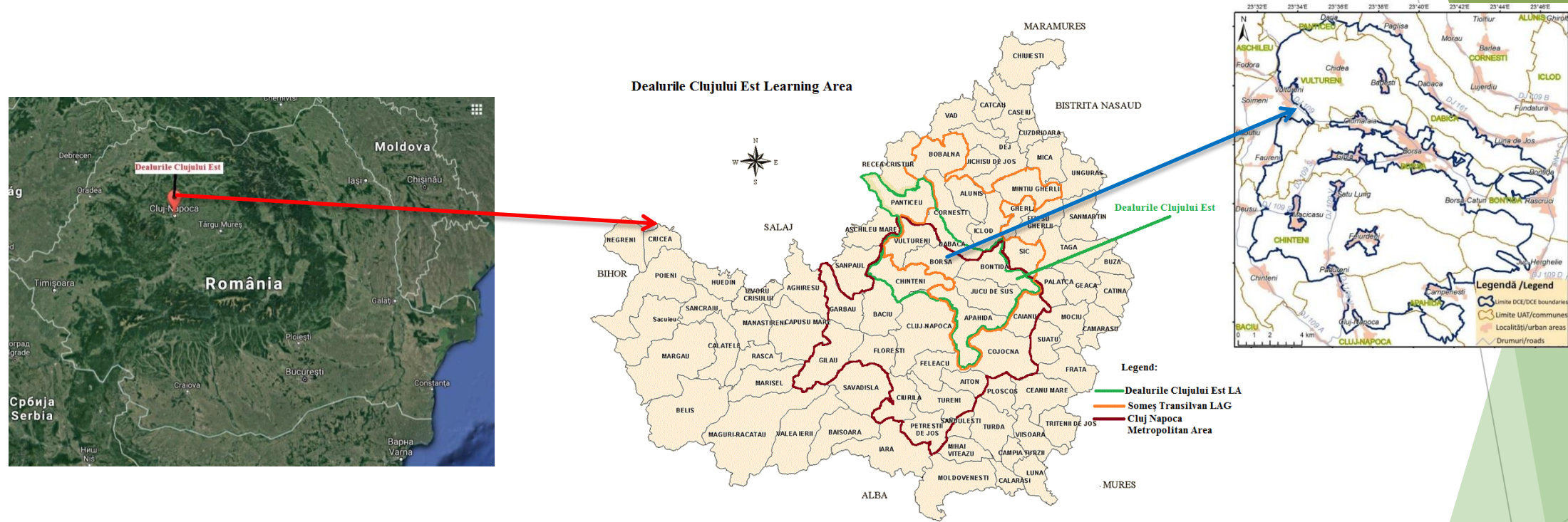


Figure 6: Dealurile Clujului Est Learning Area

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HNVLink Results. Trends. Innovations and Needs

Figure 7: Transect in Dealurile Clujului Est LA

Picture 1.a Traditional land use in Pâglișa Village, Dăbâca Commune



@ spring 2017

Picture 1.c Traditional land use in Vultureni Commune



@ spring 2017

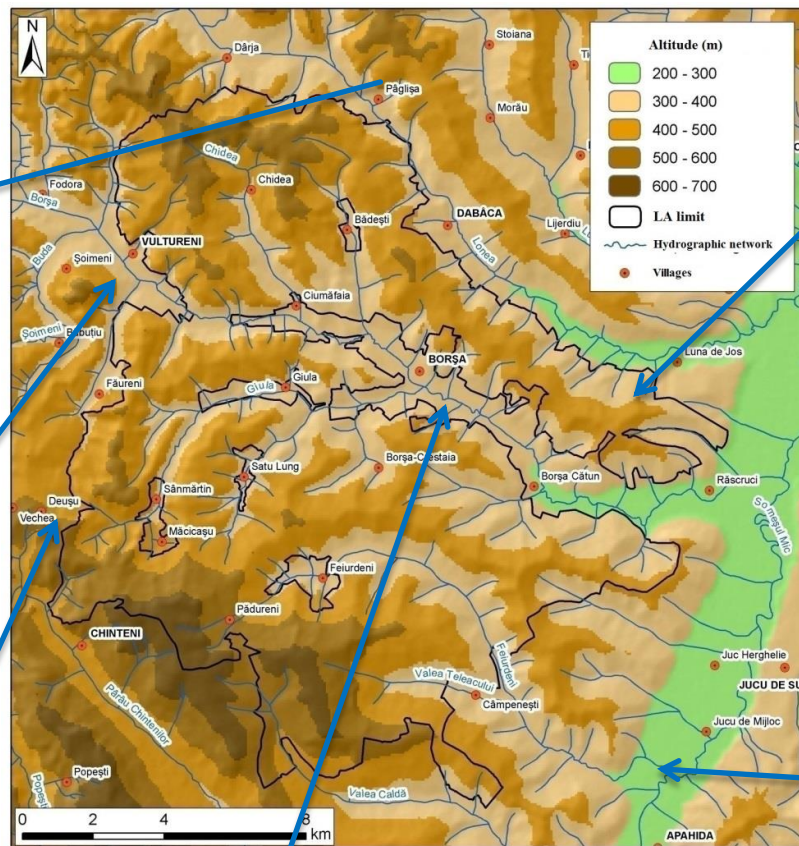
Picture 1.e Landscape in Chinteni Commune



@ spring 2017



Map 1. LA – Altitude map in Dealurile Clujului Est Natura 2000 site



Source: <https://fluturomania.files.wordpress.com/2014/04/slr-work-and-mutual-support-to-improve-butterfly-conservation-in-romania-andrei-crisan.pdf>

Picture 1.g Traditional landscape in Borșa Commune



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Picture 1.b Traditional land use in Luna de Jos, Dăbâca Commune (2014)



Source: @ Roșian George; Report prepared by Lepidoptera Association as a subcontractor in HNVLink project

Picture 1.d Corn monoculture in Dăbâca Commune (2014)



Picture 1.f Crop monoculture in Apahida Commune



Source: @ Roșian George; Report prepared by Lepidoptera Association as a subcontractor in HNVLink project



HNVLink Results. Trends. Innovations and Needs

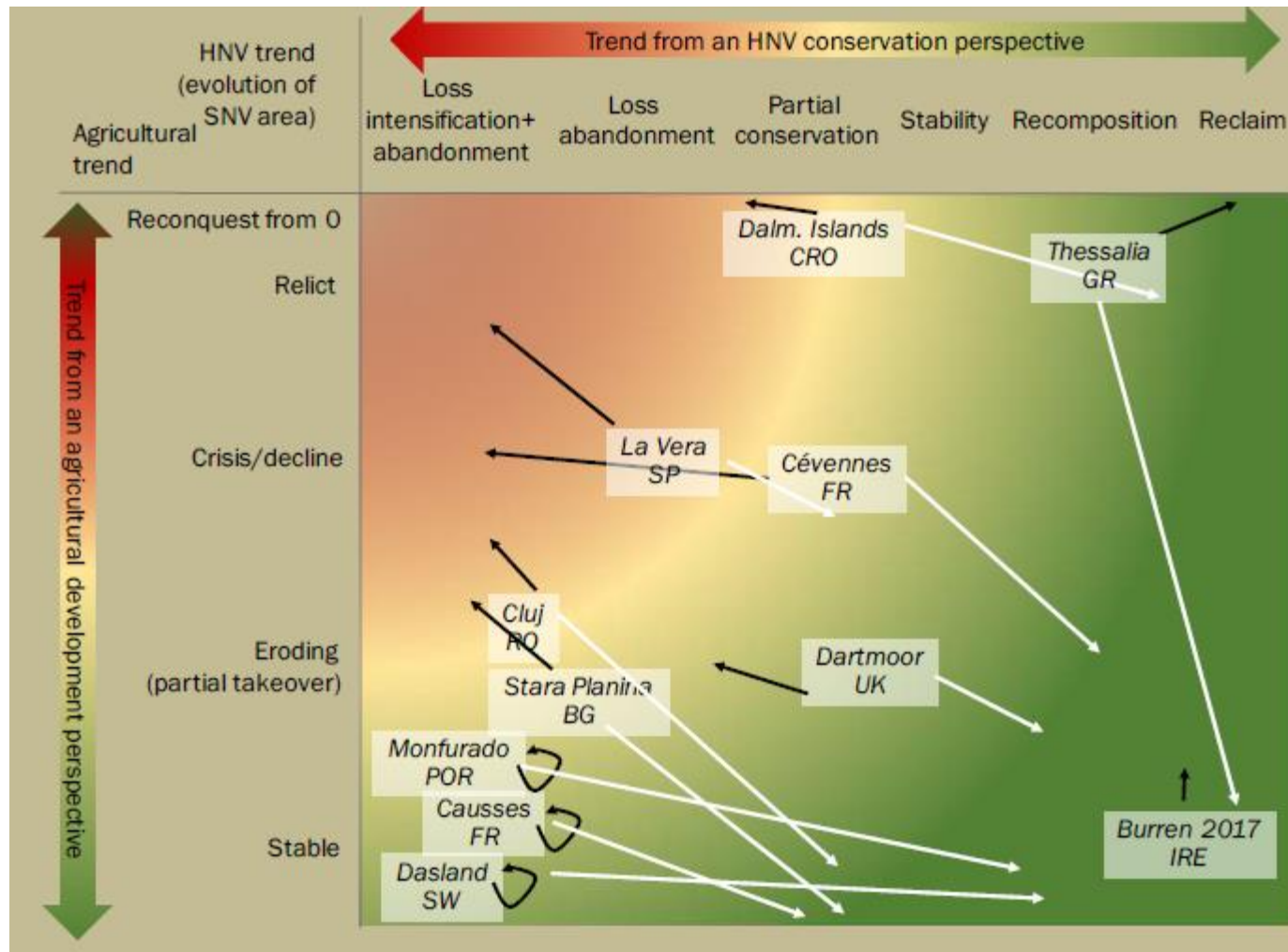


Figure 8: Trends identified in the 10 Learning Areas of the HNVLink project after the baseline assessment

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More info:

COLLECTION OF BASELINE
ASSESSMENTS AND HNV LINK
ATLAS

(<http://www.hnmlink.eu/outputs/>)
THE HNV-LINK ATLAS:
PERSPECTIVES ON 10 LEARNING
AREAS



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HNVLink Results Trends. Innovations and Needs

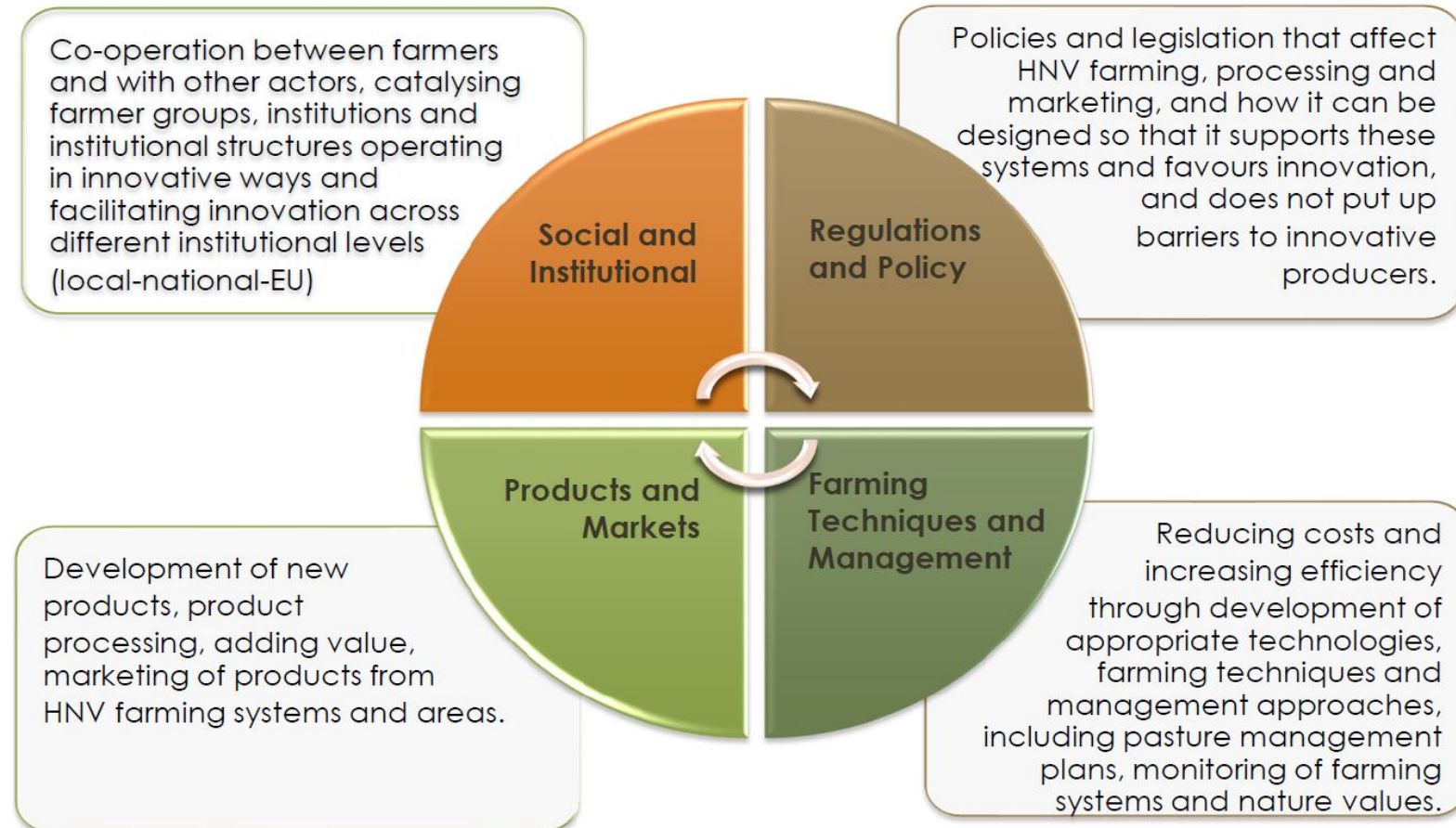


Figure 9: HNV innovations dimensions in the HNVLink project

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HNVLink Results. HNV Innovations/ Needs

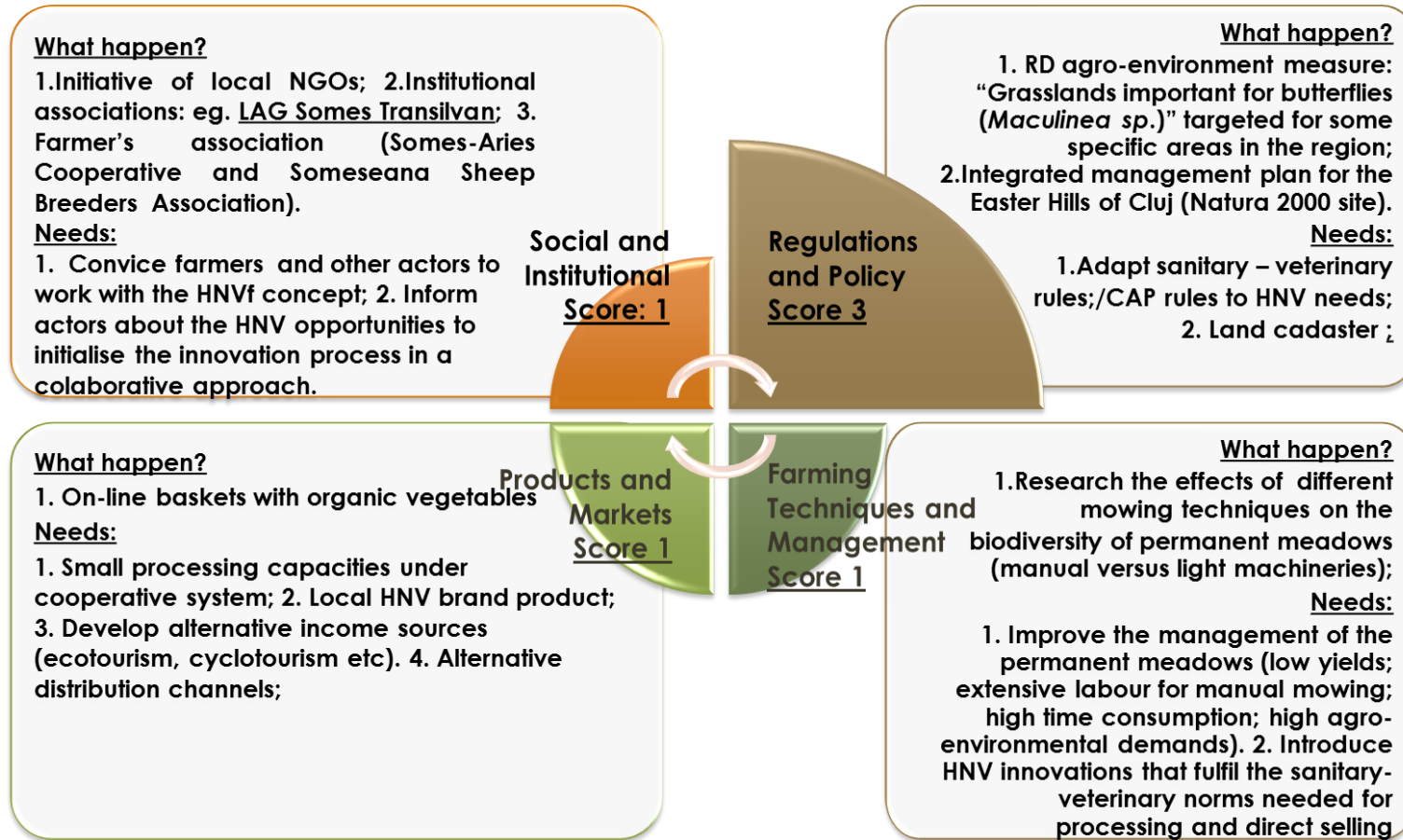


Figure 10: HNV innovations/needs identified in Dealurile Clujului Est learning area

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HNVLink Results. HNV Innovations/ Needs

Member State of LA	Social/ Institutional	Regulatory framework	Products/ Markets	Technical/ Management
BG	2	3	2	2
HR	2	1	3	2
FR	3	3	4	4
IE	4	3	1	2
GR	3	1	3	3
PT	2	1	2	1
RO	1	3	1	1
ES	1	1	1	1
SE	2	3	2	3
UK	4	2	1	3

More info:

The HNV-Link Compendium
Comparative collection of
High Nature Value
innovations, experiences,
needs and lessons from 10
European "Learning Areas"
(http://www.hnvlink.eu/download/D2.6_HNVLinkCOMPENDIUM.pdf)

Figure 10: HNV innovations scores in different LAs

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- 3.Lasanta T, Arnáez J, Pascual N, Ruiz-Flaño P, Errea MP, Lana-Renault N (2017). Space-time process and drivers of land abandonment in Europe. Catena 149: 810-823.
- 4.Redman M (2014). EIP-AGRI Focus Group High Nature Value (HNV) farming profitability Starting paper - prepared for the first Focus Group meeting in Madrid, Spain (12 - 13 June 2014). European Commission: 1 - 17;
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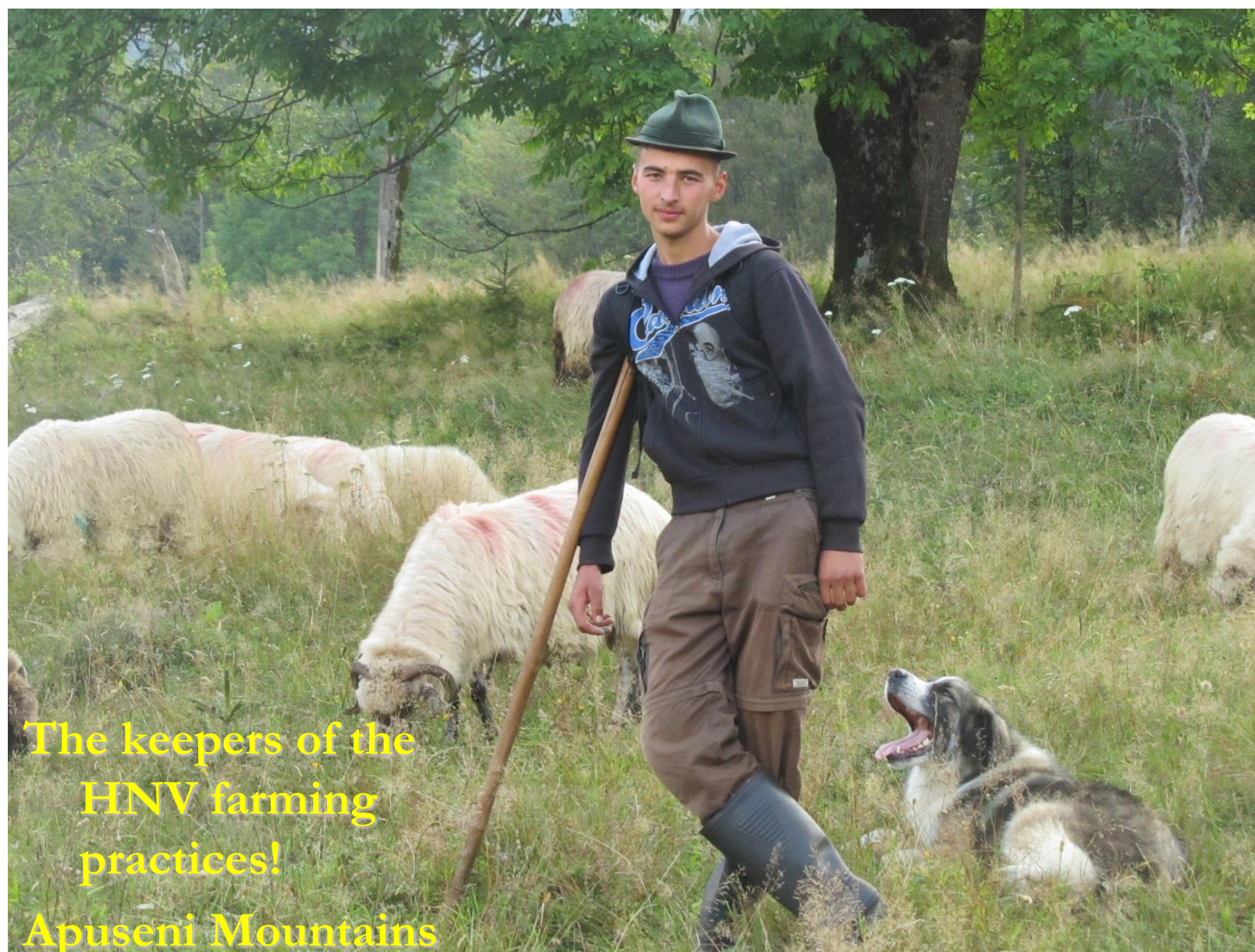


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Retezat Mountains**



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Dealurile Clujului**



For more info....

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