Adaptation of an ecological and pastoral diagnosis to the Albanian context: Challenges and lessons learned

A. Garnier^{1*}, C. Bernard¹, P. Dobi², F. Launay³, F. Lerin¹, J. Marie⁴, B. Medolli¹, B. Sirot⁵

¹Centre international de hautes études agronomiques méditerranéennes - Institut Agronomique Méditerranéen de Montpellier (CIHEAM-MAIM). Route de Mende, 3191, 34093, Montpellier, FRANCE
 ²Agricultural University of Tirana (AUT). Kodër Kamëz, SH1, 1000, Tirana, ALBANIA
 ³Institut de l'élevage (IDELE). Place Pierre Viala, 2, 34060 cedex 1, Montpellier, FRANCE
 ⁴Parc National des Cévennes (PNC). Place du Palais, 6 bis, 48400, Florac, FRANCE
 ⁵Conservatoire des espaces naturels du Languedoc Roussillon (CEN-LR). Rue Henri Becquerel, 1025, 34000, Montpellier, FRANCE

*algarnier@iamm.fr

Abstract. The European Life+ Program "Mil'Ouv" (standing for MILieux OUVerts/open landscapes) has developed an innovative method of diagnosis to allow an efficient management of pastoral resources that is both environmentally sustainable and economically profitable. Indeed, in France, lots of diagnosis methods are already in use by technicians and extension services. However, most of the time, these methods are either too general or too specific and do not combine ecological and pastoral dimensions. Thus, the diagnosis proposed by Mil'Ouv is based on a multiscale analysis crossing the two perspectives. Each diagnosis is therefore carried out by a naturalist, a livestock specialist and the breeder him/herself. This method was designed in and for the Mediterranean part of France. There was a practical and analytical issue of extending and adapting it to another context. With a research-action program BiodivBalkans, it was decided to adapt this method to the Albanian situation, which was, in a way, the farthest from the reference model. From this adaptation process, three main results can be highlighted: (1) strengthening of arguments and examples to launch a "pastoral debate" in Albania (ignored until today) (2) recognition of the local knowledges of the Albanian breeders as an unavoidable element for a sustainable pastoral management (3) identification of eco-pastoral elements to be included in the Code of Practice of a Protected Geographical Indication (PGI) on a kid goat meat from a local breed.

Keywords. Pastoralism - open landscape - Albania - France

De la France à l'Albanie, adaptation d'un diagnostic éco-pastoral

Résumé. Le programme européen Life+ Mil'Ouv (pour MILieux OUVerts) a développé et mis en œuvre une méthode innovante de diagnostic dont l'objectif est double : une gestion plus durable et plus efficace de l'environnement et des ressources naturelles. En France, de nombreuses méthodes de diagnostic existent, pratiquées sur le terrain par les techniciens et services de vulgarisation. Cependant ces méthodes sont souvent soit englobantes, soit très spécifiques et ne combinent pas les dimensions écologique et pastorale. Ainsi, Mil'Ouv a proposé un diagnostic éco-pastoral original, fondé sur une analyse multi-scalaire et un trio aux compétences complémentaires: naturaliste, spécialiste de l'élevage (pastoraliste), et éleveur lui/ellemême. Cette méthode a été conçue dans et pour la France méditerranéenne, par conséquent son extension et son adaptation à un autre contexte ont nécessité certaines adaptations d'ordre analytique et technique. Avec le programme de recherche-action BiodivBalkans, cette méthode a subi une série d'arrangements pour être adaptée à la situation albanaise, éloignée du modèle de référence. Trois principaux résultats sont attendus de cette adaptation: (1) la consolidation des arguments et des exemples pour lancer un «débat pastoral» en Albanie (jusqu'à présent inexistant) (2) la reconnaissance des savoirs locaux des éleveurs albanais en tant qu'éléments incontournables pour la gestion pastorale (3) l'identification des éléments éco-pastoraux pouvant être inclus dans le cahier des charges d'une IG sur la viande de cabri d'une race locale.

Mots-clés. Pastoralisme – milieux ouverts – Albanie – France

I - Introduction

The European Life + program "Mil'Ouv" aims to improve pastoral breeding of natural resources as well as to maintain agro pastoral habitats (especially "open landscapes") in Mediterranean regions. Based on a sample of 130 farms, the program has designed a method to carry on-site diagnosis, called "eco-pastoral diagnosis". The aim is to improve the management of pastoral resources in a way that is both sustainable from an environmental point of view and more efficient from an economic perspective.

In France, the testing zone was located in the southern area of the Massif Central, in the territory of the Unesco Site called "Causses and Cévennes - cultural landscape of the Mediterranean agro-pastoralism". In 2015, this eco-pastoral diagnosis was tested and transferred in Albania through the CIHEAM-MAIM BiodivBalkans program² (a major project implemented by the Mediterranean Agronomic Institute of Montpellier on agro-sylvo-pastoral issues in the Mediterranean). For Mil'Ouv project it was the opportunity to test the application of the method in another Euro-Mediterranean territory; for BiodivBalkans to (1) give more arguments to the pastoral advocacy in Albania and (2) to introduce, in the Geographical Indication building process for the Hasi kid goat meat, fundamental environmental-pastoral requirements.

II - Mil'Ouv, an innovative method of eco-pastoral diagnosis

The original Mil'Ouv method stems from two main observations: (1) the decline of pastoral activities in France and in other Mediterranean and European regions is causing landscape closure, a phenomenon that entails degradation of opened landscapes biodiversity and increases fire risk (Lepart *et al.*, 2007); (2) breeders that are facing landscape closure and encroachment (i.e. decreasing forage resource) try to overcome this trend and ask for innovative and participatory devices to find solutions (Buffin *et al.*, 2014).

Therefore, the eco-pastoral diagnosis developed by Mil'Ouv program combines complementary skills of two technicians (a naturalist and a pastoral specialist), and the collaboration of the breeder. Only he will be able to know the state, availability and access of natural resources at farm scale. In that line, the idea is to co-construct strategies and propositions to optimize the use of resources and the sustainable management of pastoral areas. The second originality of the method is precisely to integrate several scales of analysis (farm, management unit, topofacies). It enables to become more specific of environmental stakes and propose appropriate adaptation of pastoral practices (grazing periods/grazing paths, enclosure creation, etc.).

The method develops the following steps: (1) a global understanding of the farm functioning, based on a detailed interview with the breeder; (2) a field diagnosis to understand the interactions between pastoral practices and vegetation dynamics at different scales; (3) a monitoring phase, to assist breeders in their management choices and evaluate the impact of changing breeding practices, both on the environment and on the farming system.

III – Adaptation for the Albanian context

Albania is, in a way, one of the most distant cases possibly found from the French context in terms of institutions and production organization, as well as resources status and evolution. The transferring process of this eco-pastoral diagnosis required several adjustments to make it fully operational in Albania. The challenge was to expand its scope without losing its major principles

¹ http://www.cenlr.org/valoriser/projets/milouv

² The BiodivBalkans program (2012-2016) is financed by the FFEM (*French Global Environment Facility*) and implemented by MADA (*Mountain Area Development Agency*) and the Ciheam-MaiM.

and originality. Three major adjustments have been done to fit to the Albanian context. Once modified, the method has been tested on-adjusted during a collective one-week mission on the Hasi area in Albania (Garnier *et al*, 2016).

1. Territory and diagnostic

The original diagnostic practiced in France by Mil'Ouv integrates three levels of analysis: farm level, management unit level and homogenous ecological plots level ("topo-facies"). In the original method, the territorial level was implicit, due to the important knowledge accumulation available to specify the area from ecological, geographical and historical perspectives.

In Albania, where livestock farming systems are both highly diversified and based on the use of natural resources (Bernard *et al.*, 2014a) the analysis of agrarian landscapes and landscape ecology is necessary. However, there is a low level of information available on local pastoral situations. The first adaptation was to make explicit the macro pastoral-ecosystem which is going to be considered during the "eco-pastoral diagnosis", thanks to a preliminary identification and description of the local livestock farming system related to particular landscapes ("pastoral massifs").

2. Farm scale and collective pastures

In France, farm level is often the most appropriate and most frequent scale of diagnosis. It constitutes the largest unit where ownership and management rights are overlapping. However, in Albania, a large part of grazing areas is collective. Property and management rights do not always overlap (Bernard *et al.*, 2014b). To that regard, it was important to extend the analysis to a higher level - but still the smallest unit of common land management. In north-eastern Albania, the 'lagja' constitutes this unit: it is a village quarter assigned to a lineage (family and relatives) with a common grazing sector (De Rapper, 1998; Bardhoshi N, 2008). In the adaptation of the method to Albania, the 'lagja' is an extra level of analysis (Figure 1). Thus individual goals can be taken in account at farm scale and collective goals at 'lagja' or territory scale.

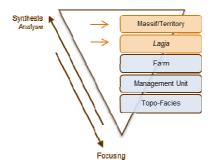


Fig.1: Integration of two levels of analysis into the diagnosis methodology

3. From 'open areas' to all type of grazing lands

In agro-sylvo-pastoral territories and especially in Albania, not only the herbaceous layer but also bushes, shrubs and forests are used as grazing resources. On the Hasi karstic plateau, heathlands and oak forests are of paramount importance both in terms of space, and as part of goats diet (Garnier, 2014).

The eco-pastoral diagnosis as it has been designed for France focuses on the evolution of pastoral open landscapes. This choice made sense because these types of landscapes show major conservation issues across European Union, due to the decline of pastoralism and landscape closure (Blondel, 2006). However in the Albanian situation and regarding the overall objective of the method, it was suitable to extend the diagnosis from open landscapes to other

Title of edition 3

grazing areas, including forest and scrublands. The aim was to cover all areas presenting pastoral and ecological interests and challenges.

IV - Conclusions

The adaptation of this eco-pastoral method has revealed its usefulness in the Albanian contex. First, it allowed the program mentioned and its stakeholders to inform the environmental-pastoral issues in a systematic perspective in the frame of a GI building process. Moreover, this diagnosis made the breeders realize and able to demonstrate how their practices and interests are closely linked to the environmental state of grazing areas. The diagnosis also highlighted the fundamental interest to integrate local practitioner knowledge in comprehensive and collaborative ecological-pastoral strategies.

From the national point of view, this experiment should be continued, deepened and institutionalized. Agro-sylvo-pastoral systems are a major challenge (although unknown!) in Albania: most of the meat (with high quality standards) consumed by the population is produced in these High Nature Value breeding systems (Oppermann et al., 2012). Livestock improvement strategies ignoring this fact, whatever their success could be, will miss the opportunity to combine rural and sustainable local development with provision of high quality products, agrobiodiversity conservation and landscape ecology protection. A lot of reasons not to do so!

Acknowledgments

The authors gratefully acknowledge the three breeders from Hasi region without whom the study would not have been possible: Arben Cahani, Kastriot Dajçi and Muharrem Xhibexhi.

References

- Bernard C, Boutonnet J-P, Garnier A, Lerin F, Medolli B 2014a. Quality labels: a way to support the development of pastoral resources? Methodological insights based on the monographic analysis of Hasi Region: Northern Albania. In: Baumont R., Carrère P., Jouven M., Lombardi G., Lopez-Francos A., Martin B., Peeters A., Porqueddu C. (eds.). Forage resources and ecosystem services provided by mountain and Mediterranean grasslands and rangelands. Zaragoza (Espagne): CIHEAM-IAMZ. p. 637-640. (Options Méditerranéennes: Série A. Séminaires Méditerranéens, n. 109).
- Bernard C, Lerin F, Crouteix O, Lopez R 2014b. Forests and pastures' devolution process in Albania: a sustainable management of Mediterranean commons? Montpellier: CIHEAM-IAMM. Inception Study on Communal Forestry in Albania, 2013/12/04, Tirana (Albanie). 31 p. Version albanaise: Preçesi i devoluimit të pyjeve dhe kullotave në shqipëri: një manaxhim i qëndushëm i të përbashkëtave mesdhetare? 33 p.
- **Blondel J 2006.** The "design" of Mediterranean landscapes: a millennial story of humans and ecological systems during the Historic Period. In: *Human Ecology*, n. 34, p. 713-729.
- **Buffin C, Gonin Ă, Schrader C 2014.** Programme LIFÉ Mil'Ouv. Compilation et évaluation des méthodes et outils de diagnostic et d'évaluation éco-pastorale de la gestion des milieux ouverts méditerranéens. Projet tutoré de Licence professionnelle GENA: SupAgro Florac (France). 101 p.
- De Rapper G 1998. La frontière albanaise. Famille, société et identité collective en Albanie du Sud. Thèse de Doctorat : Université de Paris X, Nanterre.
- Garnier A, Bernard C, Dobi P, Launay F, Lerin F, Marie J, Medolli B, Sirot B 2016. Adaptation de la méthode de diagnostic éco-pastoral Life+ Mil'Ouv au contexte albanais. (CIHEAM-IAMM Working paper).
- Garnier Á 2014. Pratiques d'élevage et diversité paysagère dans le Has albanais. Montpellier (France) : CIHEAM-IAMM. 118 p. (Master of Science, n. 144).
- Lepart J, Marty P, Klesczewski M 2007. Faut-il prendre au sérieux les effets du paysage sur la biodiversité? In: Berlan-Darqué M., Luginbühl Y., Terrasson D. (eds.). Paysages : de la connaissance à l'action. Versailles : Quae. p. 29-40.
- Oppermann R, Beaufoy G, Jones G 2012. High nature value farming in Europe: 35 European countries, experiences and perspectives. Ubstadt-Weiher (Allemagne): Verlag Regionalkultur. 544 p.
- **Bardhoshi N 2008.** *Mbi te drejtën kanunore ne krahinen e Hasit, Tirane, Kultura Popullore.* Tirana : Instituti i Antropologjise Kulturore dhe Studimit te Artit.