How does decentralization of pasture management affect the local communities? Evolution and perspectives from Southeast Albania

Florjan Bombaj, Dominique Barjolle, François Casabianca, Theodosia Anthopoulou

How does decentralization of pasture management affect the local communities? Evolution and perspectives from Southeast Albania

Florjan Bombaj[a], Dominique Barjolle[b], François Casabianca[c], Theodosia Anthopoulou[d]

[a] *UMR Innovation – Montpellier SupAgro, France, florjan.bombaj@supagro.fr*

[b] *ETH Zurich, Switzerland, barjolle@ethz.ch*

[c] *INRA Corte, France, francois.casabianca@inra.fr*

[d] *Panteion University, Greece, t.anthopoulou@gmail.com*

Abstract: *This paper examines how mountain communities in the Albanian post-communist period are affected by the recent decentralization process of the management of common pastures. Currently, common pastures represent 58% of the total Albanian pastures. Therefore, the issues around their management are very important for the mountain communities and the policy makers because they are the main resource for the development of the livestock activity and consequently, for the livelihood of the mountainous communities. Theory on the commons highlights the design principles for a good governance of the commons (Ostrom, 1990). More particularly, the governance needs a legal and institutional framework that allows avoiding the "tragedy of the commons" (Hardin, 1968). As a consequence, local communities need to build proper resource governance, which allows them responding well to changing conditions and establishing a resilience-based management of their common resource (Bestelmeyer & Briske, 2012).*

Pasture management in Albania has faced several changes in administrative modalities related to the assignment of rights and duties, which have affected pasture governance mechanisms at all territorial levels: national, regional, municipalities, and villages. As a transition privilege, the priority for attributing the use rights is given to the old authorized beneficiaries. In cases where they are not financially able, the use rights can be given outside the group of previous authorized beneficiaries.

The main hypothesis discussed in this paper is that the institutional changes affecting the access and the use of the common pastures may weaken or strengthen the local communities according to their capacities to adapt their collective governance modalities. This paper examines how the farmers, at a very local level, react to the recent institutional change in the resource use of their communal pastures. The analysis is based on social surveys applying the Likert method to measure the perception of farmers affected by the legal and institutional changes in the attribution of the rights to use and the obligations related with the management of the common pastures. The discussion is done following the analytical grid proposed by Ostrom (2009) regarding the management of the commons.

***Keywords**: Post-communism, Pasture management, Commons, Albania*

1 INTRODUCTION

This paper examines how mountain communities in the Albanian post-communist period are affected by the recent decentralization process of the management of common pastures. Currently, common pastures represent 58% of the total Albanian pastures. Therefore, the issues around their management are very important for the mountain communities and the policy makers because they are the main resource for the development of the livestock activity and consequently, for the livelihood of the mountainous communities. The summer pastures allows feeding the livestock in summer for low cost compared to the winter period. Their rich botanical flora composition gives meat and cheeses a particular flavour and specific quality, which is highly appreciated by the consumers. In Albania, and particularly in the vast pastures in the South, those products have a strong reputation even outside the production area (Bombaj et al., 2017).

Theory on the commons highlights the design principles for a good governance of the commons

(Ostrom, 1990). More particularly, the governance needs a legal and institutional framework that allows avoiding the "tragedy of the commons" (Hardin, 2009). Precisely, in *vacuum* situation created by incomplete decentralization may emerge a "tragedy of open access resource" (Mearns, 2004). As a consequence, local communities need to build proper resource governance, which allows them responding well to changing conditions and establishing a resilience-based management of their common resource (Bestelmeyer & Briske, 2012).

The decentralization of natural resource management in different countries has different effects according to the context and the way the reforms are designed and implemented. Regarding Albania, all the post-communist governments have decided and put into force decentralization policies to adapt to the pasture governance modalities of the European Union (EU) countries. Since the fall of communist regime in 1991, there are many issues related to the governance structures at regional and local levels.

Previous research in Albania has shown that the success of decentralization depends of the ability of the local community to adapt its customary rules and local traditional practices. More precisely, Rama & Theesfeld (2011) have described an effective self-governed forest management system based on the change from free access to exclusive rights for forests, which were previously managed under so-called "customary rules". In this case, the exclusivity use right has been favourable for the local community independently of the decentralization process. Another research has shown that the property rights may not become institutionalised if social practices are not considered legitimate (Stahl et al., 2009). They may easily change over time, as local actors adapt their strategies to new conditions (Vedeld., 2000).

Pasture management in Albania has faced several changes in the administrative modalities related to the assignment of the rights and the duties which have affected the pasture governance mechanisms at all territorial levels: national, regional, municipalities, and even the villages. Explicitly, the successive decentralization processes have given the right to the municipalities to manage their common pastures, which were legally recognized before as "communal pastures" and were free for the authorized beneficiaries (farmers originating and living in the given municipality). The recent law (in 2016) has changed the use rights of the communal pastures, meaning that the authorized beneficiaries will access to "exclusive use rights" by paying for them. As a transition privilege, the priority for attributing the use rights is given to the old authorized beneficiaries. In case where they are not financially able to pay the given price, the use rights can be given outside the group of previous authorized beneficiaries.

Since the fall of communism, the effects of the changes in the pasture governance mechanisms have never been studied in-depth to date. Thus, it is important to analyse how local communities, facing extreme institutional change, under certain conditions, may adapt to the new context by creating appropriate local governance mechanisms. Consequently, greater inclusion of relevant actors, and development of a governance process that is flexible to changing conditions may be a key factor for creating incentives for effective participation and collective action.

The main hypothesis discussed in this paper is that the institutional changes affecting the access and the use of the common pastures may strengthen the position of local farmers' communities in resource management or, in turn, weaken it through land use dispossession.

This paper examines how the farmers, at a very local level, react to the recent institutional change in the resource use of their communal pastures. The analysis is based on social surveys applying the Likert method to measure the perception of farmers affected by the legal and institutional changes in the attribution of the rights to use and the obligations related with the management of the common pastures. The discussion is done following the analytical grid proposed by Ostrom (2009) regarding the management of the commons.

This paper is organized as follows: the second section analyzes the theory about the decentralization of the management of the natural resources and their impacts for the local communities. The third section specifies the Albanian historical and current decentralization context for the common pastures. The fourth section specifies the case study setting and the analytical methods. The fifth section presents the evidence-based results on how local farmers have reacted to the recent changes, and how the recent legal and institutional changes affect the

pasture management in the field. In the sixth section, the findings are discussed.

2 THEORETICAL BACKGROUND AND RESEARCH QUESTIONS

Many natural resources are common-pool resources, and their good governance poses different challenges for public authorities and local communities (Andersson & Ostrom, 2007). That's why many countries have decentralized the governance of their natural resources (Shigaeva et al., 2016; Marothia, 2010; Mearns, 2004). However, evidence shows that decentralization does not uniformly lead to better or worse local governance (Upton, 2012; Hartter & Ryan, 2010; Ostrom, 2001). Consequently, when at the local level expected degree of self-determination has not been realized, local users may create their own practices while official management plans are largely ignored and unenforced (Dyer et al., 2014; van Gils et al., 2014; Addison et al., 2013).

All successful cases of good self-governance show respecting more or less eight basic principles (Ostrom, 1990). These principles identify, at different levels, to what extent the actors are collectively organised for managing their common resource. Appropriate governance of a common resource seems to be better, if the complexity of rules can evolve and adapt over time. The key to effective governance arrangements lies in the relationships among actors for whom the resource governance is a stake (Andersson & Ostrom, 2007) and for whom building social capital is a key for the future (Pretty, 2003).

Globally, pastures are one of the most important natural resource for mountain communities. They are continuously threatened by the instabilities in the governance modalities. Furthermore, innovative institutional solutions are likely to fail if they are not undertaken in holistic manner, including their perspective as well as the state's view (Bonfoh et al., 2016). In different countries where the decentralization of the pasture management has occurred, evidence shows defensive attitudes of local actors' excluded of their pastures' governance. Their reaction has occurred under a weak capacity of the state to provide a coherent legislative framework for sustaining the local initiatives (Upton, 2012).

The process of pasture decentralization may be long, creating gaps for the local communities not allowing them to be part of the resource governance (Shigaeva et al., 2016.) That's why, in some countries, local communities have created groups to participate in the governance modalities (Addison et al., 2013; Vedeld, 2000; Ho, 2000). Mostly governance institutions are imperfect responses to the challenge of collective-action problems. These "functioning failures" may exist at any level of governance and that's why complementary back-up institutions at higher or lower levels of governance can help offset some of the failures.

Consequently our initial hypothesis leads us to respond to the following research questions:

1) In which way governmental and institutional changes in the resource use affect the pasture management at the local level?

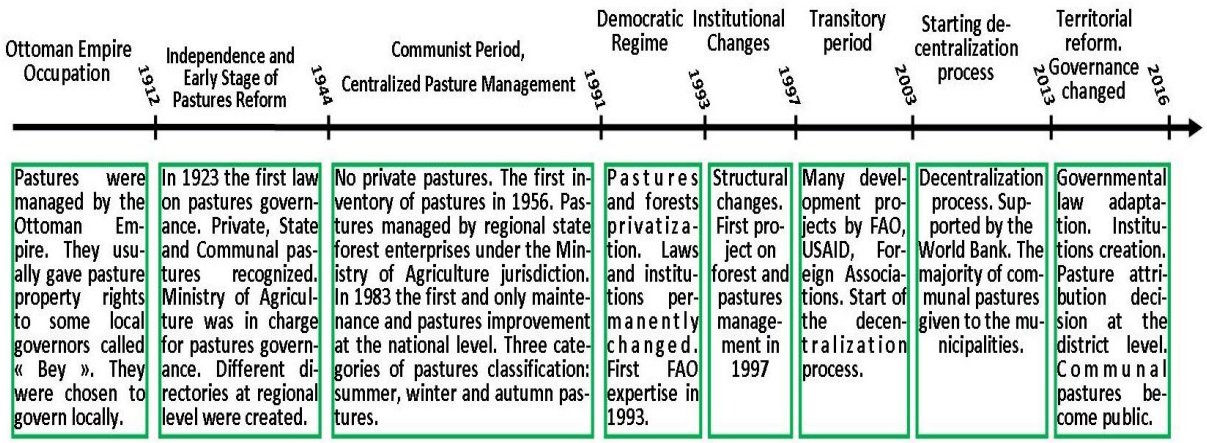
2) What resource governance might be the most appropriate according to various types of farmers and grazing systems in different communities affected by these institutional changes?

Using a mixed-methods approach, and drawing on recent research on common-pool resources, this paper provides an empirical analysis of current outcomes of decentralized agro pastoral governance in the Mountains of southeast Albania.

3 CONTEXT OF THE COMMON PASTURE MANAGEMENT RULES

Albania has known long and frequent institutional changes in pasture management that date since the Ottoman Empire occupation. In Figure 1 below, some historical key changes in the pasture management are shown.

Figure 1: Chronological changes in the pasture management in Albania



Source: Authors' elaboration

Three main periods of pasture management can be observed during history:

- The first period from the Ottoman Empire to the arrival of the communist regime in 1944 can be considered as a mixed regime where state, private and communal pastures have coexisted. The communal pastures were preferentially given to the local farmers. No historical information on pasture prices exist for this period.
- The second period is the communist regime with a centralized way of managing the pastures: all pastures were owned by the state and managed at central level. Pastures were given in priority to livestock cooperatives created after 1953 in the country.
- The third period is the democratic regime starting from 1991. Rapid and frequent changes have caused instability in the modalities of pasture governance mechanisms. The present regime is a mixed pasture governance regime where state, private and communal pastures coexist.

From 1993 to 2013, the decentralization process has gradually given to the municipalities the right to manage their communal pastures. Beginning in 2003, the first programs aiming to decentralize the pasture management governance mechanisms started with the support of the World Bank (Muharremaj et al., 2008, Weiland, 2010, World Bank, 2004).

The main goal was to complete the transfer of pastures and forests to the municipalities by increasing their capacity to sustainably use pastoral and forest resources. Pastures managed by the municipalities were recognized as communal pastures, which had the status of non-exclusive and free use.

Meanwhile, farmers had to pay to access state and private pastures. The public authorities of the district managed the state pastures. The rule was to attribute preferably the state pastures to local farmers, under conditions of respecting good management practices defined by law. Thus, local farmers needed to rent the pasture, but must also follow the herd sanitary guidelines, appropriately maintain the pasture condition and respect the neighboring pasture boundaries of the other farmers. In case where local farmers weren't able to rent the state pastures, these were allocated to other farmers from neighboring regions. The private pastures were given to farmers who paid the highest price. These were called big transhumant herders.

Since 2003, the pastures are classified as follow:

a) State pastures: owned and managed by the state;

b) Communal pastures: owned by the state but managed by the municipalities that allocate them to the local farmers;

c) Private pastures: owned by private individuals.

In 2006, state pastures account for 36% of the total pastures, the communal for 58% and the private for 6% (see table 1).

Table 1: Type of pasture according to ownership

Type/Property	Total	State Pastures	Communal Pastures	Private Pastures
	Surface in Thousand hectares (ha)			
	000'Ha	Ha	Ha	
Summer Pastures	294	116	165	13
Winter Pastures	125	36	79	10
Total	419	152	244	23
Percentage	100	36	58	6

Source: (Shundi, 2006)

The Territorial Reform, initiated in 2013 but implemented only in 2016, merged the communal and state pastures into public pastures modifying the pasture governance mechanisms. More precisely, communal pastures are now managed at the district level as a result of the merging of municipalities into larger administrative entities, like the case of state pastures (within decentralization)

They are preferentially given to the local farmers, who must now pay to use them. The access conditions for the communal pastures have not changed. Nevertheless, what has changed is the exclusivity over the right to use the communal pastures.

Looking back to the long history of pasture management, the rules have evolved with time, with only recently a change from free access to payment for exclusive use rights. What is expected from this last reform is a better use of this resource, with long-term preoccupation of the farmers, and less risk of under or over-use of the resource. We will analyse the current situation to discuss if and how those effects are obtained in reality.

4 RESEARCH DESIGN AND METHODS

4.1 Research design

Our overall methodology is a collection of qualitative and quantitative, primary and secondary data. At the national level, interviews and documents were consulted to analyze the evolution of decentralization of pastures. After data on general context were collected a case study approach was used: documents, grey literature, and interviews for gathering primary data were done in the municipality of Vithkuq. As source of information on the local context, an agrarian diagnosis approach identified pastures as the main resource for the local production systems. This diagnosis showed that different pasture management modalities in the same agro-pastoral area are crucial to understand the very local pasture governance mechanisms (Bombaj et al., 2017).

For the purpose of this research, the Likert method allows evaluating the actor's perception on the positive or negative external effects of a given policy. The Likert method is used in our approach to evaluate the perceptions of the farmers from different local communities about the future governance of their common pastures, through two sets of questions. The first set is based on their issues concerning pasture reform. The second relates to their visions for their individual and collective strategy to access and share pastures equally.

Results are then discussed according to Ostrom's grid for managing the commons (Ostrom, 2009). Ostrom explores the governance mechanisms by comparing and discussing different situations for different communities in the same institutional context.

4.2 Methods

Our research was conducted in four stages:

Stage 1. Literature research on the institutional framework regarding decentralization of pasture management and changing governance mechanisms in different contexts, with a set of documents and reports on national level allowing historical reconstitution of the territorial reform and pasture decentralization processes.

Stage 2. Selection of the case study and sampling of key informants at regional and local level. Literature research and exploratory fieldwork results (stage 1) confirmed the choice of the mountainous municipality of Vithkuq, in Korçë district, as a relevant case to get deeper insights on issues in the study. This municipality was selected as a research site because it is a mountainous territory with a deep and historical knowledge and know-how in livestock farming systems. Furthermore, it corresponds to a coherent agro-pastoral area called "Mount Rrungaja". The selection of key informants was designed to achieve good understanding of the territorial pastoral system and management of the pasture resource through interviews with 33 local farmers (the sample represented all the farming systems present in the area). The local farming system is constituted by three different types of farms. First: the small subsistence farms: characterized by the self-consumption and with very occasional or no sale. This type of farm has 1-10 sheep/goats and / or 1-4 bovine animals. They don't have young labor force to produce animal feed production for winter. Second: the intermediate farms: characterized by a beginning of breeding specialization with fairly consistent sales. This type of farm has 11-99 sheep / goats and / or 5-9 bovine animals. They tend to expand their activity and increase animal feed production for winter if they have a young labor force. Third: the specialized farms which sale the majority of production. This type of farm has more than 100 sheep / goats or more than 10 bovine animals. They tend to expand their activity and are relatively autonomous in their animal feed production for winter. Using the saturation approach for qualitative survey (Mason, 2010), interviews with the two dairy stakeholders, the two most important meat middlemen, as well as representative of relevant public authorities (Ministry of Environment and Forests, the National Association of Forests and Pastures and several NGOs working on pasture management issues), made it possible to get a general and a detailed description of the pasture management system and production system specificities in the study area.

Stage 3. Local documentary research and landscape analysis to identify modes of managing pastures. Field data collection and personal observations (see figure 2) were carried out in two phases: i) structured and semi-structured interviews addressed to regional authorities; and ii) structured and semi-structured interviews with key members of the selected villages such as the village leaders and former farmers. The questionnaires addressed the characteristics, and individual and collective strategies of pasture use mechanisms.

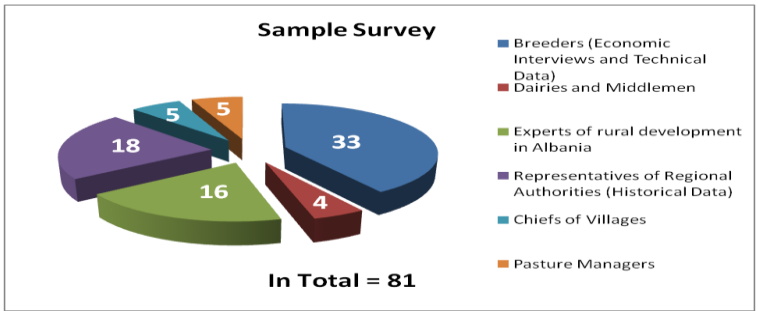


Figure 2. Sample of the survey - *Source: Authors' survey*

Stage 4. Structured questionnaires of 22 specific questions with Likert scale, regarding the governance mechanisms after the last institutional changes in the pasture rules. We selected 18 farmers from the 33 already interviewed in Stage 2. Two sets of six questions were dedicated to the reactions of farmers and the future pasture use in association to different situations observed in different villages in the previous stages.

The sampling of farmers (see figure 3) has been set up respecting two criteria:

- From the sampling of 18 farmers 9 was chosen from the two villages of Korçë district which are involved in the collective management of the communal pastures (Vithkuq and Shtyllë) and 9 from the other three villages not involved in the collective management of the communal pastures but which are affected by the reform and will have to pay for what was previously free (3 farmers from each village).
- The 18 farmers in the farming systems already identified in Stage 2, which made use of the communal pastures: the non-transhumant sheep system and the non-transhumant cattle system. This choice has been made respecting a balance between farm systems having different production specialization (sheep, cattle or mixed), precisely 6 farmers from each specialization.

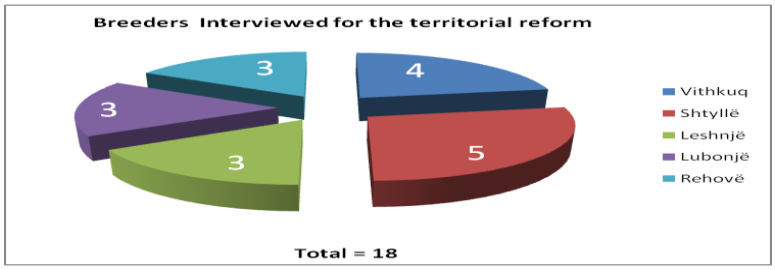


Figure 3. Farmers interviewed for the territorial reform - *Source: Authors' survey*

4.3 Case study

The case study area is located in the most largest and marginalized municipality of the Korçë district: the municipality of Vithkuq. The municipality is composed by 13 villages with a surface of 243.6 km^2. Our study area has a surface of 75 km^2 and 5 villages (including the village named Vithkuq) (see table 2). The study area belongs to the Mediterranean, mountainous climate, characterized by relatively high temperatures during the summer and very low during winter. Sheep breeding is dominant because it is well adapted to the topographic and climatic conditions of the local pastoral resources.

Table 2. Population and pastoral dynamics in the study area

Villages with their respective altitudes	2005		2016		Herd Size 2016		
	No. of families	Total population	No. of families	Total population	Dairy cattle	Sheep	Goats
1. Vithkuq (1220m)	245	908	150	600	200	1 200	180
2. Shtyllë (1550m)	38	163	15	70	70	700	70
3. Leshnjë (1100m)	55	219	40	160	105	1.200	150
4. Lubonjë (1000m)	152	564	80	400	195	1.800	100
5. Rehovë (1100m)	48	204	13	65	50	850	250
Total	538	2.058	298	1.295	620	5.750	750

Source: Authors' survey

Figure 4. In red the municipality of Vithkuq (in blue the names of the administrative

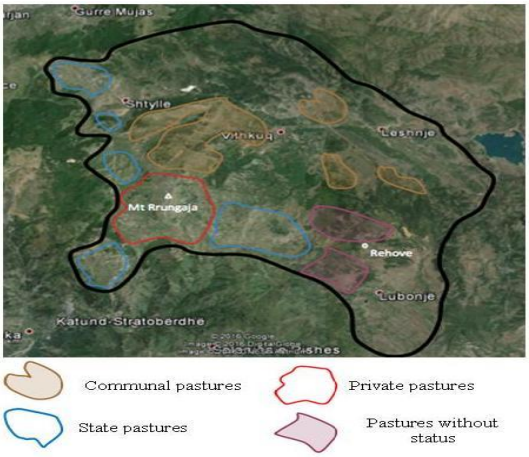


Figure 5. The study area (5 villages) and the territorial identification of the different pasture governance types regions in Albania)

5 RESULTS

5.1 Governance of pastures at regional level

After 1991, the government of Korçë region has managed the state pastures while the municipality of Vithkuq has managed the communal pastures. The region has four districts and managed all state pasture contracts. The region managed the contracts through the regional department of pastures that was, until 2013, under the jurisdiction of the Ministry of Environment and Forests. The regional department of pastures managed the state pasture contracts and monitored their conditions. After 2013 two major changes occurred. First: each district will manage only the state pasture contracts of the pastoral mountainous areas(?) belonging to the district while the monitoring of the pasture conditions remains under the jurisdiction of the Ministry of Environment and Forests through the Korçë district department of pastures (see figure 6). Second: the management of the communal pastures of the municipality of Vithkuq passed at the Korçë district, one of the four districts of the Korçë region. The district authority applies the same rules to the communal pastures that the regional department of pastures applied for the management of the state ones. The communal pastures are given in exclusive use to local farmers willing to rent them and able to pay a "good" price. If they are not able to pay, preference will be given to neighbouring farmers of other districts willing to rent them.

The regional government, elected by the citizens living in the region, is not financially autonomous and the central government subsidises it. Therefore, the regional government financially reports every year to the central government. The former municipality of Vithkuq (now administrative unit of Vithkuq - abbreviation AUV) is a branch of the district of Korçë (administrative centre of the Korçë region). It is located now in the city of Korçë. The manager of the unit is a political representative chosen by the district of Korçë and does not attribute or support the farmers to find pastures. It informs the district of Korçë of the different issues faced by the unit in terms of municipality management (electricity, water, roads, sanitary problems of herds, unpaid taxes). The unit has no power in allocating pastures to local farmers and did not encourage or support farmers to rent the pastures collectively.

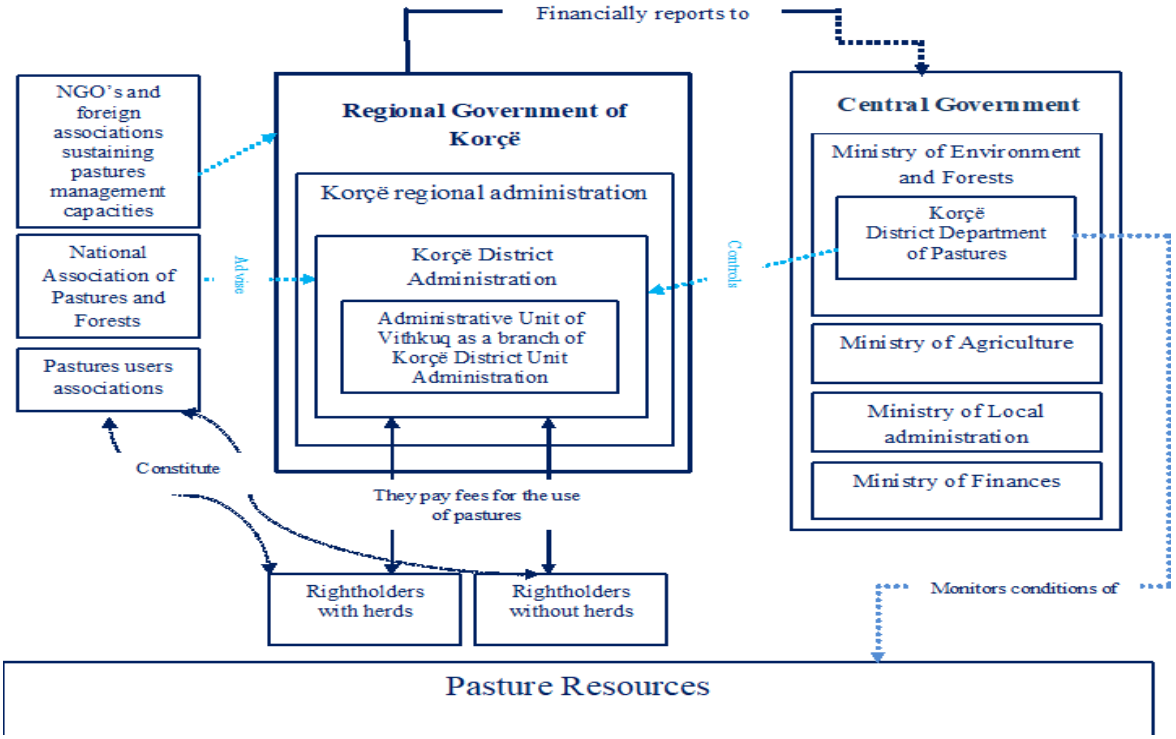


Figure 6. Primary actors and related responsibilities in the agro-pastoral system of the AUV

Source: Authors' elaboration

5.2 Governance of pastures at communal level

5.2.1 Territorial and technical logic of pasture use

The area around Mount Rrungaja has a rich flora and fauna of pastures giving animal products of high flavor and quality that are well known by local and Albanian consumers. It is one of the rare cases in South Albania mountain area where a single owner (descendant of the "bey") has more than 1.000 ha of summer pastures. This pasture was historically owned by the "bey", a Turkish lord, and given back to his descendants after the turn of 1991. According to literature (Gontard., 2016; Michaud., 2015) and our interviews, the local production system depends from the pastures available locally. Most of the farms have 1–10 sheep or goats, and 1–4 head of cattle. More than half of the farmers do not practice transhumance and bring their flocks daily on the pastures close to the villages, returning them to their stable at night. The other half takes the opportunity to combine their flocks (one breeder take responsibility for more animals than his own flock) or go alone (farmers having more than 50 sheep) to remote communal or state pastures for longer periods, located as close as possible to their village. Big flocks owned by individual farmers come each year from the coast. They settle on the private pastures of « bey » (in red in Fig. 5), as they did already before the communist period, and partially and more recently on the state pastures (in blue on Fig. 5), which are located farther away from the villages (Fig. 7).

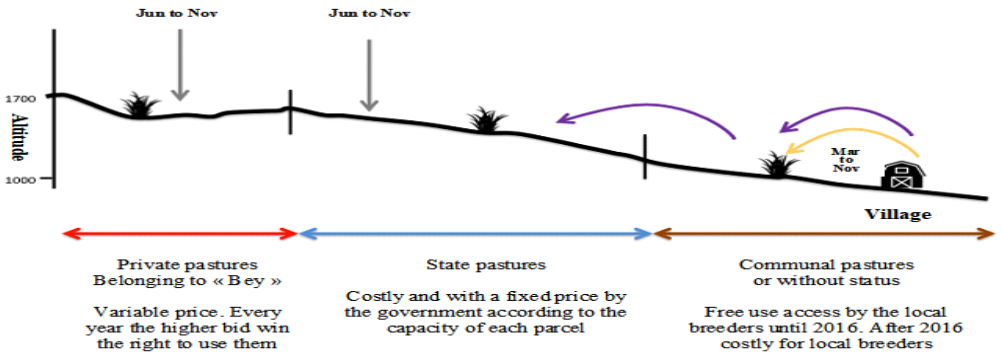


Figure 7. Movements of herds represented on a topographic section - *Source: Gontard, 2016*

5.2.2 Current communal pasture governance at village level

In only two villages (Vithkuq and Shtyllë) do farmers combine flocks to practise collective grazing of the communal pastures (625 ha) from March to November.

Two different systems of collective flocks or herds coexist:

(1) Sheep flocks (large majority): the farmers' families have another activity as farming, or are retired. They keep very small herd (between 12 to 50 animals) and land (between 0, 6 ha and 1, 5 ha). Their collective herds range from 150 to 200 sheep from 15 to 20 families. Each morning, farmers pool their animals in collective herds, and bring them to the communal pasture. There is a rotation for herding according to the number of animals per farmer: one day of herding for 10 animals.

(2) Cattle herds. Each farmer has 1–2 head of cattle. The farmers combine their animals in collective herds that graze the communal pastures every day. The rotation is 1 day of herding for 1 animal.

There are significant differences between the two villages in terms of organizing the collective management of the animals.

In the village of Vithkuq, there are sheep and cattle collective flocks. The diversity in herd size and animal specialization leads to a high heterogeneity in terms of pasture use access. Some farmers have more than 7 cattle and they practise transhumance alone without pooling their animals with the others. All farmers have plots to cultivate cereals to feed their herds, at least partially, in the winter season.

In the village of Shtyllë, there are only sheep. Shtyllë is a small village composed of 15 family flocks of similar size (30–50 sheep). The village is situated at a much higher altitude than the village of Vithkuq. The collective flocks are bigger than the ones of the village of Vithkuq. In addition, Shtyllë has no fertile arable land to sufficiently cultivate cereals to give the sheep as complementary feed in the winter, so access to common pastures is crucial for the summer to reduce the total costs of the animal feed.

5.2.3 Historical reasons of the difference in governance mechanisms between the village of Shtyllë and the other 4 villages

During the communist period, the four villages in the study area, except the village of Shtyllë, were organized in cooperatives. From 1953 to 1980, each cooperative member had the right to have 0.1 ha of private land, 1 cow and 10 sheep. From 1980 onwards, the big collectivism was applied imposing to the cooperatives members to have right to only one cow and no sheep. The villagers, then, organized themselves to take the livestock together to the pastures.

At that time, Shtyllë was organized as a "state farm".

The difference between the state farm and the cooperative was that the villagers who worked on the state farm were not considered members but workers. They had a fixed and higher salary. Nevertheless, employees of the "state farm" were not allowed to have a plot of land or to breed animals.

In 1991, after land redistribution was done, differences were observed between the 4 villages and Shtyllë. What belonged to the cooperatives was given to the cooperative members according to the number of persons for each family: the citizens of the 4 villages obtained animals and arable land. This was not the case for Shtyllë: the citizens only obtained small plots of arable land while they had to buy the animals.

The same logic was applied for the pastures in 1991. Those used by the cooperative were considered as communal pastures and were given to the municipality of Vithkuq.

Alpine pastures (above 1500 m) were not decentralized. During the long economic and political transition, farmers of the village of Shtyllë always had free access to the communal pastures belonging to their village. The village has three parcels of communal pastures, for which they have

to pay since 2016, after the recent institutional change. It is interesting that farmers are acting together to rent pastures. In fact, the pressure exerted by big transhumant herders coming from the coastal area with large herds (500–1500 sheep) and already renting the private pastures of the descendants of the bey or big state pastures, is considered as a threat by the farmers of the village of Shtyllë where livestock farming is the main activity. Those private and state pastures are located close to the communal pasture borders: this proximity creates tensions with the local farmers.

5.3 Current farmers' perceptions after the institutional changes in resource use

Applying the Likert method for the farmers' perceptions after the institutional changes in resource use, the results are as shown at the table 3 below.

In both villages (Vithkuq and Shtyllë) where communal pastures are located, local farmers show more interest in collectively renting pastures. Nevertheless, farmers in Vithkuq village show less motivation to rent pastures as a group (data not shown). Furthermore, in the future, their willingness to rent pastures as a group remains the same (see question 4.6, table 4). Other minor differences are observed between the opinions of the two villages of positive effects that the reform should have on the pasture management, their maintenance and the cohesion between farmers after the reform to share the pastures.

Table 3. Opinions of local farmers after the reform

		In total = 18 Farmers				
	Opinion on territorial reform	1 = Strongly disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly Agree
3.1	As a breeder, you are well informed about the modalities of the reform			**1**	**5**	**12**
	Vithkuq + Shtyllë (9)					**9**
	3 other villages (9)			**1**	**5**	**3**
3.2	You are of the opinion that this reform will have positive effects on the common management of the pastures, that is to say it allows a better management of this resource in association with your breeder colleagues		**1**	**2**	**7**	**6**
	Vithkuq + Shtyllë (9)				**3**	**6**
	3 other villages (9)	**2**	**1**	**2**	**4**	
3.3	The reform has prompted you to regroup with your fellow farmers to rent pastures together		**1**	**5**	**7**	**5**
	Vithkuq + Shtyllë (9)			**1**	**3**	**5**
	3 other villages (9)		**1**	**4**	**4**	
3.4	The reform has positive effects on the maintenance of mountain pastures, and on the number of animals you can take there			**9**	**8**	**1**
	Vithkuq + Shtyllë (9)			**2**	**6**	**1**
	3 other villages (9)			**7**	**2**	
3.5	The district of Korçë is the most efficient institution to manage the common pasture on which you are used to go to your animals	**5**	**7**	**6**		
	Vithkuq + Shtyllë (9)		**3**	**6**		
	3 other villages (9)	**5**	**4**			
3.6	The reform allows a better cohesion between the farmers to share the pastures		**2**	**4**	**7**	**5**
	Vithkuq + Shtyllë (9)				**4**	**5**
	3 other villages (9)		**2**	**4**	**3**	

Source: Authors' survey

As shown at the bale 4 below, the villages Lubonjë and Rehovë do not seem to be interested in renting pastures collectively. Interviewees gave several reasons:

a) There are some pastures without legal status available for free access, even after the institutional change. According to interviews, these pastures are of poor quality but still are used by the local farmers.

b) The farmers have diverse farming activities (cropping and livestock) and use one part of their own arable land as pastures for their herds;

c) The size of the population and the heterogeneity of the livestock affect their decision of cooperating with each other;

d) Farmers tend to have big herds and do transhumance;

e) There is no cooperation between the farmers, for reasons of neighbourhood conflicts or lack of social dialogue.

In Leshnjë, there are "good" reasons for the farmers to collectively rent pastures but, even after the recent institutional change, collective flocks remain very few. This is due mainly to the geographical conditions. The village is the lowest location of the municipality: it allows diversity in the farming activities (cropping and livestock): the village has a huge plain surface and very favourable for cropping maize and cereals for the feeding of animals in the winter. Furthermore, they use plots in their own possession as pastures during autumn. Also, farmers tend to have big herds and do transhumance.

Table 4. Resource use plan for the future

		In total = 18 Farmers				
	Resource Questions	1 = Strongly disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly agree
4.1	The group is an effective way to rent pastures			5	2	11
	Vithkuq + Shtyllë (9)				1	8
	3 other villages (9)			5	1	3
4.2	Conflicts between locals and transhumant herders are lower if renting is done by a group of farmers than by a single one			5	1	12
	Vithkuq + Shtyllë (9)					9
	3 other villages (9)			5	1	3
4.3	The group helps to a better coordination between farmers and local and regional institutions		3	1	13	1
	Vithkuq + Shtyllë (9)				8	1
	3 other villages (9)		3	1	5	
4.4	Renting pastures together cements confidence among the farmers to take care of the problems of management of the pasture of the zone		1	2	3	12
	Vithkuq + Shtyllë (9)					9
	3 other villages (9)		1	2	3	3
4.5	Without ensuring the use of pastures the future of livestock is threatened					18
	Vithkuq + Shtyllë (9)					9
	3 other villages (9)					9
4.6	It will be possible to organize in spite of the conflicts between my family and the neighbor (or neighbors).		1	2	10	5
	Vithkuq + Shtyllë (9)				5	4
	3 other villages (9)		1	2	5	1

Source: Authors' survey

5.3 Strong contrasts in adaptative capacities

5.3.1 The farmers' group of Shtyllë

Communal pastures are important for farmers of Shtyllë who have small herds and do not practise transhumance for several days. Feeling threatened by the big transhumant herders, they gathered in an informal group very early in 2016. The village leader represents the group. The 15 families decided to rent together the three parcels of communal pastures. The farmers do not regard the price of the parcels as costly because it represents only 5% of their total annual farming costs. The main benefit for them is to keep the annual cost of the animal feed as low as possible. That's why summer pastures reduces the total costs of hay or concentrates necessary for feeding the animals during the winter. Each family pays according to the size of their herd. The capacity is measured in Euros/sheep/year (10 sheep = 1 head of cattle). The village leader is in charge of collecting the money and signing the contract with the administrative office at district level. Each member of the group is free to use any part of the rented parcels during summer.

The group is informal and has no official status as organization or association. The functioning is carried out by informal meetings requested by one or more family heads. All families agree on the rules as decided by the group. Each family gave its promise to pay and contribute to respecting the social contract established among them. In case a family cannot pay its part, it can still use the parcels because, since recently, the other families have agreed to pay jointly the part not paid by this family.

Social cohesion seems to be important not to allow these parcels to be rented by non-residents. In case of conflicts with the big transhumant herders from elsewhere, the first to be informed is the village leader, who informs the head of the administrative unit. A person who is not a resident of the village is not admitted into the group. Furthermore, no member of the group can take animals of a non-resident. No member should allow non-resident farmers to access their rented parcels.

5.3.2 The farmers association of the village of Vithkuq

In the year 2000 in the village of Vithkuq, some of the pasture users created an association. There are 20 local farmers of the village of Vithkuq willing to protect and manage the pastures of their village. The association has a legal status but no important pasture management activity. In the early 2000s, when the pasture decentralization process began, their aim was to protect them against abusive privatization of the pastures favouring the descendants of the "bey". According to this association, the descendants of « bey » were not legally entitled to get back those pastures. The association members have taken no initiative yet for the collective renting of communal pastures.

5.3.3 Comparison between the two villages

In the two villages closest to « Mount Rrungaya », a collective organization occurred partially in reaction to the descendants of the « bey ».

Differences between two villages regarding the reactions to the new context can be explained by several reasons.

1. The group of farmers in Shtyllë is homogeneous. In the contrary, in the village of Vithkuq the farmers are much more numerous, therefore quite heterogeneous (size and herd composition, pluriactivity).
2. Social ties in the community: the village of Shtyllë has a small population compared to the village of Vithkuq. The social ties between farmers of the village of Shtyllë are many and of good quality, and this supports the collective organisation of the herds.
3. Pasture boundaries and social ties with transhumant herders issues. The village of Shtyllë has communal pastures boundaries very close to the private pastures of the descendants of the bey, rented so far by the big transhumant herders. The boundaries of communal pastures have been historically an issue for the Shtyllë farmers: tensions appear every summer. The solidarity observed between the Shtyllë farmers to face the big transhumant herders for their communal pastures has been helpful for them to come to a collective

agreement between them, and to rent the pastures. In the village of Vithkuq no such reaction has occurred, as no big issue was reported on the communal pastures boundaries.

The theory based on other observations explains that what is the key factor is the exclusivity of the right (Taylor, 2006; Gilles & Jamtgaard, 1981) to use the communal pastures: who is legally recognized as the user of the communal pastures has the right to exclude the illegal users. Therefore, we can conclude that the major factor explaining the creation of the group of Shtyllë is the historical threat of communal pasture boundaries by the big transhumant herders reinforced by the fact that they had already developed collegial relationships as employees of the state farm.

6 DISCUSSION

Ostrom grid of analysis explores the design principles for managing the commons. We propose to clarify the importance of the differences between the village of Shtyllë and the other villages at present, i.e. after the most recent changes of attribution of the communal pastures by the public district authority. Analysing the evidence from the survey on opinions (using Likert scale) into this grid allows discussing our research hypothesis (see table 5).

Table 5. Ostrom's grid applied to the case study

Principles of governance	In the 4 villages (except Shtyllë)	Shtyllë
1. Clear boundaries Both users' boundaries and resources' boundaries are well defined.	The pasture boundaries are well defined by law, history and tradition (figure 5). The private pastures have clear boundaries.	Since 2003, the communal pastures boundaries are clear and legally defined. Exclusive rights to use: only the group renting them can use them.
2. Local suitability Rules governing the use of common goods match to local needs, and local social and ecological conditions.	There is a mismatch between local resource conditions and current usage rules and regulation mechanisms (pasture management plans, no coordination between local farmers and regional government, institutional sanctions). Pasture management plans are not built with the local community. There is no coordination especially for the needs of local communities (e.g. for water points during summer for the animals).	Group rules are adapted to their livestock activity. Every member uses the pasture surface he needs it to its livestock activity. Management plans are built according to the needs of every member and collectively.
3. Collective choice arrangements People affected by resource governance rules can participate in modifying them.	Formally, only some pasture users are members of the pasture users association. For the majority of the local farmers the association does not represent their interests but only the interests of those having good relations with the big transhumant herders because they rent to them some part of their own parcels during summer.	The new reform was used as an advantage to legally rent communal pastures which has been the source of many conflicts before. Rules set at national level were locally discussed, accepted and used by the group of farmers as an opportunity to rent pastures. The group has respected the new rules and created their own. Local adaptation was done, in the sense that one member of the group rents the pastures as an individual, but the entire group pays.
4. Monitoring overseen by resource users Monitoring of resource users and resource conditions is undertaken by the users themselves or by nonusers who are accountable to the users.	Only the regional government is responsible for assessing and monitoring pasture conditions. Indeed, the local farmers or the association do not have sufficient motivation, human or financial resources to monitor the users of the pastures.	The group members being in collected herds can daily control and monitor the pasture conditions. The group member who controls shares the information of the pasture conditions with the group every time meetings are held. Disagreement or damage caused by a given member is discussed collectively when necessary.

5. Graduated sanctions People who repeatedly violate resource governance rules face a continuum of increasingly severe consequences.	Local farmers usually try to develop informal agreements to solve conflicts. The local Administrative Unit is unable to resolve conflicts because by law, the resolution has to be done by the regional institutions (the AUV only informs the regional government about the conflict).	Rules about handling the combined herds are adapted to the access to pastures. The group is united, because it faces the arrival of the big transhumant herders. There is no sanction yet, because every member respects the common rules so far.
6. Conflict-resolution mechanisms Accessible and low-cost options are in place for resolving conflicts among users and/or with officials.	Conflicts between the local livestock-keepers and big transhumant herders are solved in many cases by negotiation. No low-cost mechanisms exist to solve problems between local farmers and the local administrative unit regarding the pasture management plan.	The representative of the group is the member who is charge of the legal procedures for renting the pastures. In case of conflicts he is responsible for informing the other members and the AUV. No need for conflict-solving mechanisms is observed at the current stage.
7. Local self-determination The right of communities to organize and make rules is recognized and supported by upper level authorities.	There are no cases in which local farmers have developed their own rules to manage their common-pool resources.	Being legally recognized as exclusive users of the communal pastures, the farmers transformed the rules of the pasture access reform to their advantage by renting as a group. Only the group member who rents the communal pastures is legally recognized: the rights of the community as such are neither recognized nor supported by the upper level authorities. The group does not have a legal status as an association, thus it is not recognized by the public authorities as an institution.
8. Nested governance Common-property resource governance is organized in interconnected layers from local to regional levels.	Local level of common pasture resource governance does not exist Lines of responsibility and ownership between local-regional-national levels are poorly nested. Several NGOs are present in the area but their impact on pasture governance seems to be unimportant.	The communal pasture management plan at the local level is dependant on and interconnected with the regional level. The member who rents pastures is the contact of the group with the authorities.

Source: Authors' elaboration

For the village of Shtyllë, several of Ostrom's principles are respected (all green cells). What makes the Shtyllë's group successful is that government rules have been appropriated and used as an opportunity to rent pastures (principle 3). This means that they have been able to transform the financial threat into an opportunity by collectively sharing costs and responsibilities. The opportunity to have the exclusive right over the communal pastures boosted the principle 1 (clear boundaries). The communal pasture boundaries are meant to be legally recognized by the public authorities (principle 1) to those who use them and be defended if conflicts will occur. The weakness of their organization is that it is built on delegation of the group's authority to a single member of the group who represents them to the public authorities. He is at the same time the member who rents the communal pastures in the name of all the other members. The group rights are not recognized as such (principle 7). In case of conflicts he should inform the other member and the officials (principle 8). Thus, the interconnection between the group and the public authorities is poorly assured. What works well is that the members of the group can daily control and monitor the pasture conditions (principle 4). Sanctions (principle 5) are not yet established because the group needs to have strong solidarity to face the irrespective of the pasture boundaries by the big transhumant herders.

Between the two governance modalities, some principles show no difference (points 5 and 6) while others are really contrasted (points 3 and 4). Especially low-cost conflict resolution mechanisms are not yet present and sanctions not yet planned. A different panorama is present for the

collective action arrangements and local suitability that the group has appropriated to empower its access to pasture.

It is interesting to see that, in our case, local communities facing extreme institutional change, under certain conditions, may adapt to the new context by creating appropriate local governance mechanisms. By analysing contrasting reactions in neighbouring villages facing a very similar context, one village shows that is has been possible for its inhabitants to arrange a combination of local rules that allow the farmers to benefit from a change initiated at national level. Being the only village that has reacted to this new context in this way, studying the conditions that favoured the adaptation of governance modalities for better collective management of the pastures might be fruitful for prospective research in other cases.

This paper advances knowledge about Albanian common-pasture governance by showing that government and organizations' initiatives did not rely on the farmers' perspective at the ground level. There was no dialogue or bottom-up approach, which could have taken communities' and individuals' perspectives into account identifying the best local resource governance mechanisms (Shigaeva et al., 2016; Crewett, 2015; Dyer et al., 2014). This has led to a situation where the collective pastures management is worse than before in all villages, except one.

Institutional changes in the communal pasture management have not been accompanied by institutions capable of effectively implementing the objectives of the decentralization process. Our case study highlights the necessity for greater inclusion of relevant actors, and development of a governance process that is flexible to changing conditions creating incentives for effective participation and collective action (Taylor, 2006; Upton, 2012). Furthermore, as already highlighted in previous research, working together as a group facilitates cooperation and could be a prerequisite for building social capital to get long-term improvements in natural resources governance mechanisms (Pretty et al., 2003). It is interesting to see that the exclusivity right is a necessary condition that might accelerate the group activity to a higher level of collaboration creating models of resilience-based management (Bestelmeyer & Briske, 2012), this is not a sufficient condition, and several other key aspects have to be set before the benefits of the exclusivity of the rights shows positive effects.

7 CONCLUSION

The recent institutional change in communal pasture management has been successfully used by one village, which has rented communal pastures as a group. Thus, by creating appropriate governance mechanisms, this initiative appears to be effective for managing the common resource. The small size of the group and the clear boundaries of the communal pastures (Ho, 2000) have enhanced the group's capacity for collective action. Furthermore, the group's homogeneity and the leadership role (Vedeld, 2000) of the village head have facilitated the contracting communal pasture modalities with the regional authorities.

Moreover, the current situation has created new modalities that can be the ferment for social capital improvement. For example, the group might be the basis for common market strategies for their milk and meat products in the future. Therefore, it is interesting to understand if farmers may be able to empower their group organization. Further research should analyse the internal composition and functioning modalities of the group allowing deep understanding of the potential to develop further its actions, in broadening the scope of the collective activities.

The scope of our results is limited to the study area. To our knowledge, there are no other studies that analyse the farmers' reactions after the most recent Albanian reform on communal pasture use. Applying our method to different cases could give a deeper understanding of what the reform has changed for farmers in different territories, and test the relevance of our results.

In the post-collectivist countries the decentralization policies of natural resources show a high top-down policymaking orientation (Crewet, 2015; Hartter & Ryan; 2010; Taylor, 2006). In many of them, the decentralization of pasture management has not taken into account the needs of the local communities (Upton, 2012; Folke, 2006; Mearns, 2004) by finding what might have been the most appropriate way for local pasture governance. Nevertheless, in response to a non-collaborative central government, local communities may create their own resource governance

practices (Dyer et al., 2014). In more general ways, it will be very important to understand what might be the conditions where top-down policies meet the local communities' initiatives for resilience-based resource management.

ACKNOWLEDGMENTS

The authors gratefully acknowledge contributions from the reviewers of the IFSA symposium and also from the following people: Gabriel Michaud and Simon Gontard for many discussions about the livestock systems and management issues, Petrika Matka and Dhimitraq Gjylapi for their support in data collection, Fehmi Xhemo and Jorgo Caca for many discussions about historical pasture conditions. We also extend our thanks to the Ministry of Agriculture, the Ministry of Environment, the National Association of Forests and Pastures, the Major of the Korçë district and the Administrative Unit of Vithkuq for enabling the information about the decentralization process and for insightful discussions about the study area. A warm acknowledge to all the farmers of the study area for their kind support, availability and interest about the pasture issues.

8 References

Addison, J., Davies, J., Friedel, M., & Brown, C. (2013). Do pasture user groups lead to improved rangeland condition in the Mongolian Gobi Desert?. *Journal of Arid Environments*, *94*, 37-46.

Andersson, K. P., & Ostrom, E. (2007). An analytical agenda for the study of decentralized resource regimes. Working Paper No. 01-07. USAID/SANREM CRSP.

Barjolle, D., Paus, M., & Perret, A. O. (2009). Impacts of geographical indications-review of methods and empirical evidences. In *2009 Conference, August 16-22, 2009, Beijing, China* (No. 51737). International Association of Agricultural Economists.

Bestelmeyer, B. T., & Briske, D. D. (2012). Grand challenges for resilience-based management of rangelands. *Rangeland Ecology & Management*, *65*(6), 654-663.

Bombaj, F., Barjolle, D., Anthopoulou, T., & Michaud, G. (2017). Family Farming in the Albanian Mountainous Areas: Local Agro Pastoral Farming Systems and Market Integration Perspectives. *The Natural Resource Economics Review,* 15/03/2017, Special Issue, p. 41-52.

Bonfoh, B., Fokou, G., Crump, L., Zinsstag, J., & Schelling, E. (2016). Institutional development and policy frameworks for pastoralism: from local to regional perspectives. *The future of pastoralism* (J. Zinsstag, E. Schelling & B. Bonfoh, eds). *Rev. Sci. Tech. Off. Int. Epiz*, *35*(2), 499-509.

Cochet, H. (2011). Origine et actualité du "Système agraire": Retour sur un concept. (A. Collin, Éd.) *Revue Tiers Monde*, *3*(207), p. 97-114.

Crewett, W. (2015). Introducing decentralized pasture governance in Kyrgyzstan: Designing implementation rules. *Environmental Science & Policy*, *53*, 215-224.

Dyer, J., Stringer, L. C., Dougill, A. J., Leventon, J., Nshimbi, M., Chama, F., ... & Muhorro, S. (2014). Assessing participatory practices in community-based natural resource management: Experiences in community engagement from southern Africa. *Journal of environmental management*, *137*, 137-145.

Folke, C. (2006). Resilience: The emergence of a perspective for social–ecological systems analyses. *Global environmental change*, *16*(3), 253-267.

Gilles, J. L., & Jamtgaard, K. (1981). Overgrazing in pastoral areas. *Sociologia Ruralis*, *21*(2), 129-141.

Gontard, S. (2016). *Diagnostic agraire du massif pastoral de Rrungaja. Région de Korçë-Sud-Est de l'Albanie. Mise en valeur des pâturages-principale ressource de ces territoires de montagnes-par les systèmes d'élevage*. AgroParisTech, Paris (France). 79p. Mémoire Master fin d'études.

Hardin, G. (1968). The Tragedy of the Commons. *Science, 162(3859), p.1243-1248.*

Hartter, J., & Ryan, S. J. (2010). Top-down or bottom-up?: Decentralization, natural resource management, and usufruct rights in the forests and wetlands of western Uganda. *Land Use Policy*, *27*(3), 815-826.

Ho, P. (2000). China's rangelands under stress: A comparative study of pasture commons in the Ningxia Hui Autonomous Region. *Development and Change*, *31*(2), 385-412.

Marothia, D. K. (2010). Decentralisation of Natural Resource Management in India: An Institutional

Perspective. *Indian Journal of Agricultural Economics*, *65*(1), 1-34.

Mason, Mark (2010). Sample Size and Saturation in PhD Studies Using Qualitative Interviews [63 paragraphs]. Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 11(3), Art. 8, http://nbn-resolving.de/urn:nbn:de:0114-fqs100387.

Mearns, R. (2004). Decentralisation, rural livelihoods and pasture-land management in post-socialist Mongolia. *The European Journal of Development Research*, *16*(1), 133-152.

Michaud, Gabriel. (2015). *Etude sociotechnique des systèmes d'élevage dans une commune pastorale du Sud-Est de l'Albanie.* ESA, Angers (France). 121p. Mémoire Master fin d'études.

Muharremaj, V., Male, J., Kola, H., & Çollaku, N. (2008). Legal provisions regulating communal forests and pastures in Albania. *Legal Aspects of European Forest Sustainable Development*, 5.

Ostrom, E. (2009). A general framework for analyzing sustainability of social-ecological systems. *Science*, *325*(5939), 419-422.

Ostrom, E. (2001). Decentralization and development: The new panacea. In *Challenges to democracy* (pp. 237-256). Palgrave Macmillan UK.

Ostrom, E. (1990). Governing the Commons: The Evolution of Institutions for Collective Action. Cambridge University Press.

Pretty, J. (2003). Social capital and the collective management of resources. *Science*, *302*(5652), 1912-1914.

Rama, K., & Theesfeld, I. (2011). The Strengths and Weaknesses of Albania's Customary Rules in Natural Resource Management in the Light of Devolution Policies. *Quarterly Journal of International Agriculture*, *50*(4), 369.

Shigaeva, J., Hagerman, S., Zerriffi, H., Hergarten, C., Isaeva, A., Mamadalieva, Z., & Foggin, M. (2016). Decentralizing governance of agropastoral systems in Kyrgyzstan: An assessment of recent pasture reforms. *Mountain Research and Development*, *36*(1), 91-101.

Shundi, A. (2006). Albania. FAO Country pasture/forage resource profiles. [Accessed online May 5: https://pasture.klink.asia/klink/21ba5b/download]

Stahl, J., Sikor, T., & Dorondel, S. (2009). The institutionalization of property rights in Albanian and Romanian biodiversity conservation. *International Journal of Agricultural Resources, Governance and Ecology*, *8*(1), 57-73.

Taylor, J. L. (2006). Negotiating the grassland: the policy of pasture enclosures and contested resource use in Inner Mongolia. *Human Organization*, *65*(4), 374-386.

Upton, C. (2012). Managing Mongolia's commons: Land reforms, social contexts, and institutional change. *Society & Natural Resources*, *25*(2), 156-175.

van Gils, H., Siegl, G., & Bennett, R. M. (2014). The living commons of West Tyrol, Austria: lessons for land policy and land administration. *Land Use Policy*, *38*, 16-25.

Vedeld, T. (2000). Village politics: heterogeneity, leadership and collective action. *The Journal of Development Studies*, *36*(5), 105-134.

Weiland, S. (2010). Sustainability transitions in transition countries: forest policy reforms in South-eastern Europe. *Environmental Policy and Governance*, *20*(6), 397-407.

World Bank. (2004). Albania Forestry Project. Implementation Completion Report, No. 28783. Tirana: World Bank.