

Title: River basin as a viable space for natural common pool resource governance – The Case of Forests Commons in Albania

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Abstract

Commons constitute an alternative governance model that through authority, decision-making and accountability, intends to ensure sustainable and resilient management of depletable [natural] resources. Thinking of governance leads us to government institutions and respective jurisdictions, including administrative boundaries for exercising their competencies. Boundaries have a highly political character and to a certain degree also a historical one. Often, governments revise boundaries to reflect political agreements and functionality, with the latter almost always focussing on infrastructure and economic relationships. The functioning of natural and ecological systems, including their scale, though theoretically a key criterion, is usually given a low weight in decision-making.

Boundaries of ecosystems and natural commons contradict, in most of the cases with power and government jurisdictions of the conventional governance and associated institutions. Nonetheless, the more multi-layers is a governance model, the more physical boundaries loose significance and the natural resources gain value. This is due to the substantially diverse group of beneficiaries behind a **natural** common, who are likewise stakeholders in a multilayers governance model. In a territory of multiple natural common resources – therefore ecosystems, often spatially overlapping among them, the group's size increases significantly and also does the composition, relationships' complexity and the impacts of decisions on each common natural resource.

The focus of this paper is to explore the management of natural common pool resources in Albania in a particular territory – the macro watershed, as a viable governance model. The focus is on the typology of forests' governance, initially at national scale and then at local (commons and watershed) scale. The 8 design principles of robust self-organised common property institutions of Elinor Ostrom will be used as the reference axes for discussing forest commons in Albania. The analysis will lay on these lines: legal and institutional/stakeholders'; governance and management practices; commons regime robustness; property relations; ecosystem functions implied vis à vis the boundaries; forests types and their distribution in space. By disclosing the case of forest commons in Albania, the paper will also outline innovative solutions and challenges of forest governance.

I. Introduction: Ecosystems governance boundaries

The watershed has a natural boundary that coincides with a multitude of ecosystems, connected by a water system. It includes urban and natural spaces, being therefore very complex in terms of socio-ecological relations and constituting a macro space for integrated commons' management. So far, literature shows that it is easier to govern commons at their individual scales, with a lower number of stakeholders and limited areas. Increasing the territorial scale escalates significantly the challenge for ecosystem-based governance of natural commons.

The notion of “boundaries” gains importance, because natural resources carry out biophysical functions and provide services to a large number of impact bearers, rather than merely to the owner/s. These boundaries have also a temporal dimension. Therefore, in multiple ecosystems, overlaying “ecosystems services – property relations” boundaries results into a highly complex network, often politicised, hard to manage and yet unexplored within the sphere of socio-ecological relations.

II. Theoretical review

Property as a bundle of rights: We are living in a world of scarcity (Pejovich 1990) where uncontrolled use of [depletable] natural resources is a common environmental and economic problem (Raymond 2003). Hence, thinking that resources are abundant and there will be no need for regulating their use is merely wishful thinking. Garret Hardin (1968) defined freedom on the commons as ruin to all, raising the need for a redefinition on property rights (Hardin 1968). Hardin concluded that there are only two options to manage the commons, avoid open access and arrange the property rights: either privatization of the resource, or government's control. In this way, he somehow neglected the fact that in traditional commons [regimes] there is no real freedom on the use of the resource and a set of rules on property rights allocation and management has always been in place (Anderies and Janssen 2013). Hardin's view is rather simplistic, as is his example. In the real life, all three sets of governing property and natural resources (common, public, and private) are quite complex and have shown various degrees of successes and failures, dependant on several factors, often contextual. Nevertheless, a clear definition of property rights and property remains as yet a valid subject and certainly useful in property [rights and relations] management.

The modern lawyer's view of property is commonly referred as “the bundle of sticks, thus capturing valuable insight about the substantial flexibility in the design of property institutions. However, taking this conception too far risks turning property into a disaggregated collection of narrowly defined rights, causing us to loose sight of the connection of those rights to the things” (Alexander and Penalver 2012). The modern “bundle-of-rights” metaphor risks giving a weak sense of “the thingness” of property (Heller 1999). Different scholars and theorists have tried to overcome such a risk, by employing various other alternatives of treating and explaining property and property rights, which may then be useful in managing property.

Because the object of this paper is the [robustness of] institutions that govern property in a given setting (natural resources shared in common, with ecosystem services and

related boundaries), trying to understand “the thingness” of property, hence the reasoning and general interests behind allocation of the property rights (Alexander and Penalver 2012), including boundaries, is of interest. In an ecosystem the boundaries have both physical and time dimensions. Boundaries include also the impact bearers, i.e. the property rights holders and those that according to Alexander & Penalver (2012) have in rem¹ duties to owners. Therefore, boundaries and the allocation of rights are inherently linked among them.

Common property and property regimes: The society cares about the commons, because it considers them as essential to its wealth and happiness. We inherit the common resources from previous generations and protect, maintain and create them for future generations (Anderies and Janssen 2013). In this paper the reference is made to the concept of commons as shared resources governed based on rules of access and other property rights. The focus is on the natural Common Pool Resources (CPRs). Raymond (2003) refers to Agrawal (2002); Ostrom (1990); and McCay and Acheson (1987), when stating that informal forms and mechanisms of control and governance over CPRs flourish in various setting worldwide and achieve successful results (Raymond 2003). Elinor Ostrom, who dedicated her scientific work to the study of commons governance, identified 8 general institutional regularities among robust commons’ systems that she labelled “design principles”. The latter include: 1) well-defined boundaries; 2) proportional equivalence between benefits and costs; 3) collective-choice arrangements; 4) monitoring; 5) graduated sanctions; 6) conflict-resolution mechanisms; 7) minimal recognition of rights to organise; 8) and nested enterprises (typically important in larger organisations) (Ostrom, *Design Principles of Robust Property-Rights Institutions: What have we learned?* 2009) (Ostrom, *Governing the Commons, The Evolution of Institutions for Collective Action* 1990).

Governance of natural resources as ecosystems and commons: The examination of the links between ecological and socio-economic systems has rather ancient foundations, while early modern writers include Marsh (1874), Leopold (1949), Carson (1962), etc. Still, it is in the last 20 years that the concept got widespread attention with the publications of Costanza et al. (1997) and Daily (1977) (TEEB 2012). The natural capital is key to our well-being and existence, by carrying out various functions that turn into services at human demand. These ecosystem services (ES) are grouped into provisioning, regulatory, supporting and aesthetic/cultural ones (MA 2005a); (Kareiva, et al. 2011); (Bastian, Grunewald and Syrbe 2015), etc.

The knowledge on the ES and their socio-economic value together with the mainstreaming of ES valuation in governance and political decision-making has brought about major change in institutional behaviour about ecosystems. Governance models promoting sustainable development and resilience of natural resources are gradually replacing traditional management practices of mere protection and conservation (Brnkal'áková 2016). This ES approach remains quite important, though some scholars criticize it as anthropocentric, because it recognises bio-centric values, next to striving to find a balance between the eco- and anthropo-centric values (Brnkal'áková 2016); (Kareiva, et al. 2011). On the other hand, the knowledge on the

value of ES, even if purely anthropocentric, provides added value to the planning and decision-making processes, which so far had little or no consideration on the ES. Thus, while the research on ES is still young, blending ES knowledge in governance and political decision-making is key to proactively managing the increasing demands of humankind upon the limited resources of the earth and nature's balances (Grunewald and Bastian 2015).

The ES value-based governance is both an issue of ecological and social complexity. It deals with scientific aspects, as well as decision-making, social interaction and power relations (Keune, Bauler and Wittmer, *Ecosystem Services Governance: Managing Complexity?* 2014). As the term implies, governing ecosystems lays down the foundations for the governance of human-nature relationship, which by itself is very complex and embraces not merely institutions, but also mechanisms (formal and informal), behaviours, societal and human-nature interactions (Keune, Bauler and Wittmer, *Ecosystem Services Governance: Managing Complexity?* 2014); (Ostrom, *Understanding Institutional Diversity* 2005). Ecosystems extend their services and impacts beyond their territories, at multiple spatial and temporal scales, hence triggering highly complex interactions, a rich institutional diversity (Ostrom, *Understanding Institutional Diversity* 2005) and therefore a need for multi-layers governance.

Ecosystems as CPRs can be successfully governed through informal, community and bottom-up mechanisms that guarantee their endurance. However, the increasingly complex socio-ecological interactions and “the scales” aspect make ecosystems pretty vulnerable to external disturbances, such as the globalization processes and the emergence of dynamic regional to global markets (Klůvankova and Gezik 2016). **Multi-layers governance may provide solutions on how to decrease vulnerability**, but still two challenging questions arise: will this governance approach be reflexive and adaptive enough as to anticipate and manage the dynamic complexity and vulnerability of ecosystems? And if that is fully or partially possible, how will it then effectively address the issues of overlapping scales (boundaries) by learning from the successes of commons' self governance?

To explore answers to these questions, it is essential to analyse ecosystems from both, a typology of commons perspective and in terms of services scales and boundaries. This will lead to understanding the complexity of relationships and identifying convergence and divergence points between self-governed systems and conventional governance of ecosystems. This paper will explore these issues in the case of forests in Albania. After reviewing the relevant literature on the subject, the next step is the analysis of the typology of Albanian forests governance based on Ostrom's 8 design principles. The clashing coexistence of two governance models happens due to the external pressures mentioned above. The paper will examine these pressures and their effect on the forest ecosystem governance, with a particular focus on the overlapping boundaries and the ability of governance to adapt to these dynamic changes.

III. Methodology

There are a few gaps that this paper is aiming at studying in the Albanian case of forests governance: (i) Linking policy-making with ecosystems' governance is still far from complete (Ring and Mewes 2015). As a result, any form of governance, though institutionally robust, may experience serious failures in terms of properly addressing the human-nature interaction. (ii) The study of the natural CPRs shows for success of self-governed ecosystems. Still, this success is valid mainly at the smaller scale of the ecosystem, without considering the larger scale of the external resource users or ES impact bearers, and the full array of the ES that the ecosystem provides. This larger scale is what conventional governance is dealing with and its complexity is even higher under the globalization pressures. (iii) The capability of various governance forms to resiliently self-adapt, learn by doing and from each other can feed multi-layers governance. Still the latter will have to solve the "overlapping boundaries" issue, considering that boundaries are spatial, temporal, institutional, and scalar.

In order to explore the institutional character, the paper will focus on: 1) Describing the institutional and legal framework of the forestry sector in Albania, including some historical overview; 2) Analysing the 8 design principles of robust governance, as defined by Ostrom, and following the methodology of Kluvánková and Gežik (2016), Brnkal'áková (2016), based on previous work done by Poteete et al. (2010), Heinrich et al. (2004), Kluvánková-Oravská (2013) and Premrl et al. (2015) as referred by Kluvánková and Gežik (2016). The study of boundaries focuses on: 1) Boundaries as defined by Ostrom's design principles for robust governance; 2) Forest ecosystem administration spaces (local, regional and national) in terms of gaps and overlaps, convergences and viability of implementing, or borrowing from the commons' self-governance successes. The information is derived from desk review (legislation, strategies and reports) and from fieldwork (interviews with foresters, forest associations, forest federation, forest departments in the municipalities and national agencies as well as from visual surveys).

IV. Albanian forests and forestry sector

4.1 General overview

Sustainable development of the forestry sector is a national priority for Albania. More than 70% of the country is mountainous and 1/3 of the population lives in the mountainous rural areas. Forestry, pastoralism and agriculture, are the only economic means to sustain this portion of the population. If current global and local climate trends remain unchanged, the effects will be highly severe for Albania, resulting in extreme droughts, floods and weather. Albania has proactively responded to the key global steps on climate change prevention, namely the United Nations Framework Convention on Climate Change (1994), the Kyoto Protocol (1997) and recently the Paris Agreement (2015). The latter entered in force in 2016, and Albania was one of the first countries to ratify the Agreement. In its 3rd national communication under UNFCCC and INDC², Albania commits for a reduction of CO₂

emissions by 11.5% (eq. of 708 Gg) in 2030 versus 2016. By merely improving forest exploitation technology and doubling wood combustion efficiency emissions from forests can be reduced with 467 Gg in 15 years. A forestation rate of 500-1,000 ha/year would contribute to mitigation of CO₂ with app. 1,379 Gg – 2,758 Gg by 2050. (GoA 2016); (UN 2016)

For centuries, Albania's forests land cover has been significant in terms of size and biodiversity. Prehistorically, forests did cover the whole territory, but overtime this pattern changed into around 50% of the territory, with almost all forests located in the mountainous areas. Unfortunately, most of the information on the use of forests in the past centuries can be tracked through histories in literature and folklore, or foreign documents that record trade of timber from Albania, since at least the 16th century (Muharremaj, Pyjet dhe Kullotat [Forests and Pastures] 2003).

There are however few key exceptions. The social codes of a self-organised form of governance that existed in Albania before and during the dominion of the Ottoman Empire, known as *Kanun*, contained also provisions on the governance of forests and pastures, considering them under two ownership regimes, namely: private and common. The users of the common forest had proprietary rights, (as per Ostrom's terminology), thus being able to access and manage it, exclude whoever did not live close to the forest from using it, and harvest its produce (Gjeçovi 1925)³. The users could not alienate the common forest, which belonged to all of them (the village as the respective boundary (Gjeçovi 1925)), because alienation was simply non-relevant for common resources. People followed the *Kanun* as the traditional system of provisions on self-governance for centuries during Ottoman Empire, though this was not an official ruling law for Albania.

In fact, it is only after 1912⁴, that Albania had its own first law on forests and pastures management (Ministria e Ekonomisë Kombëtare 1930). The governments drafted it, as well as the whole Albanian state legislation, based on the best European practices of the early 20th century. During this period, the forests ownership was organised into three categories: private, municipal, and state property. The private forests were organised into 4 sub-categories, while the municipal forests were those that traditionally were shared in common by the people of a village, a city, or a group of villages and used for their provisioning services. Forests that could not be classified under any of the private/communal categories were then classified as state owned forests (Ministria e Ekonomisë Kombëtare 1930).

Since its establishment, the Albanian system for forest governance has not remained constant over time. One may claim that certain degrees of variation for a forest governance system are normal and probably needed. In the case of Albania one would also notice that the system has experienced severe abruptions in particular moments, leading to extreme alterations, triggered either by major socio-political transformations, or by the lack of experience and coherence in forest management. The previous are what Pejovich (1990) calls the exogenous reasons, where the variations to the institutions and relevant legislation on forest management are

influenced by ideological change (Pejovich 1990). As a result, the system has [fully] altered its rules in order to be adapted to the change driving factors and conditions. In the case of “lack of experience and coherence” factor, the reasons for change are endogenous, because the stakeholders in the system have requested for new rules to be in place (Pejovich 1990). It is interesting to notice though, that the exogenous factors have created the conditions for the endogenous ones to be shaped at the moment of the respective ideological (and social-economic) revolutions.

Soon after the 2nd World War, in 1945, the new Albanian Government implemented the Agrarian Reform, nationalising (among others) all forests and pastures. All land, regardless of use, was state property. Most of the institutional efforts in forest management during 1945-1990 were focused in establishing a new legal base, new institutions for forest management, technical capacities and a balance between afforestation and timber and non-timber harvesting (Muharremaj, Muharremaj, et al. 2009). Two major challenges include: considerable deforestation and conversion into agriculture land, orchards and olive groves; demand for wood as the only heating energy source was significantly high compared to the forest regeneration ability (Muharremaj, Pyjet dhe Kullotat [Forests and Pastures] 2003).

The first law on forests [and pastures] enacted after the change of the socio-economical and political regime of early ‘90s dates as of 1992. It brought back the private property on forests and classified public forests under state forest and communal forests. The latter also were state owned, but transferred to communities (villages) under user rights, favouring communities living close to the respective communal forests (GoA 1992).

The major efforts for decentralizing the governance of the forestry sector initiate as of 1995 and take place initially with the support of the Albania Forestry Project (World Bank, 1996-2004) and Albanian Private Forestry Development Program (USAID, 1995-2001). Both projects worked with public institutions and communities to increase their capacities, promote stakeholders’ cooperation and trigger functional private and commons’ forests governance. They provided funds for investments on forests regeneration and services and had poverty alleviation as an objective. It is in those years that forest communities experienced a certain re-emergence of some of the commons’ forestry traditions of the past.

However, commons were mainly re-induced by donor projects, rather than due to a deliberate government policy. There is a distinct difference between projects’ approaches: 1) the WB initiative had local governments (LG) as the primary partner and worked with communities through LGs. It facilitated the establishment of about 218 forest users associations (Lako 2008); (DPPK 2002); (Bernard, et al. 2013) that were set to implement forest regeneration activities, cooperate with the forest extension service and represent users’ interests and organise them in the transfer of forests use rights from LGs to the community and/or private owners. 2) The APFDP, on the other hand, considered the associations as rather artificial entities and representatives of a top-down approach. Therefore it worked closely with selected

forest communities and the respective aldermen into achieving similarly the same goals as AFP. ADFDP promoted also the concept of community forest management at watershed level, trying to connect this area to the administrative boundaries of the local governments in 2000s⁵ (APFDP 1998). The aim was to bring forest management from a single community or owner scale to a larger scale where communities and forest owners could efficiently cooperate with other stakeholders and interest as well.

Both approaches were successful during the project implementation lifetime because of the substantial donor technical and financial support and their leverage power with public institutions. The governance decentralization strategy and the local government law adopted in 2000 gave an institutional boost to these efforts, which grew further with the second WB financed project, Program for the Development of Natural Resources (2005-2012). This 2nd program was aiming at reducing poverty in the rural areas, by engaging communities and local governments into sustainable forests management through silvopastoral practices (Mehmeti 2005) and commons-based forest self-governance. Interestingly, it embodied the concept of watershed as an appropriate scale for community forestry (World Bank 2005). Almost concurrently, (2010-2014) the Swedish Sida and Dutch SNV financed a project on “Strengthening Communal Forests”, aiming at bringing previous work forward with particular interest in strengthening the extension service. It helped local governments, forest communities and forest users associations to transform multi-annual management forests plans (drafted with WB support) into annual operational plans.

Since January 2015, the Ministry of Environment is implementing⁶ the Environmental Services Project, aiming at supporting sustainable land management practices and increasing communities’ monetary and non-monetary benefits in targeted erosion prone and rural upland areas. This is to be achieved through the support of alternative livelihoods and provision of environmental services and through sustainable utilization of wood and pasture products in the long term (WB ESP 2017). This project re-brings the concept of watershed forest management and links it to the provision and maintenance of environmental services. It provides grants to the local forests associations on undertaking activities for erosion control and forest maintenance, next to pushing for implementation of payments for ecosystem services and establishment in GIS of the forests database. So far, the granting scheme is being implemented, while the GIS database is in slow progress and PES schemes are yet to be developed.

Under the frame of decentralization, the government of Albania undertook a process of [communal] forests property transfer to local governments. The transfer was finalised in 2008, but registration of forests in the national system for immovable properties is far from final. The process is quite costly and municipalities can hardly afford it, given their limited budgets. The chronology of the above projects is strongly linked to this transfer process and the forestry sector reform during 1992 – 2005. The projects provided the technical and legal know-how as well as incentive funding, necessary to lead towards a self-governance system for forests at watershed level.

However, regardless of the projects' remarkable contribution, they did not succeed to inject to the national institutions the willingness to incorporate a forests commons' governance system in the legislation. In practice, due to both donor support and a yet alive memory among rural population on shared forests' management, a system of commons was established and is alive. This system is hardly reflected in the law.

Institutionally speaking forests management has taken place through the Ministry and related agencies at the national level and the municipalities at the local level. The Ministry of Environment is currently responsible on forests and executes its role through the forests directorate, the national environment agency, the forest inspectorate and the national agency for protected areas. In 2013, the forest police was incorporated within the environment inspectorate and in 2014 an inspectorate of forests, environment and water (national and regional) was established (GoA 2005). This concentration has led towards politicization of the national forest police structure and a mismatch between the role (forest inspector) and the professional background (not related to forest management).

In 2016, the Government issued the 10-years forests' moratorium law aiming at halting the exploitation of timber forest products for commerce and export. The moratorium does not consider exploitation of timber for heating purposes, the conversion of forest land-use into other land-use categories and forest cutting for maintenance purposes. The moratorium is very controversial because of lacking further bylaws to regulate its main provisions, being enacted without prior assessment on possible external effects, with no considerations on other energy alternatives, and with a simplified one-rate penalty system. The latter is around 45,000 EUR per violation, regardless of the violation type and size (GoA 2005). The lack of a graduated sanctions system, next to the lack of bylaws that regulate the use of forest products under the moratorium conditions, has in fact led to either unjust sentences, or to an increase of transaction costs due to higher corruption costs. The real effects of the moratorium are still to be explored and assessed.

The current forestry legislation, enacted as of 2005 has undergone several amendments since. The objective of the law is the protection and sustainable management of the forests in Albania. This includes social-economic, eco-touristic and resource conservation and protection activities for forests, forestland and natural resources in the forests (GoA 2005)⁷. By simple definition, this law is aiming at regulating the use of forests as a production economy; the use of land in the forests, thus having a strong link with the spatial planning domain; the governance of ecosystems vis-à-vis the sectorial governance; and the landscape management processes. The object of the legislation is forests and timber and non-timber products. The law promotes the integrated management approach, considering also all elements that constitute the watershed territory where the forests are located, and its regulations reveal the value of the forest for human needs. This is a simple, but important reflection of the purely anthropocentric approach of the conventional forest governance in Albania.

The forestry extension service is expected to help and facilitate people (foresters and pastoralists) engaging with examining their daily problems and alleviating them by using forestry techniques within the range of their skills and financial resources. It is also expected that the extension staff promotes these participatory processes. (Sim and Hilmi 1987). Forestry extension was not well developed in Albania, with foresters mainly playing an inspection and police role, while community forest management was not well understood due to many historical roots lost during the communist regime (APFDP 1998).

It would not be fair though to say that the legislation does not consider ecosystem services. In fact, it supports the principles of forest ecosystem governance and it also attempts to regulate a certain horizontal coordination among sectorial legislation and strategies that have forests as a target. For instance, forests are divided into productive and protective, and forest management plans (required by law) should aim at the resilience of the natural resources and their sustainable use. The forest functions are classified into: economic; ecological; and public. The economic functions include the provisioning functions, such as timber and non-timber products, including access to hunting. The ecological functions include a multitude of regulatory and support services, such as climate change protection/mitigation, hydrological functions, provision of genetic material and habitat for wild species, thus enhancing and conserving biodiversity, etc. The public functions include mainly the cultural and aesthetic functions, thus those of the cognitive development (Kareiva, et al. 2011).

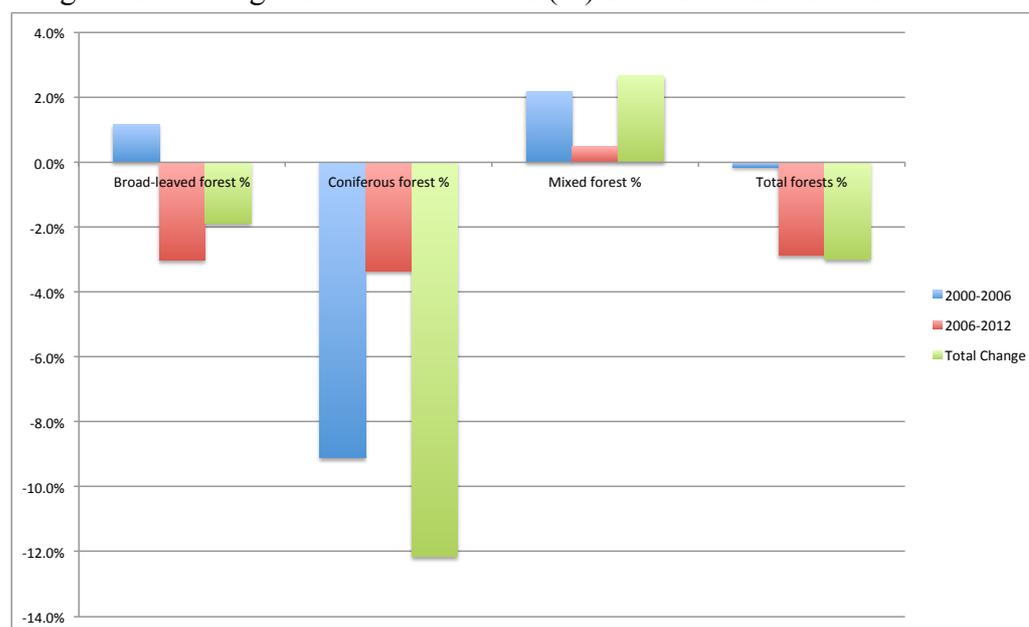
From a property perspective, the legislation recognises two forms of ownership, namely public and private. Public forests are composed of the state owned forests – environmentally protected areas covering around 15% of the territory of Albania (National Agency of Protected Areas n.d.)⁸, and the local forests recently owned by municipalities and covering around 80% of the territory. 3% of the forest area is under private ownership. (INSTAT n.d.)

The total forests' area has been decreasing since at least two centuries due to either overexploitation and mismanagement, or deforestation in favour of creating agriculture land (Muharremaj, Pyjet dhe Kullotat [Forests and Pastures] 2003). According to Corine land cover⁹ data, the forests area has shrank between 2000, 2006 and 2012 by a total of 3% and most of this decrease has taken place during 2006-2012. Below there is a table showing this change in km² next to a graph showing the change rate for Albania. However, the challenge in calculating the forest land cover change stands with the fact that any effort for updating the forest cadastre after 1990 is based on satellite pictures, without fieldwork verification follow-up. The information is not thus fully trustful; neither is linked to the prior 1990 databases. Below, the reference is made to Corine as the only database after 1990 that provides time series, by using the same methodology.

Table 1. The change of forest area 2000-2006-2012 based on Corine land cover nomenclature and database

Territory	Period	Forests' Land Cover Change in (km ²)			
		Broad-leaved forest	Coniferous forest	Mixed forest	Total forests
Albania	2000-2006	73.4	-93.2	8.9	-10.9
	2006-2012	-193.5	-31.2	2	-222.7
	Total Change	-120.1	-124.4	10.9	-233.6
Shkumbini river basin	2000-2006	-4.9	-0.7	2.1	-3.5
	2006-2012	-10	3.8	-0.3	-6.5
	Total Change	-14.9	3.1	1.8	-10

Image 1. The change of forest land cover (%) 2000-2006-2012 in Albania



The historical perspective of the forest governance development was shortly described above. Therefore, section 4.1 will discuss the typology of forest commons in Albania for the current legislative and institutional framework.

4.2 Typology of Forest Commons in Albania

The following text describes the typology of forest commons in Albania by discussing each of the 8 design principles that Elinor Ostrom posited in 1990 on the robustness and endurance of self-organised common property institutions. There will be a simultaneous discussion of two concurrent types of arrangements on the governance of forests – 1) the village and watershed based commons' regime; 2) licensed rights granted by the municipality. The two types are implemented under the municipal governance frame and will be described in parallel and confronted for each of the design principles. The two types are coexistent, with the second currently prevailing over the first, due to the national regulatory framework in place and its evolution in the last 15 years. Referring to Morris Cohen in Raymond (2003) the evolution of the Albanian forests legislation shows that the government is mainly applying an

instrumentalist approach of property. The latter is a “construct of the government and exists at the continued pleasure of the political system. The instrumentalist supports changing public priorities by adjusting the powers of ownership and even redistributing privately owned resources over time” (Raymond 2003).

The municipality, as a public body has the responsibility in managing the forests. However, as the law has created the so-called licensed rights (GoA 2005) (Raymond 2003), the municipality is assigning sets of rights to different users, being those local communities and/or farmers, or other interested “appropriators” (Ostrom, *Governing the Commons, The Evolution of Institutions for Collective Action* 1990). Alternatively, one could consider the first typology of arrangements as “forest managed in common by the villagers” and the second as “forest managed through licensed rights by various appropriators and the municipality”. Finally, though is not subject to the paper, a description of private forests management will shortly appear, limited to users rights and boundaries, as it helps in providing a better understanding of how community bonds define and/or maintain users rights.

Users Rights – well defined boundaries

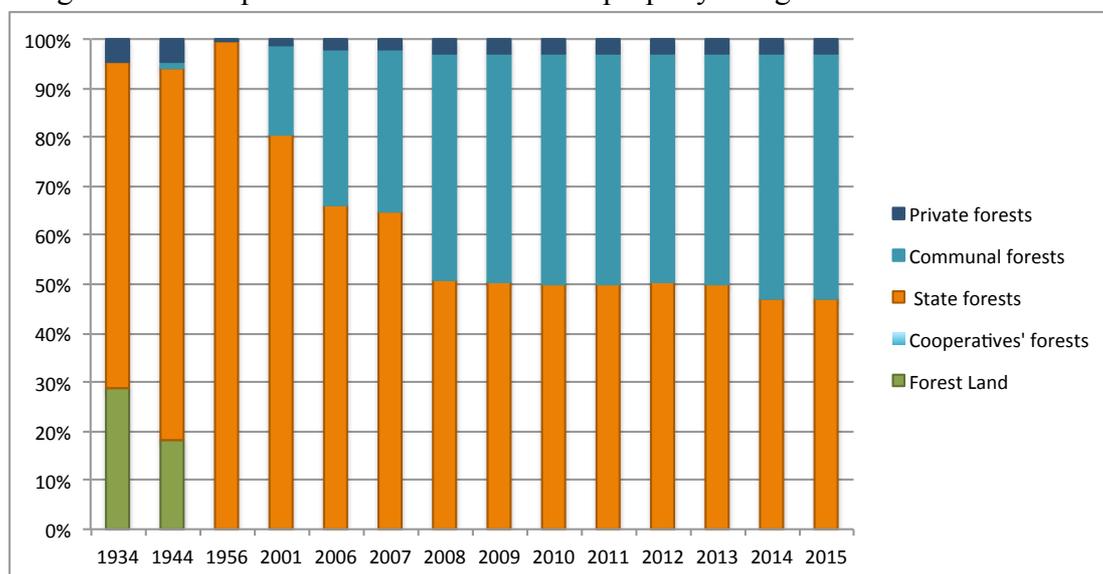
The definition of users rights depends on: the physical boundaries of the ecosystem at stake; the proximity of the users to the resource [the forest]; the property relations; the legislation system on forests and natural resources; and the historical practices. The physical boundaries of forests are defined through the legal definition on forests, which excludes individual trees and coppices in agriculture land from the forest cadastre database. The latter was established prior 1990 and not renewed since. Any attempt to rebuild a database after 1990 has made use of satellite imagery without any fieldwork follow-up, therefore not being classified as appropriate for an official forest cadastre reference. The lack of a recent forest cadastre makes it hard for authorities and researchers to come up with proper assessments, policies and scientific work on the conditions of forests and related services in Albania. On the other hand, it is the historical knowledge of the foresters and local people that somehow fills in the gap created by the lack of official information. This leads to a mixture of institutional management with add-hoc and people’s based management of forests.

Authorities have geographical coordinates for the environmentally protected forests that are under the state ownership (AKZM 2016). People can freely enter into these forests for walking, hiking and camping, as long as they do not exercise any other activity in these areas. Barbeques and camping fires are not allowed and in some of the forests camping is restricted too. Visitors may pay a fee to visit national park forests, but this is not applied in all cases and depends on the managing agency. The fees are usually 1-2 euros per visitor or car and there is no time restriction once you are in the park. Withdrawal activities are not allowed in the environmentally protected forests. The national agency and regional branches for protected areas manage these sites. They may also set exclusion rules for access to certain areas or parts of an area, depending on the biodiversity value and ecosystem services they wish to safeguard. The level of accessibility and protection depends on the features of each area and a

classification provided for them in the legislation (AKZM n.d.) (AKZM 2015) (GoA 2002)¹⁰.

In the case of privately owned forests, all user rights belong to the owner and no one else can enter the property. There are two cases of privately owned forests: (i) Transfer of property to the owner has concluded, constituting 3% of forest area in Albania (INSTAT n.d.). (ii) Transfer of property to the owners has not occurred yet, but there is common historical knowledge on the right of ownership. The “owner” has in most of the cases old documents showing his/her property rights and whose validity can only be established by a court. However, the neighbours know about this “heritage” and freely accept the conditions set by the “owner” on the property. In both cases the owner strictly prohibits others from entering his forest. Therefore, all uses are an exclusivity of the owner only.

Image 2. The composition of forests based on property and governance



Source: (Muharremaj, Pyjet dhe Kullotat [Forests and Pastures] 2003); (INSTAT n.d.); own calculations.

Seldom, in the more hilly areas, the owner fences his property. In the more mountainous settings, the owner does not fence the forest. However, in several cases, one can notice stones placed in a small pyramid-like composition along the perimeter of the property boundary. This stones’ composition is inherited since the early 1400s (for what is known), as defined in the *kanun* provisions. The same boundary mark is applied to pastures, though mainly for limiting users rights areas rather than delineating a territory of full ownership. In other cases the owner places a signboard with “private property” written on it, simply as a warning sign. The owner monitors daily the forest to make sure others are not entering or harvesting it. The owner may do so by him/herself, or hiring a watchman. The owner is responsible of maintaining the health of the forest and harvesting it, in compliance with the legislation and other technical provisions set by the respective municipality. The forest engineers from the municipality refer to these properties as private in the municipal forest management

plan and help the owners in preparing annual harvesting and maintenance plans for their own forest, in line with the municipal plan.

In the case of municipal forests, access is free for all and includes walking, hiking, bird and biodiversity watching, hanging around and picnic. Camping is usually allowed upon permission by the municipality in case it involves massive and long-term camping, but over-night stays of small groups in tents take place freely. The municipality manages the forest produce and maintenance activities either by itself (own forests' enterprise or annual contracts), or through transferring rights (common management or licensed rights¹¹). The municipality transfers rights to one forester, a group of families, or a village. The right are transferred primarily to those who live close to the forests location, thus emphasising the “proximity” feature, but there is no discrimination of other users, wherever they live. The licensed rights are rather short-term (one-three years) and include [sanitary] cutting and selling of the timber, next to some minor forest maintenance activities. The municipalities adopt a system of combined intrinsic and instrumental allocation rules (Raymond 2003), thereby favouring first those who are classified as historical users or owners of the forests (priority allocation); then favouring those who live close to the forest (instrumental, class-based); and then defining a set of technical criteria that each group of users has to fulfil (MoE 2016). The law regulates the process, but it is the public auction that defines the final beneficiaries.

If the forest is managed in common by the village, then walking is usually possible. Still it is always better and advisable that the visitor either is accompanied by a villager, or notifies on his intention the alderman or some one else who is well known to the village and will spread to news to the others.

The municipalities monitor the forests for eventual fire risks and set warning signs against fire placing activities, including excursionists who may organise barbeques. In the case of CPR forests, the municipalities still monitor, but forest shareholders take care of monitoring and preventing fires. If these forests the villagers cover the cost of fire prevention and mitigation (GoA 2010).

Private owners can sell their property, but holders of proprietary rights have no alienation rights. Municipalities cannot sell for legal reasons, but also because the forest property registration is far from being completed. However, municipalities can propose, through the territorial planning instruments, a change of use for the forest area. The Minister responsible on forests, or the Council of Ministers has the right to approve the conversion based on the size of the respective forest area (GoA 2005).

The intention to manage forests in common is historical, as are some of the procedures that villagers implement among themselves. However, the role of donor projects for the last 20 years has helped in this regard by promoting foresters to manage the forest in common, raising capacities, helping the establishment of forest users associations at watershed scale and providing funds for forest maintenance activities. There is criticism to the users associations as groups set through a top-down

pronouncement (the Ministry) and external injection by donors, thus being unsustainable in case of no funds.

This is true to a certain extent, as the associations do not carry out functions in absence of funds from donors and municipalities. On the other hand, the associations represent the users; have institutional memory of the forest commons in Albania for the last 28 years; have practical knowledge on the forest CPRs and keep updated on local forest conditions; supply the national forest federation with local information on forests health and management; and can easily resume their activities in forest maintenance, if funding is available. When the associations have access to funds, they cooperate with the forest users and together they carry out withdrawal and management activities as foreseen by the law.

The legislation provides criteria and rules for the procedures that a municipality has to implement when giving a forest area in use. These procedures have changed in 2016, due to the forest moratorium law, to exclude renting to companies for timber commerce and export. The current bylaws cover the exploitation of wood material for heating and sanitary cuttings and users' rights transfer to communities for shared management of the resource. In the first case (heating and sanitation), the municipality is responsible and carries out its function through a dedicated municipal enterprise or contracting out the activity on an annual basis. Whichever the case, the municipality designates the quantity of wood and the specific trees to cut. The municipality acts similarly for the non-timber wood products (GoA 2016).

The transfer of users' rights is implemented for a period and within the scope defined in the 10-years forest management plans prepared by the municipality, for those activities that the forests legislation allows and that: significantly improve biodiversity in the forest; improve forests infrastructure and safety; are not characterised by any conflict ownership (MoE 2016). Initially, the municipality should designate the areas that are suitable for transfer of rights and have them approved by the Municipal Council. During this process, the Municipality cooperates with villagers and foresters, in order to understand their needs and requests. Then the municipality organises a public auction to finally select and have a renting contract with the user or group of users to manage each forest. The users gain withdrawal and management rights and duties. They also gain exclusivity of access and the right to exclude others from entering and using the forest. The user/s have also the responsibility to cooperate with a forest engineer in drafting a forest rehabilitation action plan. Furthermore, they should protect the forest from fires and any harmful third parties activity. By gaining these rights, the users benefit both financially and in kind. Till 2016, the municipality used to issue certificates of use to user' rights holders. Currently, it is the renting contract that guarantees the rights. (GoA 2006)¹²; (GoA 2016)

Once a group of people are granted the users' rights on a forest, there is no any compulsory form of membership to the group. Nevertheless as the granting takes place through a rent contract between the group and the municipality, the information

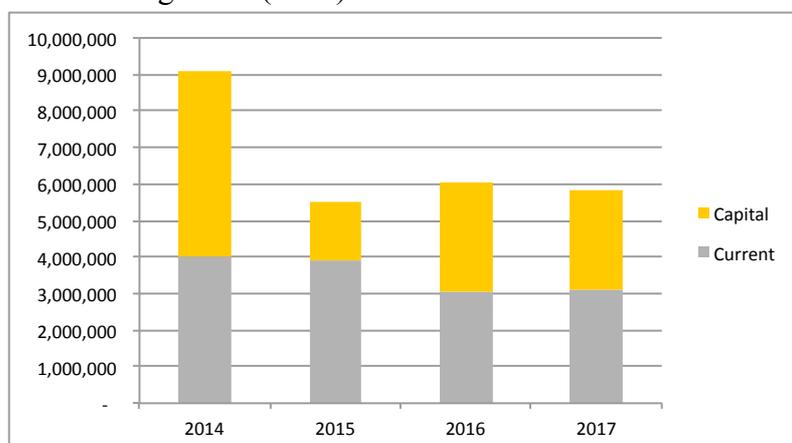
on members/beneficiaries is integral to the contract. The group agrees internally and people record this information individually, each on their own ways. There are though cases where the village alderman, or a designated person within the group may record these decisions in a book of records. The families' shares are usually proportional to the size and needs of each family, but there also cases where historical knowledge on the shared use of the resource may be added as a criteria. Once families enter in this common agreement, they do not sell rights to other possible members, because the arrangement with the municipality will not allow for it. The Municipality records this arrangement for its own purposes, upon legislation, and therefore keeps track of its implementation. As a result, there are two parallel monitoring processes: (i) the informal one from the members of the commonly shared forest; (ii) the one that the municipality carries out. (MoE 2016).

In the case of commonly managed forest, the beneficiaries live in the nearby villages –not a legal conditionality, but a practical criterion most municipalities use. In the case of private forests, or users' rights granted to one individual, the latter may also live in a nearby urban area. As a result, the number of urban “forest-owners” has increased overtime. However: (i) the licensed rights have a short-term limit of 1-3 years, therefore, the number of urban “owners” in this category has a high variation; (ii) the urban owners of private forests have currently a tendency of returning to their village homes during spring and summer time, thus reflecting a seasonal pattern of physical proximity to the forest. During winter they organise daily or weekly visits, mainly to make sure none is entering their property.

Proportional equivalence between benefits and costs

The Municipality/Ministry and external donors have been so far the key funding sources to the forest management system in Albania. The Government had a budget of app. 9 million EUR in 2014, gradually reducing to 5.8 million EUR in 2017. The balance between capital and current expenditures also shifted from favouring capital expenditures in 2014 to current expenditures in 2017 as follows.

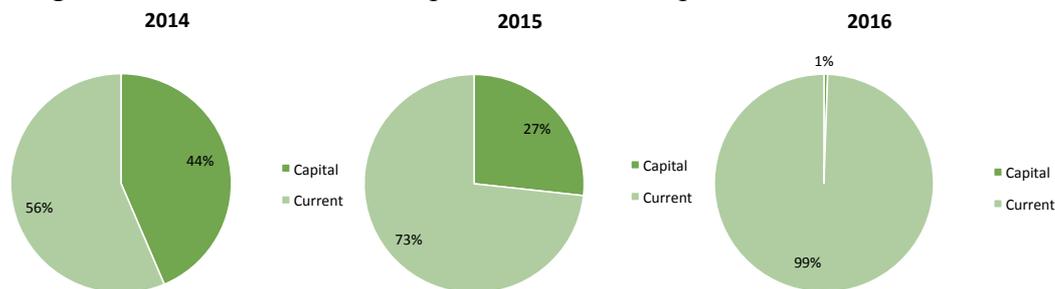
Image 3. The balance between capital and current expenditures in state budget for forest management (EUR)



Source: www.financatvendore.al (2017) and own calculations, based on Ministry of Finance data

The situation with local funds is rather complex, due to the effect of the territorial-administrative reform of 2015 (consolidation of 373 municipalities into 61), and the full transfer of forest management to local governments in 2016. As a result, the own capital expenditures have declined by around 80% while the current expenditures have increased tremendously due to transfer of operational expenditures. The state transfer for capital investments on the other hand has almost tripled in 2016, compared to 2014. Absolute figures remain though very low, with a total of app. 900,000 EUR own funds and app. 600.000 EUR state transfer for forests in 2016.

Image 4. The balance between capital and current expenditures from local own funds



Source: www.financatvendore.al (2017) and own calculations, based on Ministry of Finance data

Donors have been/are interested in establishing a strong commons' regime and ecosystem-based management system for forests, therefore supporting the governments, the users associations and foresters since 1995. WB projects alone rise to more than 30 million EUR. Local foresters that have a renting contract (usufructuary rights) with the municipality, or companies that have been granted licensed rights for a short-term period constitute another funding party. However, there is a disproportionate relation between costs and benefits that each party bears/receives.

Public institutions and donors invest in order to maintain the health of forests, ensure their sustainability and resilience of ecosystems and establish knowledge and capacities on how to govern forests through an integrated approach at the benefit of the direct forest user, the society and biodiversity. Due to their intended mission and social responsibility, the governments and donors provide substantial funds, though lower than the intended benefits. The users on the other hand, operate in a more individual and profit-based level, aiming at receiving the highest benefits at the lowest costs. While local users have a direct dependency relation with the forest ecosystem, therefore safeguarding them for the future, the licensed companies apply low or zero discount rates to the ecosystem value. In many cases, the companies have not planted new trees after cutting the timber as set in their contracts. In the case of commonly managed forests, the villagers share among them responsibilities and the expected benefits proportionally to the size of the family and based on historical relations with the forest. This is all agreed in the arrangement document they have with the

Municipality. In general, local foresters are keen on applying high discount rates as they see substantial future value in the forests.

The rules and criteria for allocating/licensing users rights to individuals, group of villagers or companies, together with fund allocation and disbursement are defined in the legislation and specified in agreements. Being nationally defined these tend to be as broad based as possible to reflect as many local circumstances as possible, and there is no typically any customization. The rules among villagers in the case of commonly managed forests are set between them informally and/or partially foreseen in the agreement they have with the municipality. Other rules that do not appear in the contract are set and followed upon historical and practical knowledge that the shareholders have on the use of the forest at stake. Thus, both physical and temporal boundaries play a significant role in shaping the relation between the shareholders.

The overall management of forests from an institutional perspective is as follows: public in the case of municipalities governing the resource through their own enterprises; non-for-profit in the case of activities carried out by the users associations; profit making in the case of licensed companies; and profit making with high discount rate and social responsibility in the case of commonly managed forests.

Collective-choice arrangements

Decision-making on the use and management of forests is made based on the territorial plans and Forest Management Plans (FMP), prepared by the municipalities. The previous define the type of land use over the territory and designate possible areas for land use conversion. If the approved plan provides for conversion of forestland into other land uses, the Minister responsible on forests, or the Council of Ministers (area sensitive) issues the respective decision. The FMPs, on the other hand focus on forests management. The current FMPs are old and their full update is rather costly. As a result, municipalities are concerned on deciding about renting contracts, in a situation where the plan is mandatory due to the moratorium conditions. So far, municipalities have managed forests through gradual and partial update of the plans, only for those parts of the forestland being rented out. The forest user/s participate in the update process by expressing his/their interest on the management of the forest, but do not affect decision-making. The municipality reflects these interests in the plan and monitors its implementation as part of the contractual agreement.

The representation of users' interests is regulated through the agreement with the municipality. The users' associations on the other hand, represent the community of local foresters on a watershed basis, mainly in the communication with the Municipality, the national forests federation and any policy process related to forests governance. The associations have an NGO status, existing since more than 20 years, but paying taxes only when receiving donor-funds to carry out activities as designated in their statutes. Because many of them have not unregistered in the court during the financially silent periods, they experience troubles with the state institutions, or do not benefit from state funds, in case they wish to initiate activities with financial implications.

Since two years the national forests federation and the users associations have engaged in a critical lobbying and advocacy process to influence the new forests' law, to include communal property and all relational matters. The representatives of 251 users associations and 11 regional forests federations have carried out 7 regional meetings, resulting on conclusions that the national forest federation presented to the Parliament, the Prime Minister and the President. They have raised issues such as: the process of property transfer to private owners is lagging behind; the management of forests in common by village-based users is still weak and the current legislation does not promote it; in the few commons' cases, the users' benefits have a time limit and exclusivity to the villagers is not guaranteed. Users can use forest products, but cannot sell them. The associations and the federation propose that local forests traditionally belonging to the villages should be given in use to the villages (rural families), which initially should have at least proprietary rights on an exclusive basis and then own them. This will guarantee full access, withdrawal, management and exclusion rights on forests, selling of forest timber and non-timber products and the intrinsic principle of historical users. (FKPKK 2016)

Internal decision-making takes place through common agreement within the group that shares a forest. This is possible as the groups are small. However, this small group size and the several cases of individual use contracts contribute to system's fragmentation. The main aim of users associations is to avoid fragmentation, but as their work intensity is irregular over time and varies upon funding opportunities, so is the pressure they place on, or incentives they provide to users. It is clear that these associations can play a beneficial role in strengthening a commons' regime for forests, but their sustainability has to be guaranteed first. So far, the associations see funding opportunities as coming from donors and/or the government and do not pretend that users can also sustain their associations, assuming that users have yet weak rights on forests' governance and therefore low benefits.

Monitoring, graduated sanctions and conflict resolution

The forest owners, the users of shared resources and the municipal and national inspectors carry out forests' monitoring. Forest owners do not apply any sanction in case of own property violation, rather than warn the violator. However, they report the case to the municipality and ask for support in case of repeated violation. Sometimes they fence the property in order to avoid violation, but as private forest ownership is traditionally recognised in the village, the cases of violation are rare if not existent at all. In the case of commonly shared forests, the system functions similarly to the privately owned forests. The users monitor the forests and not being able to sell forests products, but only use for themselves becomes an incentive for them to protect what they are allowed to benefit. As the property belongs to the municipality, the latter applies penalties as defined in the legislation. The system of penalties was that of a "graduated sanctions", but since the moratorium is in place the inspectors apply a fixed-penalty of app. 45,000 EUR for each violation (GoA 2016). The inspectors are aware that local users would never be able to pay such penalties, so

they informally apply the “graduated sanctions” system, with warning as the initial step in case of noticing a violation.

In case of conflicts, resolution follows a step-by-step approach. Initially individuals involved in conflict try to solve the conflict amicably among them. If no solution is found, then the village alderman and/or the representative of the users’ association intermediates between the conflicting parties. In other cases, all members get together and try to reach a solution. If the conflict remains still unresolved, then the parties ask the municipality as an intermediate. Last but not least, there are also cases of two litigants only, where no solution is found and the conflict remains.

Recognition of the forest regime and nested enterprises

To date, the forest governance system allows for common management of forests to take place, but lacks legal provisions on commons’ regime. The local users’ associations and the forest federations (national and regional) advocate on behalf of the local appropriators, insisting that the law should include common property on forests and property belonging to the village, as recognised traditionally. Current commons’ rules do not appear in the legislation, but this can be subject to bylaws, once the commons’ regime and property will be recognised by law.

The juridical status of the forest considered for use as CPR is municipal property given in use to local appropriators through the use agreement. The users’ associations that act on behalf of the local appropriators have an NGO status, but they have no user rights. They advocate and lobby on behalf of the users and when funds are made available to them, they also support users to maintain the health of the forest. The associations are not very effective to date due to lack of financial sustainability, but they constitute the hook for pulling a network ecosystem-based system of forest commons, by having the ability to penetrate locally next to being organised in a watershed-based polycentric network. The latter is vital to establishing a national system of commons and can sustain the management of large commons on ecosystem principles.

V. Conclusions

Albania has a mixed regime of forests management that combines conventional governance by public agencies at national and local level, with shared informal management of some forests at local level. This hybrid system has experienced severely abrupt changes overtime. This has been due to both, exogenous reasons, such as variations to institutions and legislation influenced by dramatic ideological shifts, and endogenous reasons, i.e. stakeholders’ lack of experience, historical memory and coherence (Pejovich, 1990).

The commons’ forests regime is present, but hidden. The law does not recognize the commons’ regime; instead it provides for local forests being managed through users’ agreements (usufructuary rights) that one can associate to a commons’ regime. The conventional governance system recognizes only public and private ownership on

forests. While, the system allows some shared management to take place almost informally, without properly specifying this in the law, it does not recognize forest common property. In summary, the system is a combination of two approaches, with the instrumental approach prevailing over the intrinsic one. The latter though, exists due to the practice of local officials, who have a preference in choosing traditional appropriators to render rights, versus those who have no historical ties with the forests.

Ecosystem wise, the whole system is built in a way as to emphasize utility values and provisioning services of forests. The law emphasizes the watershed as the scale for organizing forest economies and mentions other ecosystem services as well, but does not provide instruments to unravel the principle of ecosystem governance. Government and donor programs have organized forest management activities at the watershed level and have/had ecosystem-based forest governance as an objective. They have focused on strengthening institutional regimes of forest management, but have not managed yet to pull out ecosystem services improvement initiatives. Ecosystem-based forest governance remains as yet more of an intuitive approach rather than an official and rational choice of forest management.

By emphasizing the conventional governance, the law aims at enhancing the role of municipalities in managing forests. However, the commons' regime on forests has also gained space practically through donor-funded projects (at least 5 large projects since 1995) having a multidimensional intention of: (i) introducing a system of multi-levels governance at watershed scale and a polycentric network for forests; (ii) raising knowledge on the value of forests ecosystems and related services and capacities to ensure ecosystems-based management approaches; (iii) reviving a system of common pool resources management for forests based on inherited practices that have lost their importance during the centralised socio-political regime of 1945-1990, but remain vivid in the memory of local people; (iv) introducing the watershed as an appropriate physical space for organising forests management, with both principles of commons and ecosystem services combined.

However, as these intentions were donors-led (both financially and capacity-wise), their results are rather feeble and the struggle of the communities, forests associations and forests' federation to provide space for forest CPRs in the legislation is still going on. Donors have followed two distinct approaches to streamline a commons regime: (i) the first¹³ established forests users associations as the hook to pull communities into shared management of forests. The strength is the existence of the associations to date. The weakness stands in their lack of capacities (financial and technical) to guarantee their sustainability and therefore carry out properly their role; (ii) the second was about working directly with forest appropriators (foresters and villagers), at watershed scale enabling them to properly engage with access, withdrawal, management and exclusion rights (the strength). The lack of alienation rights, vagueness in the law regarding CPRs, and local poverty hindered the sustainability of this approach (the weakness). State extension service was poorly run, so both

approaches could not resonate with an official establishment of the CPR regime for forests in Albania. Nevertheless, the existence of the watershed-based network of forest users associations (a social innovation) and scattered cases of the commonly managed forests, represent a good starting point for the strengthening of the CPR regime, assuming that the legal framework will also be revised to accommodate it.

The current regime of forest commons allows for appropriators to have access, withdrawal, management and exclusion rights. The appropriators can use the forest products, but not sell them. The appropriators and the municipal officials carry out together forest monitoring and cooperate in conflict resolution. The system has weakened however recently due to the forest moratorium law that has set a one-penalty sanctioning system instead of the previous graduate sanctioning.

The relationship between costs and benefits of forest governance is mainly defined by the legislation. However, physical and temporal boundaries play also a role in the case of commonly managed forests. Thus, due to insufficient monitoring and low enforcement of sanctions by the public authorities, the costs and benefits are not mutually proportional in overall, with those receiving licensed (short-term) rights bearing less costs and receiving high benefits and vice versa for the municipalities. Costs and benefits are shared proportionally between shareholders within the few cases of a commons' regime.

The watershed-based CPR regime should be strengthened and have a healthy cooperation with the conventional forests management, as the way to guarantee ecosystem-based governance for forests. This requires that public institutions raise their capacities in the one hand and communities are given the official opportunity to engage in a commons' regime in the other. However, measures to conserve natural resources are more likely to succeed if local communities are given ownership of them, share the benefits and are involved in decisions (MA 2005). Some scholar presumed that unless users had alienation rights, they did not have any property rights. (Ostrom, Desing Principles of Robust Property-Rights Institutions: What have we learned? 2009). In fact, in Albania, users gain proprietary rights, but as these depend on a contract with a limited lifespan, their strength is pretty questionable. Therefore, it is necessary either to reform the criteria for providing strong proprietary rights, or provide full ownership to villages for the so-called village/common forests. This undoubtedly requires for a substantial revision of the legislation, to accommodate a sound common's regime for forests.

The revision of the legislation should emphasize the use of the intrinsic approach in forest governance. Historical knowledge and practices of shared forest management are an asset in this regard. Stakeholders request for a strong common property regime to be in place, considering it more appropriate than a commons governance regime, because full common ownership will: revive historical links, leading to sustainable practices; provide ground to ecosystem-based governance for forests; enhance the success of the shared management due to strong direct links between appropriators and resources. On the other hand, moving from a hybrid system to a full common

ownership may risk the very purpose of the shift. Therefore, stakeholders propose for a gradual change to take place. As a first step, the moratorium needs to be revised to eliminate side/external effects and replace the one-penalty system with the graduated sanctioning one, next to enhanced monitoring. Then the common management of forest on village and historical ties basis should be settled in the law, followed by criteria that strengthen the system and sustainability of the proprietary rights. Municipalities should then promote people in the rural areas to self-organize for shared forest management.

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¹ Referring to Alexander & Penalver (2012), one of the distinctive features of property rights is their in rem quality, i.e. properties impose duties on everyone else to respect those rights, regardless of whether they participated in the respective transaction. The boundaries of the thing play a vital role in defining the scope of people's in rem duties to owners.

² Intended Nationally Determined Contributions

³ Kanuni of Lekë Dukagjini is a summary of the norms, social codes and laws that regulated the life of the Albanians of the North for some hundreds of years, before Lekë Dukagjini was born, during his life and after his death, i.e. during the 15th century. The reason for taking his name is because it is thought that he was the first to summarise it in a written form. The version that I refer to in this text is a reprint of the publication of father Shtjefen Gjeçovi, which he prepared during 1010-1925, including also his own short biography and a foreword with instructions on how to read and understand the Kanun. The Kanun, as a book, has a social value and it contains 12 "books" (chapters) and more than 1,200 articles. Beyond the Kanun of Lekë Dukagjini that regulated norms and ethics in the northern Albania, there are also other Kanun-s, such as that of Scanderbeg, of Labëria, etc.

⁴ After the declaration of the independence from the Ottoman Empire and the creation of the first Albanian State.

⁵ Albania has undergone a territorial-administrative reform in 2015 that resulted in the consolidation of 373 local governments into 61 municipalities. The previous LGs were smaller in size and those located in the mountainous areas were in many cases corresponding to micro-watersheds.

⁶ WB support that means: an IBRD (International Bank for Reconstruction and Development) loan of 7.3 million EUR and a GEF (Global Environmental Facility) grant of 2.2 million EUR.

⁷ This law has gone through several amendments since it was approved. This paper refers to all those amendments. The law amendments can be accessed in the Official Gazette of the Republic of Albania in www.qbz.gov.al. The respective sources are listed as follows, with the figures corresponding to the exact number of the official gazette, the respective page and year of publication: 56/1604/2006; 103/3001/2007; 150/7375/2008; 86/3775/2009; 18/747/2012; 30/1230/2013; 84/4665/2016.

⁸ The area is calculated in GIS based on the specific data provided by the National Agency of Protected Areas for each specific area.

⁹ “In 1985 the Corine programme was initiated in the European Union. Corine means 'coordination of information on the environment' and it was a prototype project working on many different environmental issues. The Corine databases and several of its programmes have been taken over by the EEA. One of these is an inventory of land cover in 44 classes, and presented as a cartographic product, at a scale of 1:100 000. This database is operationally available for most areas of Europe”. (European Environment Agency n.d.).

¹⁰ The law on protected areas has been amended in 2008 and a new law on protected areas has just initiated the approval procedure.

¹¹ Licensed rights were in place till June 2016, when a bylaw was passed by the Council of Ministers to reflect the forest moratorium law.

¹² This Decision of Council of Ministers is revoked in 2016 and replaced by the DCM no. 433.

¹³ The World Bank approach