Current pathways towards good forest governance for ecosystem services in the former Soviet republic Tajikistan

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ABSTRACT

As one of the former Soviet republics, Tajikistan is facing a slow transition from a communist command-and-control system to a more market oriented, decentralized and participatory forestry. In the last 25 years, the country's forestry sector has undergone several reorganizations. In the process of a current reform, the overall aim of this study is to gain a broader understanding of the current state of forest sector in Tajikistan. Our specific objectives are a) to describe the current institutional network's complexity, (b) to analyze stakeholders' perceptions on the key challenges towards good forest governance, (c) and give recommendations to tackle the key challenges, so that important forest ecosystem services (ES) may be enhanced, thus, also contribute to the development of the sector. We elaborate a generic framework, which simplifies complex interaction of governance and forests ecosystem services. Quantitative and qualitative data were collected through questionnaire-based interviews with stakeholders of the forestry sector. The results indicate that the forestry sector is still far from representing good forest governance, however the newly established structure seems to be a first step. Yet, challenges in establishing sound legal frameworks, decision-making transparency, and implementation enforcement must still be overcome. While it is too early and challenging to assess the impacts of forest governance on ES and vice versa, the survey respondents highlight the importance of provisioning services for the development of the forest sector. Given the post-Soviet background, almost all member countries developed along similar lines. Therefore, the study results are not only of significance for Tajikistan, but also countries with similar history and socio-economic context.

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1. Introduction

It is widely agreed that the state of forest ecosystems and their contribution to socio-economic development is largely dependent on the chosen governance. Poor forest governance causes depletion of these ecosystems and their consequent failure to provide sufficient goods and services to society (Lazdinis et al., 2009). While numerous definitions are in use, 'forest governance' essentially includes the "norms, processes, instruments, people, and organizations that control how local people interact with forests" (Kishor and Kenneth, 2012, p. 3). Higman et al. (2005, p. 6) argue that forest governance is about the quality of decision-making processes rather than the political governmental structures. The authors define forest governance as good governance when it encourages the implementation of sustainable forest management. In turn, good governance is associated with stakeholder participation, transparency of decision making, accountability of actors and decision makers, rule of law, predictability, efficient and effective management of natural, human, and financial resources, as well as fair and equitable allocation of resources and benefits (Kishor and Kenneth, 2012).

With a wide definition of forest governance, it is challenging to cover all aspects (Giessen and Buttoud, 2014), however, here is a common consensus that good forest governance would enhance ecosystem services (ES) of forests, as the services are tied to the sustainable management of forest resources (Ostrom, 1999; Spangenberg et al., 2014). Given this background, in the context of this study we define 'good forest governance' as a network of institutions, wherein the interaction of transparent legal frameworks, decentralized decision-making, and implementation is assumed to lead to the enhancement of ES of forests over time. This definition of good forest governance, however, would not have been relevant in the former Soviet Union. This is because forest policy in the Soviet Union is often acknowledged to be a centralized and top-down system, despite several positive aspects (Ziegler, 1990; Pryde, 1991; Nordberg, 2007; Lazdinis et al., 2009; Brain, 2011; Ulybina 2014a; Ulybina 2014b). Tajikistan, as one of the former Soviet republics, needs to cope with both the acting command-and-control system and the slow transition to market oriented, decentralized and participatory forestry. Here, during the Soviet times, "the socialistic state was the only owner of all forests" (Mukhin and Kryvda, 1976, p. 7). Thus, the state played the dominant role in defining the directions of forest policy

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and its implementation. Private forestry at that period remained inconceivable because it was perceived as profit-oriented and thus, unsustainable (Koldanov, 1992). Tajikistan was in the "forest deficit zone," thus, conservation was the main aim of forestry. Wood harvesting was shifted to "forest surplus regions" such as Siberia (Pryde, 1991, pp. 115, 130). All workers of the forestry sector were employees of state cooperatives or state enterprises. In terms of implementation, forests were conserved and used only according to the plans and guidelines established by the state (Lazdinis et al., 2009; Nordberg, 2007). The inheritance of the Soviet environmental policy plays an important role in the country still today. Previously and newly established formal and informal institutions at multiple administrative levels create a complex institutional structure, which influences today's forest governance. At the same time, a lack of political attention and limited funds allocated to the forestry add further challenges towards good forest governance achievement. Additionally, the energy crisis, which occurred after the collapse of the Soviet Union in 1990 put high pressure on the already scarce forest resources (Mislimshoeva et al., 2014).

As a step towards good forest governance, i.e. better-organized institutions and more effective law enforcement, the Government of Tajikistan (GoT) declared a reform of the forestry sector in 2013. Fundamental institutional changes took place in two agencies, which are governing the country's forests: the Committee for Environment Protection (CEP) and the Forestry Agency (FA) under the Government of the Republic of Tajikistan. Before the end of 2013, the FA functioned under the command of the CEP; today the two operate independently. However, the ongoing reform process is particularly complex, due to the following challenges (Solberg and Rykowski, 2000; Kadka and Jalilova, 2013; Kohler and Kirchhoff, 2013; SPCT, 2013):

a) Weak tenure laws of forest management and lack of awareness of ownership rights; insufficient public participation in forest management;
b) A significant gap between legal frameworks, especially those on property rights and practice;
c) Lack of trained personnel;
d) Lack of reliable data on forest cover, conditions;
e) A significant lack of research in forestry sector.

To overcome these challenges, many activities are being conducted by national and international development organizations during the ongoing forest sector reform so that a decentralized and sustainable forest management system may be achieved in Tajikistan.

Not only in Tajikistan but also in other former Soviet republics forest governance topic has received very little scientific attention, despite its importance in the transition phase. In the case of Tajikistan, identifying and understanding the potential challenges of the forestry sector is essential especially in the process of the ongoing. The overall aim of this study is to gain a broader understanding of the current state of forest sector in Tajikistan. Our specific objectives are threefold: a) to describe the current institutional network's complexity, (b) to analyze stakeholders' perceptions on the key challenges towards good forest governance, (c) and give recommendations to tackle the key challenges, so that important forest ecosystem services (ES) may be enhanced, thus, also contribute to the development of the sector. The elements of the institution network, good governance and ES are explained in detail in the research framework section.

About 9–11% (around 400,000 ha) of the total pasture[1] area of Tajikistan are managed by the FA (Robinson et al. 2012; Wilkes, 2014). Pasture governance, conflicts of pasture and forest management, and implementation disputes are, however, not in the focus of this study. In-depth comparative analyses are readily available (see for

example Robinson et al., 2010; Halimova, 2011; Robinson et al. 2012; Wilkes, 2014).

2. Methodology and theoretical approach

2.1. Background, forest ecosystem services and management

The Republic of Tajikistan is a landlocked country, located in the south-eastern part of Central Asia. It shares borders with Afghanistan, Uzbekistan, Kyrgyzstan, and the People's Republic of China. About 93% of its area is covered by high mountains. Almost 50% of the area is located at an elevation of more than 3000 masl (Romer, 2005; UNDP, 2008). In 1991 Tajikistan gained independence and between 1992 and 1997 it experienced a brutal civil war causing tremendous human losses and devastating the economy (UNDP, 2008). Today, Tajikistan's economy depends on exports of cotton and aluminum, while the most important factor for socio-economic stability are the remittances from labor migrants from abroad (World Bank, 2009; ADB, 2015). Poverty headcount ratio at national poverty line ($ 1.4 per capita per day) is 47% of the population (World Bank, 2009). The independence of Tajikistan and the civil war shaped the development of agriculture and forestry (Romer, 2005). Since then, these scarce resources need to sustain the increasing demand for agricultural and forest products.

Forests[2] in Tajikistan are a crucial spot of biodiversity. There are 200 species of trees and shrubs in the forests, including rare and endangered species (Kirchhoff and Fabian, 2010). The most widespread types of forests in Tajikistan are coniferous forests (juniperus), broadleaved forests (mesophilous), small-leaved mountain forests (microthermous), light forests (xerophilous), and Tugai forests (Novikov and Safarov, 2003; Kirchhoff and Fabian, 2010). According to the last conducted forest inventory in 1985, there were 111,200 ha of "forest covered land" in Tajikistan, covering about 0.8% of the country's land surface (Pryde, 1991, p. 114). At present, no reliable data on forest cover are available. According to the Global Forest Resources Assessment (2010) estimates the State Forest Fund[3] in Tajikistan encompass 1.8 million ha, out of which approximately 410,000 ha are actually covered by forests. This equals 3% of Tajikistan's territory. Other sources suggest that due to the ongoing human induced degradation, less than 2% are covered by forests (Kirchhoff and Fabian, 2010).

Today's forest conservation policies can be tied to the history of environmental policy in the Soviet Union. In 1943, all forests of the Union were categorized into three groups (Ulybina, 2014b). Group I included only forests under strict conservation, Group II were those of conservation and utilization, and Group III were for industrial use. Even though use of forests (including timber harvesting) was foreseen in the Forest Code of the Tajik SSR (1980, p. 109), 95.8% of its forests were under Group I, which included forests of "urban greenbelts, resorts, erosion control, shelterbelts, road protection, and forest reserves" (Pryde, 1991, p. 115–16). Thus, forests were utilized for conservation purposes, while the countries' enormous timber demand was covered by concessions in Siberia (Pryde, 1991, pp. 115, 130). Under the current Forest Code of Tajikistan (2011), conservation of forests includes areas that are important for a set of ecosystem services:

a) "water regulation — protective forest belts along rivers, lakes, reservoirs and other water bodies;
b) erosion prevention — forest on the slopes, protective strips along railways and roads;
c) sanitation and wellness — urban forests, forests around towns and other populated areas, recreational forests, and resorts;

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[1] In the Forest Code (2011) pasture is defined as "land of the State Forest Fund intended for livestock grazing purposes."

[2] Forest is defined in the Forest Code (2011) as an area which is no less than 10% covered by wood-forming plants, not less than 0.5 ha and a width not less than 10 m.

[3] "The State Forest Fund comprises of all the forests of natural origin, regardless of the land user, as well as forests of artificial origin, administered by the state agencies, and lands which are not covered with forest vegetation, provided for forestry needs" (Forest Code, 2011).