

Changing Role of Public Forestry Institutions in Central Asian and Caucasus Countries



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Executive summary

As a follow up to the FAO Forestry Outlook Study for West and Central Asia (FOWECA), a more detailed analysis of five Central Asian and Caucasus (CAC) countries (Armenia, Georgia, Kazakhstan, Kyrgyz Republic and Uzbekistan) was undertaken in 2008-2009. The study looks at the changes which occurred in the public forest institutions of these countries since independence and assesses the effectiveness of organizational reforms in improving forest management and in strengthening institutional capacity. Changes are analyzed in the broader context of the transition to a market economy. This report summarizes the findings of the five case studies and suggests possible ways to improve the efficiency and effectiveness of the public forest service.

Formerly part of the Union of Soviet Socialist Republics, the five countries studied share a common background and a similar institutional system, characterized by the dominant role of the state and clear hierarchies. After independence in 1991, each country had to reform their administrative structures and institutions to reflect the drastic changes which were required as a result of their new status. Although strong presidential powers emerged after independence, government structures inherited from the previous regime were slow to adapt to the new context, including the shift to a market economy. Therefore, their capacity to control social and economic development was extremely weak. Other trends which the countries shared were a move towards administrative decentralization and a transition to market-based economies, the former being introduced to help overcome the failure of central government to adequately address local needs and priorities and to adapt to changes taking place in the social-political context. Administrative responsibilities were delegated to local governments while decision-making, including over the management of financial resources, remained centralized. For the most part, reforms did not go beyond the re-structuring of ministries, departments, territorial administrations, and local self-government.

Economic reforms were oriented to the establishment of market relations and to the development of policies to replace central planning and specialized economies. New rules and mechanisms became important determinants of change and ultimately modified the economic structures in each country. Privatization of state enterprises and their assets, as a matter of priority, is another important change. However, inconsistent, ambiguous and uncoordinated regulatory frameworks, combined with a significant lack of knowledge and experience, have made the transition from state to private ownership difficult.

After independence, a change in the role of the state, a considerable decrease in state subsidies, and an urgent need to develop alternative financing strategies defined the changes required so forest institutions could assume a new role and deal with the emergence of new actors. A new vision of forests as a provider of multiple services and goods, different expectations, and the increasing importance of environmental issues have all contributed to the formulation of new forest policy objectives and management priorities. Thus, decentralization and a redistribution of functions promoted the establishment of new institutions and, at the same time, created a need for new policy instruments and mechanisms.

To become a modern and flexible service capable of responding to changing needs, public forestry institutions must overcome several challenges, one of which is to develop comprehensive approaches to forest policy and strategic planning which take into account the particular circumstances of each country. Another is to integrate sustainable forest management priorities into the policies of other sectors. In this regard, harmonization of laws is a pre-condition. For effective institutional development, coordination is also essential between national legislation and international agreements (legally and non-legally binding) as well as with laws governing other sectors. Commonly defined and shared enforcement mechanisms would also serve to better integrate forestry issues across sectors, as would a clear definition of the new role and functions of the public forest service in a changed administrative, political and economic environment.

In order for the forest sector to undertake the range of reforms required, it will have to build the knowledge and skills to cover more than just the technical aspects of forestry. At the moment, such capacities are still missing. Clear decentralization strategies are also missing in all five countries and, as part of their development, an analysis of the extent to which current functions correspond to newly

identified needs should be conducted. Comprehensive privatization strategies and policies pertaining to information and education are also needed to both facilitate and improve the efficiency of institutional reform.

For decentralization to be effective, fiscal aspects must also be decentralized to complement the transfer of administrative responsibilities. However, lack of action on this front accounts for one of the weakest points in the institutional reforms of CAC countries to date, quite often because these processes are not supported by the development of financial capacities. Neither do they define the modalities for involving the new actors who are becoming involved in forestry as a result of decentralization, including local government, local populations, associations of private users, and civil society in general. These gaps could be filled if countries adapted their current financial strategies and mechanisms to the needs called for by decentralization.

Institutional changes in the forest sector are linked to several emerging trends: (i) a new role for the state, (ii) the appearance of new actors, (iii) a wider vision of forest as part of general development, and (iv) the integration of forestry into other sectors. Consequently, the state and public institutions must move more towards managing public goods and providing essential services - a move that will require facilitation skills and regulations which are consistent with good governance.

The paper's conclusions and recommendations stress the need for public forestry institutions to adapt to changes so that they can better respond to today's challenges, especially with regard to integrating forestry issues into the policies and strategies of other sectors. At the same time, it is also important for the sector to review its norms and regulations on a continuous basis to ensure they remain relevant. Taking on the role of facilitator and strengthening the regulatory framework both entail having forest policies in place that promote transparency, accountability and participation as elements of good governance. In addition, new functions, new actors and new institutional arrangements could all be defined in a comprehensive strategy which focuses on information and education. A regional network could also play an important role in developing public forestry institutions and in enhancing collaboration.

Introduction

In five Central Asian and Caucasus (CAC) countries¹ under analysis, multiple changes have taken place since their independence in 1991. With regard to forest policy and public forestry institutions, the common background each country shares - a centralized planning system, direct or indirect subsidies to the forest sector and state forest ownership - brings to light some general trends. To better understand how forest policy has evolved and what effects policy statements have had on the forest sector in these countries, a broader political environment needs to be taken into consideration. The transition from centralized government to a regime based on democratic principles and free market relations poses major challenges which include the need to establish new institutions and re-organize outdated ones. Parallel developments in the global context, such as the debate on issues surrounding sustainable development and general democratization processes, also promoted a move toward government decentralization in the countries studied. The institutional structure of the public forest sector was similar in all five countries, influenced by internal factors (general reforms based on decentralization and privatization) and external ones (global international initiatives and donor requirements). The findings of this comparative study show that changing expectations from forests and the growing importance of environmental and social aspects are re-orienting policy objectives and means, thus promoting conceptual and operational shifts: redefinition of policy instruments, establishment of a new legal framework, promotion of private initiatives, and redefinition of financing modalities. These changes should lead to different roles and functions of the state forest service as well as the identification and involvement of new actors. The study indicates, however, that a lack of clear strategies and mechanisms to implement reforms is making the transition difficult. Moreover, in many cases, the willingness to move beyond political declarations and policy statements is not apparent.

¹ Armenia, Georgia, Kazakhstan, Kyrgyz Republic and Uzbekistan

Background and objectives

The FAO Forestry Outlook Study for West and Central Asia (FOWECA) stated that “achieving better management of forest resources in Central Asian and Caucasus (CAC) countries requires re-vamping public forest sector agencies, including a re-examination of their core-values, functions and structures” (FAO, 2007). Indeed, the development of a framework for the evolution of public institutions is influenced by external factors, such as the international dialogue on sustainable development and global efforts to reduce poverty, address climate change and curb deforestation. It is also affected by internal factors at the national level, such as decentralization and privatization. With increased stakeholder participation, a growing private sector, and decentralized management, new actors are assuming some of the functions and responsibilities of public forest institutions, thereby changing their role and functions as well.

Evolving contexts create new opportunities for forest products and environmental services and are creating different expectations of the sector. In turn, these shifts require public institutions to continuously adapt. Frequently, this adaptation takes the form of structural changes and a reorganization of the state forest administration, including a redistribution of responsibility among ministries to oversee forest management. Changes in decision-makers, in turn, can also lead to more rotation of staff and more structural changes.

In 2008-2009, following up on the FOWECA findings, FAO undertook to examine the changes in the forest sector in CAC countries since independence and to assess the effectiveness of organizational reforms on forest management. This analysis is based on in-depth studies conducted by national consultants, in close collaboration with focal points appointed by the heads of the forestry administrations or relevant ministers in each country and in consultation with a range of stakeholders.

The study focuses on the changing role of public forestry institutions and on what may be done to improve their efficiency and effectiveness in the context of larger changes. How do they adapt to the changes? What are the drivers and the obstacles for change? Which changes have improved performance and efficiency? Which changes are still required?

Based on a detailed assessment of functional and structural changes in the public forestry agencies, the case studies analyze the linkages between such changes and the broader evolution of political, economic and institutional dimensions. They have provided the basic information to assess and compare country experiences and to identify options available to improve the functioning of public forestry agencies.

The development of forestry institutions in each country was looked at from five aspects: (i) general forest policy objectives; (ii) policy instruments (as reforms at the conceptual level) (iii) institutional reform; (iv) legal reform; and (v) information/education/training reform (as reforms at the operational level). The division into “conceptual reforms” and “operational reforms” has been made to better understand the possible gaps between stated objectives and strategies and their implementation.

The country reports were validated and complemented by round-table discussions with key forest stakeholder groups, including government officials, the private sector and civil society organizations. Concrete measures and changes needed for the forest sector to function effectively, ideally within a 10-year period, were deliberated and form the basis for the conclusions contained in the reports. The meetings helped to create among the main stakeholders a sense of involvement in and responsibility for further institutional improvement, consistent with the recommendations of the study.

A regional workshop, organized at the end of the study, involved about 40 participants from governments, the private sector, and civil society organizations from each country that participated in the study, in addition to representatives from Turkey and Tajikistan. Discussions centered on the reform process in public forestry agencies and exchanges of information enabled countries to learn from each other’s experience, identify common problems, and assess the potential to formulate recommendations for shared actions, including when appropriate, changes in forest policy. Participants also defined possibilities for establishing a regional network on forestry institutional issues in the CAC countries.

This report summarizes the outcomes of the study and describes broad trends in public forestry institutions in the context of actual changes. It also identifies possible follow up and support needed to strengthen capacity to meet emerging challenges.

Implications of recent changes on public forestry institutions in CAC countries

Informal rules and norms which are not necessarily codified, legitimized or enforced by formal structures can influence how institutions are reformed to a greater degree than those that are established. Thus, it is important to consider the dynamics arising from social interactions because they have a decisive role in formulating any kind of change. For this reason, the development of forestry institutions is considered here within the larger framework of general trends in the social, political and economic contexts of the countries studied.

Regardless of the multiple differences and unique traditions, culture and choices in the way each country has embarked on its development, they all share a history of centralized decision-making. From this common background, similar internal factors can be detected with regard to the transformation of autocratic regimes into societies based on democratic principles and with regard to the transition from centrally planned economies to free market relations. Hence, these countries - all under political, economic and social pressure - face similar challenges in implementing reforms.

After independence, each country had to establish itself politically in the international arena, including by signing onto international conventions and committing to fulfilling associated obligations. Hence, the pressure for change is coming also from external factors: the global common priorities of sustainable development, democratization and human rights, climate change and poverty reduction. These similarities give rise to some general trends which help to better understand the status, challenges and potential of institutional changes in the public forestry institutions in the CAC countries.

ESTABLISHMENT OF NEW POLITICAL INSTITUTIONS

Before gaining independence, all five countries had similar institutional systems, characterized by the leading role of the state (represented by the Communist Party) and well defined hierarchies at the institutional level. After the break-up of the Soviet Union, the countries were confronted with the need to reform political institutions and put in place new administrative structures. In most cases, the new ruling elite came from the former communist structures and initial reforms were copies of soviet institutions, somehow adapted to the new conditions. During this first stage of democratic transition in the early 1990s, the balance of power between the executive and legislative branches favored the latter. In practically all 5 countries, the national assemblies became quite influential, thus creating hopes for institutional reform. However, this change did not translate into concrete results in terms of public action.

The economic decline and social instability after independence demanded specific and harmonized reactions and solutions at a time when a lack of political professionalism and democratic experience of parliamentary institutions was obvious. In the mid-1990s, as part of a general trend in many post Soviet countries, governments started to lose control over social and economic development, while executive presidential power became stronger and centralized. This shift in power could be seen as an effort to improve government effectiveness in controlling social and economic development but it could also be considered an indication of the unwillingness to change in any significant way. The legacy of the Soviet State system after its collapse has been transformed into a strong presidential system with bureaucratic structures. Growing regionalism, with newly developed local loyalties and re-established importance of clan relationships, combined with unclear and disputed boundaries, have further weakened the capacity of the state to define its legitimacy in terms of its political, economic and social functions at the local level.

The new social dynamic that was developed in the post-Soviet countries, marked by democratization and economic transformation based on market mechanisms, have had an impact on decision making and on the redistribution of power. At the same time, globalization, with the growing importance of common values and increased inter-dependence of countries, has linked national policies to international priorities. These internal and external processes have contributed to changing

the role of the state in the newly independent countries. Naturally, the transfer to democratic decision-making and stakeholder involvement, as a result of social pressure, requires effective mechanisms and well tested procedures.

In the post-Soviet countries, decentralization and transfer of responsibilities to other hierarchical or administrative levels best characterize the changing role of the state. The primary rationale for decentralization was to overcome central government's failure to address local needs and priorities and adapt to changes taking place at the social-political level. In the new economic context, the state is no longer the only provider of goods and services or executor of central planning and development. Therefore, decentralization (flash 1) brings to the public sector new and important actors from private and civil society domains.

FLASH 1. *Types of decentralization*

Decentralization can be divided into three broad categories:

- ❖ Political decentralization (or devolution) transfers power and authority from the centre to the local level. Also known as democratic decentralization, the state gives up its responsibilities to allow *independent decisions* to be taken by locally elected officials who can be held accountable and responsible to the local citizens.
- ❖ Administrative decentralization (de-concentration) transfers responsibility for the *delivery of services* from a centralized state apparatus to local mechanisms which could include several arrangements such as public-private partnerships.
- ❖ Fiscal decentralization is a complex method of transferring *authority for financial decisions* from the central to local level. It requires (i) a sound legal framework which defines the relationship among levels and specifies respective functions and responsibilities; (ii) sufficient local sources of revenue to finance services; (iii) a possibility to borrow funds for long-term objectives which can not be covered by local means and (iv) a system of transfers based on unbiased and transparent allocation formulas to equalize local financial capacities.

Political decentralization in the CAC countries, even when reported, does not seem to be effective due to strong presidential power and the inability of local governments to take independent decisions because fiscal decentralization is lacking or incomplete. In general, fiscal decentralization seems to be the most problematic in all five countries due to economic instability, an ambiguous legal framework and, probably, lack of capacities and readiness from both the central state and the decentralized bodies to implement it. Administrative decentralization appears to be the most common, implemented in practically all CAC countries at the end of 1990s (more recently in Uzbekistan). To differing degrees, reforms deal with the re-structuring of ministries, departments, territorial administrations and local self-government bodies. Up until now, they were limited to changes in status from an agency to a department or to the transfer of responsibilities from one ministry to another rather than an actual transformation of structures and functions.

For example, over the past several years, Kazakhstan and the Kyrgyz Republic have adopted legislation governing the civil service and engaged in structural reforms of the central administration. Public administration reform has been introduced in Armenia on a pilot basis while, in Uzbekistan and Georgia, it is one of the key objectives of the current governments. Initial functional reviews have been undertaken with a view to improving efficiency, effectiveness, accountability, transparency and responsiveness. Regardless of these efforts, there is still a long way to go until a professional and impartial civil service and efficient public administration systems are in place in these countries (see Box 1).

BOX 1. Decentralization in Central Asia

"In 1990 the Soviet Union adopted a law on the main principles of local government. The law served as a basis for the legislation of Central Asian countries but failed to provide actual safeguards (financial, material, organizational, or legal) to the local authorities, which made enforcement of the local self-government principles unfeasible. The countries of Central Asia still have a predominantly centralized culture, inherited from the past. Decentralization is understood in this region as the transfer of responsibility from the central government to the local government. The structure of local government has not undergone any substantial changes; it has remained the same as, or very similar to that under the Soviet regime. It has three descending hierarchical levels—regions (oblasts), districts (rayons), and towns and villages—where government offices are based to represent the president and the central government. The self-governing authorities exist only at the grassroots level (except in the Kyrgyz Republic, which has instituted municipal self-government).

Local authorities in Central Asia include both representative (elected) and executive bodies. But (except in the Kyrgyz Republic) both are part of the state government. The powers of local governments are enshrined in the constitution.

A multi-tier system of local government is also reflected in budget systems. The main sources of revenues for local budgets are tax revenues, non-tax revenues, and financial assistance from higher budgets. Local budgets provide funding for pre-school, elementary, and secondary education, as well as for social, cultural, and health programs. The financial instability of local government bodies presents a serious problem in terms of policy implementation at the local level. In addition to the lack of appropriate legislative and institutional arrangements, public officials lack the skills and experience needed for sound local budget management. Further, many managers at the local level held executive positions during the Soviet era, and their work style is still marked by a predisposition for centralism".

Source: Verheijen, Sirotkin, Kozakova, 2001

The Central Asia Human Development Report (2005) "Bringing down barriers: regional co-operation for human development and human security" indicates that "the decelerating pace of political system modernization,... overwhelming dominance of the executive over the representative branch and open mechanism to ensure rotation of the ruling elite" represent the main risks for the development of a decentralized state system. Presidential authority which reaches the local level through akims² or marzpetz (Armenia) does not allow locally elected councils any level of authority or independence. In Georgia, the change of political leadership in 2004 brought about a transfer from a two-tier system of local self-governance (a local elective body [Sakrebulo] and an executive body [Gangeoba] or, in large cities, a mayor appointed by elected representatives) to a one-tier municipal system.

ECONOMIC CHANGES

After independence in 1991, the economy in all five countries reached crisis proportion and was further aggravated in Armenia by the war. This state of affairs contributed to the impoverishment of the population, especially in rural areas. For example, although not the worst situation in the region, about 50 % of citizens in Kazakhstan fell below the poverty line by 1993. The initial shock caused by the switch to a market orientation and the termination of state subsidies was gradually replaced by stabilization and economic improvement, the pace of which was specific in each country, depending on the extent and impact of changing national contexts. The Kyrgyz Republic has gradually stabilized and increased its GDP since 1996 by an average of about 5% per year. Growth of Georgia's GDP averaged 10% per year since 2005, although the war in August 2008 and consequent political upheaval caused some perturbation. Between 1995 and 2008, due to effective market-oriented reforms and a restructured budget system, Kazakhstan's unemployment rate decreased and its GDP per capita increased more than tenfold. Moreover, all five countries have adopted strategies and measures aimed at reducing poverty.

The economic reforms undertaken after independence were oriented to the establishment of market relations to replace centrally planned and country specialized economies. The introduction of new rules and mechanisms which this switch entailed were important determinants of change and provoked structural reforms in these economies.

Due to the high degree of integration and interdependence within the structure of the former Soviet Union, each Republic was assigned specified priorities in terms of economic development. This

² Akim (hokim in Uzbek) is the head of the local administration in Kyrgyzstan and Kazakhstan

specialization of the past helps to explain the origin of some current institutional difficulties. For example, agriculture was among the most important sectors in Uzbekistan and Kyrgyzstan both for crop production and animal husbandry. Hence, their historical high dependence on land has implications for present land-use arrangements. The economic development of Kyrgyzstan after independence is marked by a decrease in industry's share of the GDP (11.1% in 1996), with a gradual increase of that of agriculture to more than 40% in 2005. Most recently, the construction, transport, mining and service sectors are gaining in importance compared with previous years. Kazakhstan was one of the main wheat producers for the entire Soviet Union. In the economy of Armenia and Georgia, agriculture also played an important, although not a leading role. At the same time, recent economic growth figures in the agricultural sector in Georgia show its share of the country's GDP decreased from 19.3% in 2003 to 9.4% in 2007.

PRIVATIZATION AND LAND REFORM

The notion of private property is recognized in the constitutions of all post Soviet countries after independence in 1991. Privatization of state enterprises and their assets became an economic policy priority and was introduced at an impressive scale and pace. During the initial phase, big enterprises and entire economic sectors became shareholding companies (e.g. railroad and air transport communications), often with the state as the main shareholder. The transition from state to private ownership has often lacked clear mechanisms, coordinated approaches, and standardized norms to support efforts. Land privatization and a large variety of tenure arrangements are good examples of the results of such inconsistencies (FAO, Forest Tenure in West and Central Asia, the Caucasus and the Russian Federation, 2009).

In all ex-Soviet Union countries, land reform began with the re-distribution of state collective farms among all farm members. In most cases, this division resulted in high fragmentation of holdings and “virtual” land shares, with no clearly defined boundaries. In Uzbekistan, land remains under state ownership though assets of the former kolkhozes and sovkhoses have been privatized. Virtual land shares, in fact representing the former collective farm (*kolhoz*) fields, are managed by farmer associations which are given use rights over the long term. In all other countries, current land laws as well as regulations and amendments related to the land sector are not harmonized and often wrongly interpreted. Furthermore, implementation is not co-coordinated. A significant lack of knowledge among individuals on their rights to land share, undefined access to the resource, and weak capacity to defend positions during a distribution process have resulted in weak land tenure governance and insecure property rights. (See example from Kyrgyzstan in Box 2. Similarities may be found in the other countries studied.).

<p>BOX 2. Land reform challenges in Kyrgyzstan</p>
<p>The major concerns for farmers over land are the forms and methods of governance and the legislative and institutional structures that have been created to oversee distribution and use. Both the state and local governments have rights to distribute state land for use and to monitor, control, and withdraw privately owned land. The rules governing these rights are unclear, very broad, non-transparent and do not provide for the involvement of landowners. There are some main issues related to land distribution. First, as in most other ex-Soviet Union countries, Kyrgyzstan chose to distribute agricultural land to members of the state and collective farms, thus excluding those who were not engaged in agriculture directly and lived in towns. The second issue relates to the 25 percent of all agricultural land that is contained in the Land Redistribution Fund (LRF), held by the state and controlled by village authorities (<i>aiyl okmotu</i>). This land fills many needs but is managed and distributed in a non-transparent and often unfair way. Annual fees earned from auctioning this land are used to support local government. While by law some of this land should be going to poor and disadvantaged groups, the lion's share is allocated to the privileged and well connected. Third, pastures have not been privatized and are presently managed by three levels of government as follows: near pasturelands (<i>aiyl okmotu</i>); intense pastures (<i>raion</i>); and distance pastures (<i>oblast</i>). Several disputes associated with the distribution of pasturelands were reported. As livestock herds rebound and easily accessible pastures are over-used, there is concern at the <i>aiyl okmotu</i> level that pasture disputes will increase.</p> <p><i>Based on: USAID, 2005</i></p>

In the CAC countries, the scarcity of land suitable for agriculture and the multiplicity of demands placed on land use challenge the privatization process and give rise to conflicting interests among agriculture, forestry and development (construction/infrastructure) priorities.

Regardless of the uncertainties, land reform, together with private land ownership, have introduced new types of tenure arrangements based on permanent (indefinite) or fixed term (long or short) use rights (FAO, 2009) and brought new actors into the forestry sector.

These fundamental system-wide changes in the CAC countries have defined the modalities for the transformations which have occurred in their respective forest sectors. The common origin for these changes is the switch from a system of command and control and of central planning (inherent with its heavy subsidies) to a market economy and governance-based relations. From this perspective, the forest sector, as a sub-set of the general policy system, should follow a similar dynamic in terms of institutional change - an idea which will be explored in the following chapters.

Public forest institutions in the changing context

THE FOREST SECTOR IN CAC COUNTRIES UNDER THE SOVIET REGIME

Economic aspects

The forest cover of the CAC countries studied is relatively insignificant: about 10% of the total territories in Armenia and Uzbekistan and only 4-5% in Kazakhstan and Kyrgyzstan. In Georgia, in spite of more than 40% forest cover, it is low density and thus has little economic potential. Consequently, the forest sector's low share of GDP decreased further after independence. For instance, in Georgia, it dropped from 4-5% prior to 1990 to 1.3 % in 2002.

Special measures were established under Soviet rule to protect forests in most CAC countries, in recognition of the important ecological services they provide, including their capacity to combat erosion and regulate water. Their potential to generate income from timber production was not tapped to any great extent, except perhaps in Kazakhstan and, as a result no more than 20% of domestic demand was met. Still, in all 5 countries, some processing took place, mainly using timber supplied by Russia. Thus, in Georgia, before 1990, the primary wood processing industry accounted for 69% of the sector's income, while timber-harvesting contributed 14%.

The collection of non-wood forest products, mainly medicinal herbs, honey and nuts, figured in the annual management plans of forest enterprises but were only used for the production of juices jams and dried products - activities which did not yield a high economic return for the sector. Forestry enterprise operations, including for forest management, have been financed from the state budget and complemented revenues they received from economic activities, such as processing forest products and agricultural outputs (potatoes, wheat, fruit, meat and poultry, for example).

The centralized system under the Soviet Union to supply cheap energy and construction material was functioning well so rural areas did not need to depend on forests for such products and services. As a state-owned resource, forests and their management did not conflict with the objectives and activities of other state agencies. As all was planned, controlled and financed by the state, neither did conflicts of interests arise among different stakeholders.

Structure of the Soviet forest sector

Under the Soviet Union, the state was practically the only owner of forests. Thus, public forestry agencies played a dominant role and executed all functions, including policy and regulatory. Resources were managed by State Forestry Committees which had branches at the regional level and local forest management unit level (forestry enterprises or *leshozes*). Management plans and budget allocations originated and were controlled centrally. The structure of the sector was diverse and included state forest reserves, experimental research stations, and industrial processing enterprises such as factories in Armenia which produced forest machinery and canned preserves from non-wood forest products, for example, and factories in Georgia and Kazakhstan which made furniture.

Forest management planning

A specialized Forest Inventory and Planning unit (Lesoustroistvo-Soyuzgiproleshoz) in Moscow, with well equipped branches in Yerevan, (Armenia), Almaty, (Kazakhstan) and Tashkent (Uzbekistan), defined forest management activities based on ten-year plans. Standardized forest inventory management/silvicultural techniques were adapted locally and used by the Kazakhstan branch to conduct forest inventory and management planning for spruce forests in North Kyrgyzstan; by the Moscow service to complete the inventory of walnut forests in South Kyrgyzstan; and by the Uzbek branch to inventory forests in Uzbek, Tadjik and Turkmen Republics.

In order to restore the condition of forests which were devastated due to extensive use between 1930 and 1950 (during industrialization; for the needs of World War II and post-war recovery), a *special protection regime* was set up in the CAC countries in the early 1950s. According to the management norms, most forests (except for some in Georgia and Kazakhstan) were categorized as protected forests - a status which allowed only for interventions to control pests and disease. Economic profitability was among the least considered aspects, given that the sector was heavily subsidized by the state. Due to the ecological (protective) importance of these forests, the establishment of plantations was declared a priority as a means to increase forest cover. The establishment of nurseries and seed production was also considered essential. Quantitative parameters prevailed as indicators for planning and evaluation and as a basis for financing (see box 3). Other environmental issues, apart from erosion control and water regulation, were not expressly addressed in the management plans.

BOX 3. State Forest Committee in Soviet Armenia

"The peak of the country forest sector development coincides with the period when State Forest Committee was functioning in soviet Armenia. That period was also distinguished with massive activities aiming to the increase of forest cover in the country, reaching the target slowly, but surely. Around 5000 ha of new forest plantations were established annually, which was eventually leading to around 1500 ha of annual transfer into the "forest cover" category. At that time there was a well developed infrastructure for the production of planting stock, about 600 ha of forest nurseries operating in different climatic regions of Armenia to satisfy the demand for high quality seedlings and saplings, both for forest breeding and planting of greenery in urban areas. The establishment and maintenance of such infrastructures required huge investments, which were supplied centrally by the State Forest Committee of USSR".

A.Gevorgyan, National report, 2009

The forestry education system

Higher education and training for forestry specialists, including engineers, was offered through institutes in Russia, Ukraine, Georgia, Uzbekistan and Kazakhstan. Specialized schools for other forestry technicians were also available in these countries. Schools in Kyrgyzstan and Armenia had the capacity to give technical training but, for professionals from these countries who were seeking to upgrade or enhance their skills and knowledge, they had to travel to Russia.

THE FOREST SECTOR IN CAC COUNTRIES AFTER INDEPENDENCE

After the collapse of the Soviet Union, the forest sectors in the CAC countries faced many difficulties and new challenges: (i) a critical need for new investments to replace dilapidated technical equipment which previously had been maintained and modernized on a regular basis; (ii) loss of professional capacity due to weak economies and migration, (iii) inability of forest services to implement their usual functions. These problems within the sector were exacerbated by a general economic decline in all CAC countries (aggravated in Armenia by the war and post-war rehabilitation efforts) and by privatization in the agriculture sector which increased pressure on forested land. All five countries reported a considerable decline of their forest sector after independence.

The main factors which had an impact on forest institutions after independence included economic reforms brought about by the economic crisis ; decentralization and the consequent emergence of new actors; and the increased importance of the environmental functions of forests. These three aspects promoted changes in the structure and status of public institutions, revised forest policy objectives and redefined the role of the state, including in the decision making process.

Economic aspects

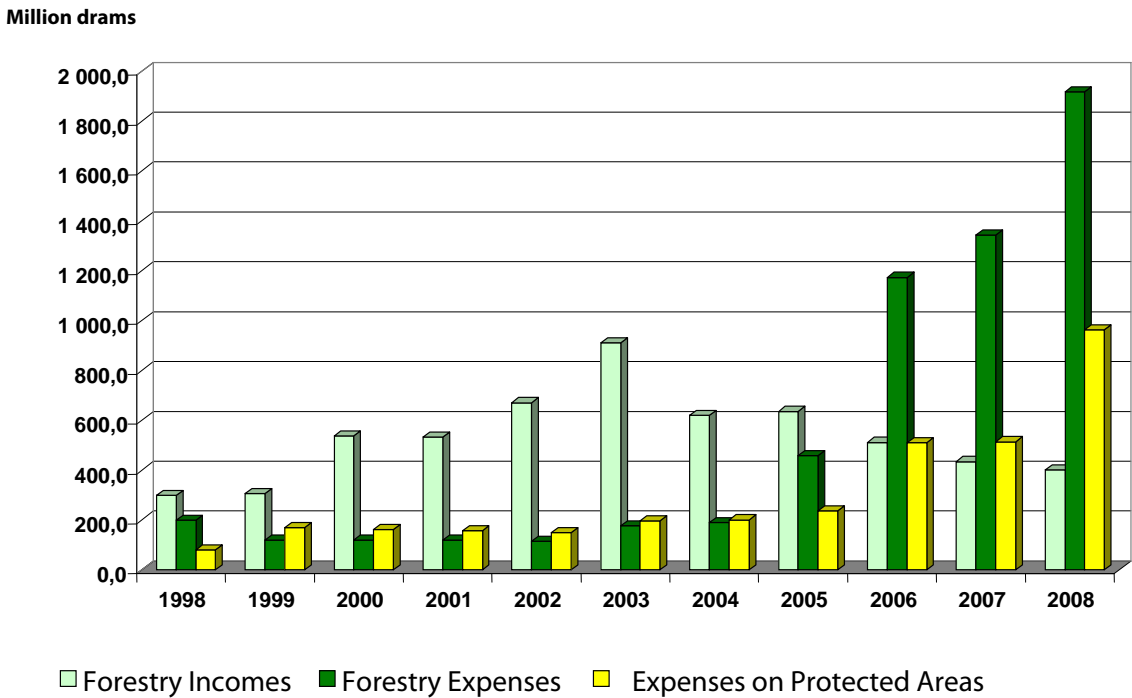
In the transition to a market economy, economic aspects constitute the leading factor in defining changes to public forestry institutions.

The forest sectors in the five CAC countries studied became dysfunctional almost immediately after independence, mainly because their historical reliance on subsidies made them unprepared for the transition to a market economy. Moreover, the weak economic potential of forests severely limited the

sector’s capacity to self-finance and institutional as well as legal constraints restricted the possibility of obtaining alternative sources of financing. A lack of service orientation in the public administration and absence of market mechanisms, new for post-Soviet societies, also were contributing factors. Timber processing practically stopped for 5 years or more due to a cut in the supply of cheap timber from Russia and, even today, volumes have not reached pre-independence levels. Outdated and dilapidated processing facilities, equipment and infrastructure all have had a negative impact on the economic efficiency of the forest sector. It took about 10 years for countries to find solutions to overcome these fundamental problems, often only after countries undertook wider institutional reform, such as decentralization and privatization.

Regardless of economic difficulties that all five countries still face, it has been more or less accepted that public functions related to forest conservation and management should be funded by central budgets. For example, in Armenia, state financing increased in 2005 to US\$800 000 and foreign inputs amounted to about US\$1 million (fig.2). However, between 1990 and 2000, no serious investments were made in the sector. Annual earnings totaled approximately US\$200 000 mainly from timber exports to neighboring countries.

FIG. 2: Dynamics of state budget annual allocations on forestry and protected areas in Armenia 1 dram (ADM) (1 USD = 350 ADM)



The national case studies show that, in Armenia, Georgia, Kyrgyzstan and Uzbekistan, state budget allocations to forestry have risen since 2004-2005. Partially, this increase coincides with changes to forestry institutions and policy processes - the development of national forest programmes (NFPs), for example - and with changes in forest policy objectives (see chapter 4). It is also perhaps an indication that governments are paying more attention to the forest sector in response to society’s new demands and to show they are implementing reforms. The increase in financing may also simply be a result of general economic growth but more analysis would be needed to draw such a conclusion. The additional funds were used to improve the efficiency of forest guards, expand forest regeneration and pests/diseases control, and promote forest management planning.

Apart from state funding, several international development partners such as the World Bank, Swiss Development Co-operation, GEF, SIDA and FAO are making large contributions to the forest sector in Armenia, Georgia and Kyrgyzstan. In Kyrgyzstan, a Forest Development Fund has been established and functions with a share of the profits generated by forest enterprises (see box 4).

BOX 4. Financial system in forestry in Kyrgyzstan

According to Article 98 of the Forest Code of the Kyrgyz Republic, state financing for forest management extends to conservation, protection, and reproduction. The Ministry of Finance establishes the modalities for financing the sector and use of funds is made and substantiated in accordance with accepted economic norms. From 1994 to 1998, the sector was financed from two sources: national allocations paid wages and contributed to the Social Fund, while local budgets covered the cost of forest reproduction, conservation and protection, among other activities. From 1999 on, money generated from forest enterprises under a scheme known as “special finance means” also went toward wages and the Social Fund. From 1999 to 2007, revenues to local budgets from this source for the activities noted above have stopped but forestry institutions and organizations financed them through the *Republican environmental protection and forest sector development fund*, established for this purpose. As of 1998, the forest sector is exonerated from paying all taxes because of its particular circumstances and the difficulties associated with replenishing a profitable part of the state budget. Each forest enterprise contributes 4% of its profits to the fund and all income collected goes to conservation, reproduction, and protection of both biological diversity and the environment. Such reinvestment back into the sector, in turn, supports its development at the national level.

Surappaeva, National report, 2009

Financing of the forest sector was also influenced by broader internal institutional changes, as described below:

With *decentralization* came understanding of a need for new self-financing strategies and for new mechanisms to decentralize budgets. Administrative decentralization has brought new sources of financing to forestry from local development (Kazakhstan), while changes to the functions of the state opened up possibilities to earn income based on the provision of services (Kazakhstan, Kyrgyzstan).

Although the *privatization of industrial capacities* decreased income possibilities for state forest enterprises, it created opportunities for new actors in the sector.

Opening of local markets for forest products and services (e.g., ecotourism and hunting) as well as increased international *investment* in forestry, namely in logging (Georgia, Armenia), plantation development (Uzbekistan, Kyrgyzstan) and processing (to a different extent in all countries) are also providing new income possibilities.

Changes in forest policy objectives which reflect increased concern for environmental protection and better recognize the multiple functions of forests - biodiversity conservation, recreation and landscape restoration, among others - have widened society’s vision of forests from one which focused purely on the resource. This broader perspective is also creating new possibilities for income generation. Nevertheless, continuing difficult economic conditions, both for forestry enterprises and rural populations, still make non-wood forest products an important source of income, even when the potential for timber production is high (see box 5).

BOX 5. Use of forest resources in Georgia

According to a recent assessment, the net value of non-wood forest products consumed in the country amounts to US\$8.35 million as follows: 1.5 million for mushrooms; 0.58 million for nuts; 2 million for berries and 0.08 million for herbs. In addition, the export of fir (*Abies nordmanniana*) seeds earns US\$0.44 million and the annual production of three million tons of fodder from state forest lands generates US\$3.75 million. Although timber will remain the key source of revenue for the sector, earnings from non-wood forest products are expected to increase, especially given poverty levels and the high demand on fuel wood for energy.

Under sound management, Georgian forests – with a total standing volume of approximately 434 million cubic meters and the average annual growth of about 4.0 million cubic meters – could easily produce 1.5 to 2 million cubic meters of timber and firewood. Thus, these resources would be important in terms of both environment protection and economic development.

M.Machavariani, National report, 2009

Structure of forest sector after independence

Under previous institutional arrangements, a forest administration included control and management functions as part of its law enforcement responsibilities - a situation which had it supervising its own activities. For more than ten years after independence, the main functions of the forest service, and consequently its structure, remained unchanged from the Soviet system (see box 6).

BOX 6. Summary of the common functions of public forestry administrations as inherited from the Soviet system

Policy/regulatory

- Policy and strategy development
- Definition of legislation and regulatory norms

Forest management

- Planning
- Inventory
- Forest regeneration/plantation + nurseries
- Protection from pests and diseases (sanitary measures)
- Fire control
- Construction and maintenance of roads in forest areas
- Management of recreational areas
- Biodiversity conservation
- Protection of environmental services, such as the management of slopes and watersheds

Economic functions and activities

- Industrial harvesting of timber and non-wood forest products
- Processing, marketing and sale of timber and non-wood forest products
- Secondary activities such as agriculture as a means to self-finance from the revenues generated

Controlling functions

- Enforcement of the legal framework, including regulatory and legal norms
- Issuance of licenses for forest use/hunting
- Policing of activities in the forest

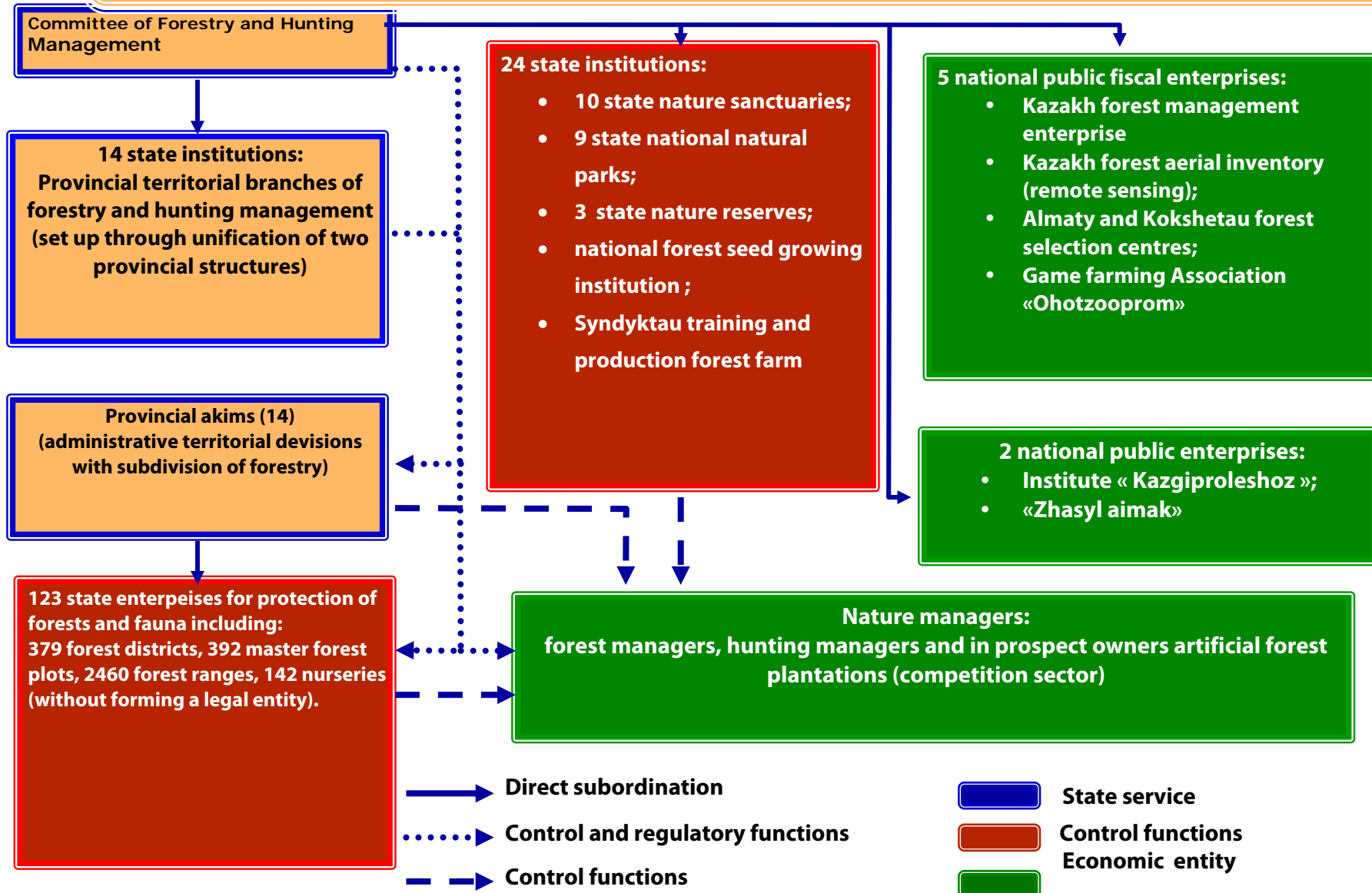
Social- economic services- planned actions along with a budget provided to villages in the forest management unit (for example, to support kindergardens/schools and supply fire wood to socially vulnerable groups such as the elderly and single parent families)

Some countries recently have taken initial steps to separate the various functions of their respective forestry administrations. For example, in Georgia, the Forest Code of 1999 transferred commercial harvesting to the private sector, although this move was not supported by regulatory changes to separate the duties and functions of different state institutions, for example, to grant permits and supervise the activities of the new private companies. Such changes are essential if these businesses are to function effectively. In fact, a normative basis for such a separation of power is still not clear.

In Armenia, the functions are divided among several public institutions, although this redistribution has been slow to take effect. The 1995 document which outlines the National Forest Programme foresaw the establishment of the State Forest Service (SFS) but, despite several attempts to present a draft law for approval, a decision had not been taken as of early 2010. However, the Government adopted regulations concerning state cadastre and forest inventory in February 2008 but it is widely acknowledged that duplication of functions is frequent both among institutions at the centre and among central, regional and local governments.

In 2002, Kazakhstan placed all forestry enterprises under the jurisdiction of provincial executive bodies and assigned the responsibility for forest protection (fire, diseases) and conservation to forest institutions. Timber extraction and processing was given to the private and semi-private sectors. The State Committee of Forestry and Hunting under the Ministry of Agriculture was entrusted with policy development and implementation, the regulation of forest and game management, and control over forest and biodiversity conservation, protection and reproduction (see fig. 3 for the structure of Kazakhstan's forest sector as of 1 January 2009).

Structure of the Committee of Forestry and Hunting Management under the Ministry of Agriculture of the Republic of Kazakhstan as of 1 January 2009



Social aspects

In the post Soviet economic and political climate, social aspects took on more importance in the evolution of forest institutions. The economic instability associated with the transition period and changes in the social security systems provoked a sharp increase in poverty in all five CAC countries. On average, about 40% of the rural population had limited employment possibilities and therefore were the most vulnerable and least able to deal with this crisis situation. As a consequence, their dependence on natural resources in terms of land and as sources of energy considerably increased at a time when the state was no longer able to respond to rising demand. The growing budget deficit resulted in drastic cuts to social benefits, while public institutions could not effectively fulfill their functions. In fact, at the local level, practically the only function that the state forest service could manage to perform was the control of activities which it deemed illegal, including the use of resources by local people. In doing so, forestry authorities generated limited revenue from fines or, in some cases, bribes. Thus, the social aspects which are key to understanding the dynamics which influenced the forest sector during the transition period are the increased human pressure on natural resources and the new role of civil society and local communities that complemented or replaced some state functions.

- *Increased human pressure on forests* was reported as one of the biggest problems the sector had to face during the transition period. At the beginning of independence, the priority was survival and resulted in massive illegal cuts for firewood and in unsustainable gathering of non-wood forest products, such as nuts. The search for additional agricultural land for crop production, haymaking and grazing brought people closer to the forests, worsening the tension between forest guards (seen as controlling police) and villagers (seen as encroachers). With the economic situation improving and the GDP experiencing some growth over the past 5-7 years, another type of human pressure is manifesting itself: the felling of precious timber (e.g. walnut burls in Kyrgyzstan and Juniper trees in Kazakhstan, Uzbekistan and Kyrgyzstan); and the negative consequences of industrial development, such as road construction and mining. As industrial development is a key priority since independence, often it supersedes environmental concerns which are the subject of forest policy objectives.
- *The new role of civil society and local communities:* Democratization processes, which are unfolding in parallel to social and economic transformations, have attributed a new role to civil society and are introducing participation and bottom-up approaches in decision-making. NGOs, local populations, local administrations, and environmental and recreational agencies are starting to play a more prominent role in the formulation and implementation of forest policy. In addition, the private sector is being developed and private initiatives are searching for a niche in the forestry sector, mainly in the areas of processing and service provision (tourism).

Such development creates a paradox: on the one hand, the importance of the social function of forests is increasing - a situation which is positive and new. On the other hand, recognition of this added importance could place at risk the ecological functions of these resources if they are not managed wisely.

The introduction of *new forest tenure arrangements* has created the potential to raise additional revenue for forestry, for example from the sale of concessions. While forest land remains state property, legislation in Armenia, Georgia and, to some extent, Kazakhstan provides the possibility for government to grant concessions. Tenure rights apply only to the trees and specify the volume of timber allowed for harvesting. Generally, these rights do not include right to the land. A concession can also take the form of a contract to manage resources within a given forest management area. In practice, however, concessions are not yet operational because inventories and management plans which are prerequisites for their approval are still non-existent.

Although the new tenure arrangements open up more economic possibilities, they also create risks in terms of sustainability and often find opposition among civil society (see box 7).

BOX 7. New forest tenure arrangements in Georgia

Prior to 2004, the institutional and legal system governing the issuance of permits for forest use and the collection of forest taxes was cumbersome and non-transparent. Moreover, because licenses to harvest wood were issued annually for a one-year period only, forest operators focused on short-term monetary gain and had no incentive to plan or manage for sustainability over a longer time frame. Since 2004, the government grants licenses to the private sector through auction for specific forest territories and for up to 20 years, mostly for timber harvesting. This change is consistent with its stated objective to move toward privatization and implement a sound environmental policy.

The civil society of Georgia and main stakeholders in the forest sector (NGOs, academic institutions, local population, experts, mass media) do not agree with the way these resources are allocated, given the lack of information on forest inventories and the fact that the environmental and protection role of forest ecosystems are underestimated. As a result of their protests, Government was forced to suspend tenders on about 200 thousand hectares of forests in November 2008.

M.Machavariani, National report, 2009

Establishment of new forest policy and institutions

After independence, under pressure within and outside the five CAC countries, the forest sector undertook reforms in an *ad hoc* and fragmented way, revising legislation which only addressed specific issues. However, no comprehensive vision was developed to place the sector in a broader context and the changes instituted were not linked to objectives agreed at the global level. Reforms common to the 5 countries can be analyzed as changes either at the *conceptual level*, for example to policy objectives and the means to translate them into action or at the *operational level*, for example, to legislation and institutional frameworks. (See annexes 2 and 3 for a summary of the policy means which currently exist in the 5 countries and those which are still missing.)

One of the challenges associated with making changes to forest policy of a conceptual nature is rooted in the Russian language. Even though the same word “*politika*” is used to translate both “*policy*” and “*politics*”, it basically only conveys the sense of “*politics*”. In the authoritarian/majoritarian social system of the Soviet Union, “*politika*” was clearly the privilege of professional politicians of the state government. Engaging in such activity was not open (and even perceived as risky) to common people and could explain the initial reluctance of public administrations to undertake forest policy reform, especially since foresters were not expected to be politicians and had no capacity to perform such a role. The move to involve other stakeholders in forest policy development met with even stronger resistance. Nevertheless, among the changes which occurred due to pressure from various sources, the following should be highlighted:

- *Weakened role of the state*: At the beginning of the transition period, the forest sector was marginalized because of its low contribution to GDP and the need for significant state investment in forest management and protection. Besides, the lack of financial capacity of the state to support such activities meant that other economic and political priorities prevailed. The emergence of new actors and newly defined functions of the public forestry administration filled the gap left by the weakened role of the state.
- *Private forests*: Although the legal provisions for private ownership of forests exist in the CAC countries, its occurrence is rare.

Administrative reform and the inability of the state to continue financing forestry from the central budget have quickened the pace of change to the role of the state and increased the importance and development of the private sector. However, although the promotion of private initiatives was identified as one of the new forest policy objectives, the introduction of commercial functions into the management of the state owned forests was and still is a daunting challenge. In all five countries, the forest sector is the last one to privatize, except for the occasional transfer of production/processing activities. State ownership remains dominant but forests are not a national development priority. Hence, the budget allocated to the sector falls far below what is required.

- *Change of forest policy objectives and management priorities:* “Undoubtedly, the most important development affecting forestry in recent years is the increasing awareness of the environmental issues relating to forest resources management, with initiatives at all levels (including the global-level Convention on Biological Diversity, Convention to Combat Desertification and Framework Convention for Climate Change, which were initiated by the United Nations Conference on Environment and Development [UNCED], and country-level efforts to revise forest policies) giving emphasis to environmental benefits. Outcomes of this awareness include ongoing efforts to develop and refine criteria and indicators for sustainable forest management, certification and labeling, codes of logging practices and the extension of protected areas” (Nair, 2001).

After independence, a political priority for the new countries was to be recognized at home and internationally as independent states. Membership in the global arena influenced the course of change in terms of societal and economic reforms but also led to a new understanding of environmental priorities. In recent years, biodiversity conservation became more prevalent than productive priorities in the stated policies of the five countries.

Thus, it was only under the pressure of international obligations (external factor) and the high risk of forest devastation (internal factor) that biodiversity conservation was placed on the national political agenda, along with the notion that forests were to be considered part of a global environmental network. The development of a vision that reflects the multifunctional values of these resources and recognizes the need for their sustainable management has led to a change in forest policy objectives in each of the countries studied (see table 1). Indeed, biodiversity conservation and sustainable use, taking into account the various interests of stakeholders, have been declared priorities for forest sector development. Another change concerns efforts to increase protected areas, such as national parks and reserves, as part of a new vision of forest management. This shift, consequently, has had an impact on the structure of institutions.

TABLE 1. **Stated objectives of forest policy in CAC countries**

Armenia	Georgia	Kazakhstan	Kyrgyzstan	Uzbekistan
Curbing forest degradation			Sustainable forestry development	Development of the economic, social and ecological potential of forest resources
Conservation of biodiversity		Conservation of biodiversity		Definition of the role of science and international experience, co-ordination of research
Mitigation of illegal activities in the forest		State control over forests and over licensing of forest use	Definition of the role of the state in the forest sector	Definition of the role of the state in the co-ordination of forest sector development
Prevention of cattle grazing in forests	Privatization of forest management	Development of private (economic) initiatives in forest sector	Involvement of the local population in joint forest management	Support of non state initiatives in forestry, involvement of local population in forestry activities
Increase of forest cover		Increase of forest cover		Development of a staff policy in the forest sector

- *Decentralization and change in administrative practices in public forestry institutions:* In the same way as countries had to adapt to changes brought about by democratization and the transition to market economies, the need to reform forest management and administration was also felt. As previously reported, decentralization in the forest sector - commonly understood as the transfer of responsibility for forest management from the central state to local government units and communities - mainly took the form of administrative decentralization and was not

supported by a shift in authority to make financial decisions (see annex 6). This type of decentralization is often motivated by the need to address increasing forest degradation due to central government's failure to protect, manage and conserve the resource; reduce the cost of forest management and central bureaucracies; and, as often suggested by development partners, promote the role of local communities and ensure equity.

Although legislation in the five countries provides for decentralization of forest management, it is still centralized and implemented by state institutions (see annexes 4 and 5). However, as part of institutional reform, alternatives are being developed. For example, in Armenia, the Forest Code (2005) allows forest management to be carried out by organizations which function within the system of State Government, by local self-governing bodies, by *physical* and *juridical persons* (persons who have been granted legal authority to act on their own behalf or on behalf of a group), as well as by Armenian citizens, with respect to sustainable forest management objectives. In Kyrgyzstan, state forests are managed by executive bodies: the government, the state agency responsible for forests and special protected areas, the bodies responsible for other types of land management, and local administrative bodies. Forest sector reform, ongoing in Kyrgyzstan since 1998, foresees the transfer of functions and responsibilities to state forest management units (*leshozes*) and greater involvement of the private sector and the local population, mainly through licensing forest use activities, with the consequent transfer of responsibility for forest protection from fire and disease. In Georgia, the Forest Law (2005) foresees forests of local importance being managed by local governing bodies but, up until now, their main function has been to assist the Central Government to identify local needs for fuel and industrial timber. Kazakhstan has probably the most advanced experience with decentralization in forestry (see box 8)

BOX 8. Decentralization of forestry in the Republic of Kazakhstan

Since 2000, in line with the general decentralization process, institutional reform is ongoing in the Kazakh forest sector. Management of state forests falls under the purview of the *executive power*: government, the state forestry administration, state bodies responsible for the administration of other categories of lands, and the local state administration.

The Ministry of Environment Protection is the country's central executive body, performing the functions of direction, inter-sectoral co-ordination and state control in the sphere of environment protection.

With regard to forestry, among other sub-sectors, the Ministry of Agriculture (MA) is responsible for overall direction and the co-ordination across sectors for elaborating and implementing the state forest policy and policies for the management of specially protected areas and of flora, fauna and of phyto-sanitation. Its Committee of forestry and hunting as well as its territorial bodies (oblast inspectorates) control the implementation of forestry legislation (inspectorate), manage national specially protected areas, implement forest monitoring, conduct inventories and approve forest management plans. They define quotas and norms, license forest use, and approve tenders and other tenure arrangements.

The year 2000 saw a separation of economic functions of state forestry enterprises (harvesting and timber processing) from management and control. As a result, 2 new entities were established: the Republican *state enterprises* (RSE) and state institutions for forest and fauna protection (*leshozes*). The RSEs - which became a monopoly for timber harvesting and were also in charge of processing - could re-invest their earnings into forest conservation and regeneration. The *leshozes* were financed from the state budget and dealt with the protection of forest and fauna, control over the use of forest and other biological resources, as well as the regulation of forest use and issuance of licenses.

In 2001-2002, both entities, together with their functions, duties and responsibilities, were transferred to community *oblasts* and regional governments.

Consistent with the national decentralization strategy, local (oblast) executive bodies are charged with territorial development, including some aspects of forest guarding to combat illegal fellings and protect against pests, disease and fire; forest regeneration and afforestation; licenses for forest use; and organization of the tender process.

Units for forestry and hunting have been established at the local (oblast) level but state forestry enterprises remain the key actors in the sector. The local executive bodies have little capacity to finance forest management and protection. In addition to lacking an understanding of forestry objectives and juggling a multitude of other pressing issues related to territorial development, they do not consider forestry a priority either on their agenda or for budget expenditures.

Based on National report, Baltabaev, A., 1009

- *Re-definition of policy instruments, including planning and decision making Modalities:* The move towards democratization in the CAC countries has also changed forest policy processes by opening decision making to new actors and stakeholders. This change called for new requirements as well as a new understanding of the role and functions of forests and of the conflicts that different social, economic and environmental interests could engender. In addition, forest policy needed to deal with the increasing unregulated human pressure caused by devastating economic conditions. As a consequence, the modalities of decision making and planning in forest sector also needed to be changed.
- The performance of forest organizations was often measured in technical terms, using quantitative indicators such as planted/re-planted forest area and cubic meters of timber produced/processed. Less attention was paid to qualitative aspects, social objectives and financial sustainability. Broad participation, inter-sectoral approaches, and an iterative process based on the evaluation of results and implementation of decisions would change the forest management planning process from a quantitative assessment of the management plans of forest enterprises to more qualitative measurements.
- Recognition of the need for a long-term vision of forestry development is one of the obvious conceptual changes which national forest programme processes brought to CAC countries as a platform to formulate sustainable forest policy. Even in countries such as Kazakhstan where the NFP process has not been formalized yet, the lack of a long-term strategy at this early stage is considered a weakness. NFP processes have already been launched in Armenia, Kyrgyzstan and Uzbekistan (see annex 1), creating a framework based on public consultation on objectives, means and responsibilities. In Kyrgyzstan, the NFP (2005) is an integral part of forest policy reform which has been ongoing since 1998 (see figure 4). In Uzbekistan and Armenia, NFPs have only recently been defined. Overall, there is an urgent need to design mechanisms which ensure that the results of mid-term evaluations are incorporated into implementation strategies and provide for the sharing of responsibilities for forest management and planning among local authorities, local administrations and the forest service.

Although the launching of a NFP process is only a first step, it constitutes one of the major changes in forest policy instruments. Integrated management plans in Kyrgyzstan, based on village land use planning, combined with negotiation and constructive conflict resolution, is one example of its practical application.

FIGURE 4. Road map of forest policy reform in Kyrgyzstan



(Source: Unasylova, 2006, N 225)

- *New legal framework:* Efforts to harmonize and render regulations and norms operational through adequate enforcement mechanisms and strategies have been undertaken in all five countries but study reports show that significant further efforts are required. The problem is that legislation is seen as the means to implement reforms when, ideally, policy should be developed first. A detailed analysis of the results of legal reforms is not the objective of this study but some information on this aspect can be found in the country reports. (See also annexes 2-5 for a summary of the policy means which currently exist in the 5 countries and those which are still missing)

Education and information

At the end of the 1990s, the forest sector lost a large number of qualified and experienced staff due to internal/external migration for political and economic reasons. Those who stayed are now approaching retirement age but improved conditions in the sector as of 2000 are attracting new people, including youth. All five country reports note significant urgent demand to enhance capacities, both current and new. Besides technical knowledge, social and policy skills are required to respond to the conditions emerging in different spheres and at various levels of the sector. The capacity for such training, including for in-country specialists to teach such new subjects and develop new curricula, is almost non-existent (see annex 7).

Current challenges in the public forestry sector

All the changes noted above - the establishment of new political institutions, decentralization, administrative reforms, and new economic and socio-political contexts - had a clear impact on the structure, management and decision-making modalities in forestry in CAC countries. Because forests were now considered as an important element of the socio-environmental equation and not only as a source of timber, expectations from forests, forestry and forestry institutions are no longer the same.

Contrary to significant changes in contexts, the design of public forestry institutions remain conservative, limiting the number of pre-determined technical functions to protection, production, licensing/control, and forest management. Moreover, forest policies are sector focused. In general, the structure of public forestry institutional system is characterized by hierarchical command and control and a highly regulated information flow. As a result, institutions lack the flexibility to adapt to change and must overcome several difficulties as they seek to modernize.

HARMONIZING FOREST POLICY AND STRATEGIC PLANNING WITH OTHER SECTORS

One of the major challenges facing forestry is to integrate the priorities for forest development into the policies of other sectors. Consistent with the principles on which NFPs are based, documents which outline forest policies and strategies usually include aspects of inter-sectoral co-ordination and harmonization. However, in practice, collaboration with other sectors which influence forestry development either directly or indirectly is still weak - for example, with agriculture, the environment and finance. Given the decision of governments to pursue economic development as a priority, the need to promote and support industrial growth means that objectives related to this pursuit often prevail over those identified in the forest sector. As a result, funding or other types of state involvement (such as amending regulations) is not made available to implement any strategy, however well-defined.

Although new forest policies are providing for the establishment of private initiatives and community involvement, legal ambiguities related to forest tenure and taxation of private activities, for example, continue to be problematic. Another major obstacle which concerns both foresters and new actors is the lack of experience, knowledge and concrete initiatives on ways to better integrate their activities. Moreover, even though stakeholder participation has been introduced and figures in forest policy discourse, decision-making remains centralized and sector-specific (see annex A for a summary of the evolution of policy means).

COMPREHENSIVE LEGAL REFORM

In all five countries, the legal basis for forestry is being updated through revisions to Forest Codes and the elaboration of by-laws and regulations. However, amendments are made on an *ad hoc* basis, without a coordinated approach or a comprehensive vision of the general needs. Often, laws are drafted before a policy is developed. The elaboration of new laws, the cancellation of outdated and conflicting regulations, and harmonization with the legislation in other sectors take a long time and are resource intensive (including human). As a result, all country reports note that legal reform is not responding to actual needs (see annex B). In this regard, the following aspects need to be resolved:

- *Coordination between national legislation and international discussions/decisions:* Internal country dynamics are often out of sync with international obligations to which countries subscribe. Thus, legal reform at the national level lags behind. For example, new forest legislation may not consider the principles of sustainable forest management, such as participation; transparency as a means to fight illegal activities; and the use of economic mechanisms as tools for forest conservation.
- *Coordination with the norms and laws of other sectors:* Other sectors often disregard the interests of forestry in their policies and thus undermine efforts to harmonize laws and improve collaboration. In addition, heavy bureaucratic hierarchies in the public service make coordination within and among sectors to enforce laws and draft new ones almost impossible.

This problem is compounded by weak enforcement mechanisms, often because time does not allow for their inclusion in the laws. The studies not only report a lack of reciprocity and readiness on the part of other sectors to harmonize laws and resolve issues jointly, but they also note that actors in the forest sector are not sufficiently pro-active in this regard either. In fact, interests which are specific to certain sectors but conflict with others are probably the main reason for the lack of coordination: competition over land- and water- use; production versus protection; and development versus conservation, for example. Traditional and informal practices within the public service (e.g., nepotism and corruption) can also clash with efforts to modernize legal, institutional and policy frameworks.

- *Timely elaboration of implementation mechanisms:* The study clearly indicates that the main drawback of the legal framework is the absence or late elaboration of implementation mechanisms, such as by-laws, regulations and coordination procedures, to meet the needs of the sector's reform process in a timely manner. For example, when economic reforms and the private sector were developed, rules and regulations did not provide a sufficient basis for generating profits from forestry activities and thus limits the possibilities for alternative financing of the sector. The study further shows that implementation mechanisms need to be revised once the role and functions of the forest service are changed. Commonly defined law enforcement mechanisms across sectors would also contribute to the integration of forestry objectives in wider agendas.
- *Creation of capacities to meet current demands:* Knowledge and experience which extend beyond technical forestry or the drafting of legislation are currently lacking and largely account for the reason that laws remain exclusive and specific to the sector.

STRENGTHENING ADMINISTRATIVE REFORM

Administrative reforms are proceeding slowly in each of the five countries and those pertaining to the forest sector are no exception, especially given the complexity of actors and their various demands (see annex C for a summary of institutional/administrative reforms). As contained in the country reports, the capacity to undertake administrative reforms needs to be reinforced in the following areas:

- *Development of a clear decentralization strategy:* The revision of functions and responsibilities, along with the delegation of certain ones to the regional level are now part of the policy in each of the five countries, as is the involvement of the private sector (where possible), local communities, and other ministries and agencies. However, several factors are hindering institutional reform: the lack of experience and mechanisms for decentralization, including comprehensive strategies (especially for fiscal aspects) and adequate policy co-ordination; fragmentation of local government structures; and underestimation of the importance of local traditional practices in terms of how communities organize themselves, among others. Moreover, the assignment of functions to local government is not clear and the basis on which to devolve them is lagging behind, especially with regard to defining obligations and responsibilities. In other words, with no mechanisms and no institutional or financial autonomy, the framework to implement decentralization does not exist. In the case of Kazakhstan and Kyrgyzstan, the process of decentralization, as transfer of duties and responsibilities to the local level, has been initiated prior to the creation of required capacities in place.
- *Analysis of the extent to which current functions correspond to the changed context and of the appropriateness of their definition and redistribution:* Although administrative functions are defined, duplication happens among different levels. The traditional technical/control functions are no longer appropriate in the new context, given the increasing importance and role of new actors. Current efforts are sporadic with regard to the redistribution of functions (production, control/licensing, management, conservation) horizontally among various agencies and vertically within the same sector. Even when the protection and production functions are legally separated, as in Kazakhstan, Kyrgyzstan and partially in Uzbekistan, co-ordination among responsible institutions is non-existent (see annex 8 for a summary of available and missing forest policy means which would be useful to redefine and categorize functions).

- *Definition of appropriate mechanisms for effective fiscal decentralization:* Administrative decentralization and the transfer of responsibilities and functions to the local level were not followed by complete fiscal decentralization. Besides, mechanisms to separate economic functions from control and productive functions from protection are limited. Neither is there flexibility to generate income and re-invest at the local level because budgets are still centrally distributed and the means to do so are not developed. Normative procedures are lacking and, as a result, the capacity to develop reinvestment and fund-raising strategies is weak. In turn, this lack of capacity is one of the main reasons that fiscal instruments are inadequate and decentralization is limited to administrative functions only. Usually, forests generate some profit and re-investment back into the sector but, as part of privatization and the transition to a market economy, the economic/productive function was one of the first to be transferred to actors outside the public service. Despite few opportunities for forestry to self-finance, the sector receives funding, often on the basis of what local budgets have left after supporting activities in other sectors.
- *Definition of a clear privatization policy:* Privatization in the forest sector is still in its infancy and faces many challenges. It is not supported by financial mechanisms; the regulatory basis for forest tenure or private forest development is confusing; tax legislation governing processing/harvesting by the private sector is inconsistent; strategies to privatize productive functions lack a clear vision and do not advance solutions for the survival of forestry enterprises in the new climate. For example, in Kazakhstan, due to excessive privatization of production functions, businesses lost capacity to self-finance operations. At the same time, alternative sources of income are limited, uncertain, and do not always correspond to actual demand.
- *Involvement of local communities:* The involvement of private actors and communities is highly promoted in the policy discourse but, in practice, either the motivation to move in this direction or the mechanisms to facilitate it are missing. Thus, the potential to draw on the expertise and experience of private actors is not fully tapped. On the one hand, participation in forest policy and forest management processes, along with the consequent attribution of new roles, are changing the structure of stakeholder organizations and are having an impact on public institutions, their roles and functions. On the other hand, the classical vision of forestry as a field requiring specific technical knowledge limits the access of non-experts to decision making. The idea of foresters sharing technical functions with local communities often becomes a way for them to secure cheap labour, mainly because mechanisms to foster community involvement have not been adapted or are not available.
- *Creation of local capacities (at decentralized levels):* The reinforcement of capacities and skills to adjust to the new context is a precondition for the success of any reform but is still lacking at all levels, especially for local authorities: for example, skills in communication and conflict resolution, in forest policy development, and in forest management planning which takes into account both marketable and non marketable values - many of which are neither considered nor accurately estimated at the present time.

DEVELOPING A COMMUNICATION AND EDUCATION POLICY

Even though changing contexts are opening up forestry boundaries and encouraging more collaboration across sectors, implementation of reforms is difficult when other sectors remain focused on their own interests and when other priorities prevail at the national level. Some elements of inter-sectoral co-ordination are being developed but the mechanisms, including an information strategy for the sector, are not yet formalized.

Historically, forestry research, education and training have been oriented almost entirely to forest protection and plantation development. They do not take into account a new set of circumstances or the new vision for forestry which is different in each country. As such, curricula no longer respond to today's needs, there is no systematic approach to revamp the system, and little analysis of future demand for specialists and skills. Since independence, there has been an explosion of new training/educational establishments and a dramatic increase in the number of forestry specialists. However, the quality of teachers and of education in general is uneven, not to say problematic.

Possible ways forward

A possible future role for public forestry organizations will be as facilitators to the large number of stakeholders and the diverse and sometimes conflicting interests which are emerging. Forestry authorities could also lead the development of standards for various forestry practices, in consultation with these different players. Since most production functions will be transferred to communities and private enterprises, the public sector is unlikely to have any major role in timber production. At most, its domain will be limited to managing public goods and services, often under contractual arrangements. Following this streamlining of functions, the knowledge needs of forestry institutions are likely to change accordingly (see table 2).

TABLE 2. Possible new functions of public forestry institutions

Functions	Knowledge/ skill requirements
Policy and regulation	<ul style="list-style-type: none"> •Broader perspective of the role of forests and forestry in the economy. •Role of different players/ segments of society. •Approach to encourage positive responses by different players.
Protection	<ul style="list-style-type: none"> •Threats to forests and sources of threats. •Tools and techniques for dealing with various threats. •Cost-effective enforcement of forest legislation.
Resource management	<ul style="list-style-type: none"> •Economic, social and environmental aspects of forest management. •Implications of different interventions including costs and benefits. •Nature of conflicts in resource management and approaches to their resolution
Facilitation	<ul style="list-style-type: none"> •Behaviour of different players •Socio-economic conditions that encourage/ discourage forest/ tree resource management. •Responses to different market/ non-market mechanisms.

Source: Nair, 2009

Consistent with this vision, the forestry administration would continue to have responsibility for the development and implementation of **policy**, legislation, regulations and, in the interest of ensuring public goods, manage activities related to forest protection, such as fire, pest and disease control, and special protected areas. The regulatory function may include elaboration and implementation of a state strategy for forest protection, afforestation, reforestation and forest use which should determine priorities for forest sector development, identify activities to enhance co-ordination, and provide the basis for normative, economic and regulatory aspects of forest management. At the same time, the development of long-term planning and strategies should involve all relevant stakeholders.

The responsibility for **forest management** could be assigned to a specialized organization in charge of the economic use of forest resources (as is the case in Armenia and Kazakhstan) or it could be decentralized to the local level. This function may include:

- forest conservation: the protection of soil, water supplies and valuable stands, the regulation of climate, and recreation
- management for a sustainable supply of timber and non-wood forest products
- forest protection: regeneration and pest and disease control
- maintenance of the forest information system (registry)

Facilitation and conflict management is a new function for the public forest service to take on as it adapts to a different role. New actors are increasing pressure on the state to separate the policy/regulatory function from management. With the growing importance of international conventions and voluntary agreements as well as the greater need to collaborate across sectors, the forest policy/regulatory function will no longer fall strictly under the purview of the forestry administration. Rather, its main function would be to create enabling conditions for other players to manage the resources efficiently (Nair, 2009). In other words, the public forest agency should start acting as a facilitator, seeking compromise solutions in forest use and management among stakeholders. However, there are several difficulties inherent in assuming this function, for example, relinquishing the power and status of being sole decision-maker in favour of a softer role as broker in the resolution of conflicts. The shift in attitude and behaviour required to make this transition will be difficult, will take time, and will require new knowledge and different skills. Success will depend, to a great extent, on building capacity within institutions to perform the following functions, among others:

- *Co-ordination*, including in policy development, decision-making on matters related to natural resources and the environment, law enforcement (e.g., FLEGT), information exchange, and participation in cross border initiatives
- *Capacity building* of stakeholders
- *Development of public awareness campaigns*

Conclusions and recommendations

Analysis of the extent to which public institutions are responding to the challenges of the transition period - and the new economic, political, social and environmental priorities associated with it - shows the need for a profound reform of their basic roles and functions rather than a simple organizational restructuring. In the former Soviet republics, increasing demand for forest services/products and the emergence of new actors are exerting strong internal pressure for change. These countries must also operate within the broader global context which is defining conditions and incentives to strengthen institutions and better respond to needs. Public forestry institutions in the CAC countries are therefore undergoing various changes, many of which are of a superficial nature: mainly organizational structures and rotation of personnel. All country case studies report a loss of continuity and of institutional memory as consequences. They predict that, in the long run, this situation will further undermine confidence in the efficiency and management capacities of public forestry institutions. Presently, initial evidence shows that the changes in roles and the redistribution of management functions between different state entities or the private sector has been effective (in Georgia, for example). In Kazakhstan and, to a lesser extent in Armenia, forestry institutions are being reorganized to run as financially independent commercial enterprises.

The major institutional reforms in the forest sector of CAC countries are linked to two broader changes: (i) a new role for the state, (ii) the consequent emergence of new actors, (iii) a more encompassing vision of forests as part of general development, and (iv) closer collaboration across sectors. Public forestry institutions therefore need to modify their functions to reflect these changes if they are to respond in any meaningful way to the challenges they face, including integration with the policies and strategies of other sectors and continuous review and adaptation of norms and regulations. New functions, new actors and new institutional arrangements will also require a comprehensive information and education strategy.

Findings of the study and outcomes of the regional workshop led to the formulation of special focus areas which should be developed to enhance the public forestry institutions.

A new institutional set up in the forest sector as a step towards integration

The emergence of new actors and roles within the forest sector, coupled with changed expectations, require an update of the institutional set up as a framework for strengthening relations within the sector. A first step in this direction would be to review the actual functions of the public forest service.

Decentralization and transfer of functions will require:

- An assessment of current functions and the extent to which they correspond to the changed environment, needs and capacities of the forest sector
- Confirmation of the current functions which need to be retained and identification of new ones which will allow the public forest service to respond to the demands and expectations arising from changing internal and global contexts
- Development of a new regulatory system.

In addition to these tasks, the following supportive measures should be considered:

- At a time when decentralization and privatization is expected to result in a loss of revenue to the public forest service as it relinquishes many aspects of production forestry, the growing importance of environmental and social dimensions of forests and government's commitment to increase protective areas will call for increased budget expenditures - a reality that must be taken into account in the development of decentralization strategies.
- Fiscal decentralization should accompany the transfer of management functions to the local level.

- Building on the experience of Kazakhstan with decentralization (see box 8), the role of local governments should be taken into account when revising the institutional framework. For example, to avoid conflicts related to the redistribution of power and functions, a detailed analysis should be undertaken of the activities, roles, capacities and functions of the different actors.

Local government authorities - now empowered with new functions and responsibilities as a result of decentralization and privatization - and new private forest owners (communities and individuals) need professional support from forestry specialists. Hence, an entirely new function will be created: service delivery.

Current examples of effective functional changes are rare, often because the process is still being tested. Besides, such innovation requires a comprehensive approach which consists of a capacity building component, a recruitment strategy, a communication/information strategy, and new managerial tools, complemented by technical equipment. Of necessity, the exercise is time consuming, resource intensive, and requires the state to be willing and committed to engage in change.

One effective way to strengthen public forestry institutions is to *create capacity* (including a conscious understanding of a need) to establish a new set-up within the administration. This task requires that training extend beyond the technical dimensions of forestry to include social, economic and communication aspects. Openness for change, flexibility and adaptability are also important. Such capacities are built not only by traditional means such as workshops but also by regularly involving stakeholders in events, such as discussions, brainstorming sessions, and expert panels which take place at both national and regional levels. For example, the participation of representatives from Turkey and Tajikistan in the regional workshop "Ongoing reforms of public forestry institutions in Central Asian and Caucasus countries", organized as part of the present study, confirmed the benefits of exchanging information and experiences as part of the learning process.

Strengthening regulatory functions through better governance

As institutions adapt to changing contexts, norms and regulations need to keep pace - a problem that is urgent but not easy to resolve (chapter 3.2.b):

- Forest legislation in each country should be made flexible and reflect the new internal contexts instead of merely duplicating that which existed under Soviet rule.
- A national coordinating mechanism should be established to update and draft legislation which takes into account interests across sectors, other reforms being undertaken and outcomes of relevant international discussions.
- A system needs to be put in place to ensure timely implementation relative to other government decisions taken - orders, decrees, norms and regulations, for example.

As the role of the state is changing, the regulatory function of the public forest service should not be limited to the development and enforcement of norms. Since it keeps the lead responsibility for policy and hence, for the identification of priorities through a process of negotiation, it should modernize the way the regulatory function is put into practice. Focus should be on new policy mechanisms and instruments based on iterative processes to create and diffuse knowledge; negotiate and co-coordinate policy goals; define solutions; and make adjustments following monitoring and assessment (CEC, 2001). Given that good governance brings new actors into the policy process, it requires considerable time and capacity to ensure the meaningful participation of the various stakeholders, including through empowerment and the sharing of responsibilities. It also requires coordination between sectors and different decision-making levels; accountability mechanisms; and new market mechanisms.

A new policy for information and education to promote facilitation and integration

Currently in the forest sector of CAC countries, deteriorating capacity at the professional level is exacerbated by the urgent need for new skills and knowledge which correspond to new roles and functions. In the course of institutional reform, when new actors assume some aspects of forest management, facilitation may become one of the main functions of the public forest service. To support this new direction, it will have to switch from a "command and control" mentality to one of "co-ordinate and connect".

- **Systems to evaluate** current professional capacity and future demand should be put in place to define the needs for capacity building and for revamping forest institutions.
- The **quality of training** does not appear to be commensurate with the large number of forestry educational/training establishments, nor do the curricula take into account social/communication and policy aspects, as reflected in the new vision of forests and their role. Moreover, outdated teaching methods do not promote dialogue, discussion, free thinking or analysis. Rather, they are based on a subservient relationship between master and student. Hence **new methodologies of teaching** and of preparing teachers are needed (“training the trainers”).

Revisions to curricula should involve forestry specialists at all levels (from administration to field), should be linked to application, and should take into consideration local specificity and the need for adaptation.

Ideally, capacity building modules (e.g. on integrated forest management) could be formulated for mixed groups of representatives from the forest service, local administration, local users, and private entrepreneurs. As social aspects in forestry are gaining momentum, new subjects such as forest policy, communication, participation, and conflict management need to be introduced into the curricula as well as in courses to build capacity. Forestry research strategies also need to be adapted to emerging challenges.

The forest sector needs to design a new education strategy jointly with the Ministry of education, including elements related to the evaluation/accreditation of teachers and determination of the potential and viability of an establishment to provide specialized training in forestry. The forestry administration may be involved in assessing the quality of education as well as in establishing the number of graduates based on sector needs.

A **good communication strategy** would help to promote the interests of the forest sector both at the national level, for example, for inter-sectoral co-ordination and lobbying for resources and at the local level to motivate community involvement and promote decentralization.

Strengthening regional collaboration

The study results and discussions during the regional workshop clearly showed that experiences in each CAC country were unique and, when shared, proved beneficial to neighboring countries. Forest policy reform has been underway in Kyrgyzstan since 1997 and extensive work is being done on a national forest inventory (supported by the Swiss co-operation) and on an assessment of forest resources (supported by FAO). A cross-checking of the data gathered in these separate exercises provided a comprehensive vision of the potential and priorities for forest management. The country also indicated that an integrated approach to forest management was being introduced, as was community involvement. Experience at the local level has been positive, specialists have been trained, and methodologies have been adapted to mountain conditions. Thus, Kyrgyzstan is in a good position to provide advice and help other countries of the region to implement reforms.

The experience of Kazakhstan in conducting classical forest inventories since its independence from the Soviet Union and the specialists it has trained for this purpose could also prove useful to other countries that are interested in embarking on similar work. Presently, inter-state (inter-government) agreements are required to launch this type of collaboration - a process which is lengthy and bureaucratic, especially since forestry is not a government priority. If such agreements could be concluded at the regional level as part of inter-regional co-operation, FAO might be able to support or facilitate the process.

Regional centers for enhanced training, such as the one FAO supports in Uzbekistan, could be replicated to offer specialized training for professionals in different branches of forestry (including processing) and for forest users and other stakeholders. However, such centers would require assistance both in terms of organization and expertise.

Definitely, one of the main challenges in building a new institutional structure in CAC countries is to usher in a new understanding and acceptance of the changing role of the state and public forest institutions. Without such a vision, further development of the sector may not be possible. FAO, with its expertise and knowledge acquired when conducting FOWECA and other studies, could have an important role in supporting these countries in their decision to reform their institutions and in building the capacities required for them to do so.

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Annexes

ANNEX 1: NFP PROCESS IN CAC COUNTRIES

Country	NFP	Main thrusts	Achievements	Difficulties	Comments
Armenia	adopted in July 2005; covers short-term (2006-2008) mid-term (2008-2010) long-term (2010-2015)	Improve legislative basis and institutional framework; redefine planning modalities; assess forest resources and environmental aspects; strengthen forest guarding, forest protection, reforestation and afforestation; enhance economic efficiency; address other priorities such as certification, social dimensions, research, education, financing and international co-operation	Forest State Monitoring Centre was established in November 2005	Delay in establishing NFP National Co-ordination Board hinders coordination and monitoring of NFP implementation.	The document outlines areas to improve the forest economy and mobilize internal financial resources through improved forest management practices. However stronger government commitment is needed to achieve targets.
Georgia	drafted in 2004			Not yet approved by Government	Development of the NFP is a proposed priority before restructuring the sector.
Kazakhstan	no NFP				A forestry development strategy is under preparation
Kyrgyzstan	adopted in 2005	focus on conserving forests and biodiversity; sustainably managing forests; restructuring the state forest service; reforming the sector; enhancing the role of local communities in forest use and development; improving information policy	A 5-year plan to implement the NFP was defined and approved in 2005, natural protected areas are increasing, and functional analysis is underway.	A system to assess and adapt forest policy on a regular basis is needed.	NFP is part of the forest policy cycle and complements the sector's long-term development strategy. It defines objectives and expected results as well as the schedule, means for their achievement and responsibilities. Integrated management plans, as one of the tools to implement the NFP, is the next step in the Kyrgyz forest policy cycle.

Uzbekistan	NFP under development with FAO support	Will introduce measures to develop the sector, such as new types of forest tenure; joint forest management, decentralization, and inter-sectoral co-ordination			A new Forest Code is one of the pre-conditions for NFP but is actually missing.
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ANNEX 2: POLICY MEANS (EXISTING)

Armenia	Georgia	Kazakhstan	Kyrgyzstan	Uzbekistan
NFP (2005)	legal and institutional changes in the state structure and licensing	legal basis for forestry development; forest conservation principles embedded in the forest code	NFP	NFP process initiated
Forest strategy		indicative plan for social-economic development of the country	national concept of forestry development	draft strategy developed
action plan to curb illegal logging		separation of control and economic functions; transfer of functions and responsibilities to the local level	action plan to curb illegal logging; integrated management plans; strategy to separate functions	
forest recovery /development fund	financial strengthening through state budget	guaranteed funding to implement policy	action plan	
poverty reduction strategy			national development strategy based on the concept of ecological security	

ANNEX 3; POLICY MEANS (MISSING)

Armenia	Georgia	Kazakhstan	Kyrgyzstan	Uzbekistan
weak collaboration across sectors	no NFP	no strategy for forest development	No approved strategy for integrated management plans	no long term or mid-term vision
no strategy for adapting to climate change	no official forest strategy		no mechanisms for private initiatives in forestry	no forest code (elaboration ongoing)

ANNEX 4: LEGISLATIVE REFORM (EXISTING)

Armenia	Georgia	Kazakhstan	Kyrgyzstan	Uzbekistan
Forest Code: definition of forest; forest classification, including production capacities; different ownership possibilities	law on government structures; law on licensing forest use	Updated forest code: separation of control and economic functions of local authorities and responsibilities of different institutions in the sector; Forest Code is harmonized with the environmental code and regulations of other agencies; definition of "private forestry" both in land code, water code	privatization of timber processing units	

ANNEX 5: LEGISLATIVE REFORM (MISSING)

Armenia Georgia	Kazakhstan	Kyrgyzstan	Uzbekistan
No specific guidance on forest management according to categories/conditions Outdated forest code; no guidelines on forest management by local communities following transfer of this function	No national forest development strategy, therefore, sector not linked to broader development goals	Mechanisms to transfer production functions to private sector not regulated	Current forest code too general
No regulatory framework to operationalize legislation governing the state forest service No guidelines on the principles of forest management		No clear regulations on private forestry	By-laws not harmonized
Legal documents not harmonized, for example, in the land code re: ownership		Land tax in private forestry not regulated	
No consideration of other land use types in the forest code; lands not defined in the term "forest land"		No mechanism to monitor implementation of legal reforms (only declarations)	

ANNEX 6: ADMINISTRATIVE/INSTITUTIONAL REFORM (EXISTING)

Armenia	Georgia	Kazakhstan	Kyrgyzstan	Uzbekistan
Concept of institutional reform	a new structure of the forest service is proposed	functions/responsibilities of ministries and agencies defined	types of functions defined	responsibilities clearly defined
Centre for forest monitoring		functions related to policy development and implementation defined		
		interagency commission for inter-sectoral coordination established		

Institutional reform (missing)

Armenia	Georgia	Kazakhstan	Kyrgyzstan	Uzbekistan
no forest service	functions not clearly defined or separated	no clear strategy	no stability or continuity of initiatives due to permanent structural changes	
no private institutions				No distribution of functions
weak human resource management		insufficient local capacities (professional and material) in decentralized bodies		weak human resource management
no NFP coordination unit				

ANNEX 7: INFORMATION/TRAINING/RESEARCH REFORM (EXISTING)

Armenia	Georgia	Kazakhstan	Kyrgyzstan	Uzbekistan
specialization courses in forestry	forestry faculty and forestry research institute		academy of sciences deals with development of new technologies for forest sector	structure to enhance training and knowledge transfer
growing interest of NGO and public in knowledge dissemination			training/education of foresters; sector-focused newspapers and journal	

Information/training/ research reform (missing)

Armenia	Georgia	Kazakhstan	Kyrgyzstan	Uzbekistan
need for continuous enhancement training	low quality of education	no programme for training/consulting services	no formal strategy to enhance professional quality of staff	low quality of professional education
lack of forestry extension service	no strategy or programme for enhancement training	no extension service (enhancement training);	no quality control in educational institutions	
limited availability and access to information	no strategy to develop forest science and education	limited access to information		lack of modern means to access information, including quality material in local language and terminology
lack of knowledge and research on forestry issues		weak basis and strategy for science development		poor state of forestry science and research, including conditions and quality of research
Lack of a regular nationwide forestry events (eg. a congress)		exchange of experience and knowledge		introduction of innovation and knowledge

ANNEX 8 : ELEMENTS OF FUNCTIONS: SUMMARY TABLE FOR CAC COUNTRIES

	Regulatory	Management (economic)	Facilitation
<p>Armenia</p> <p>Political will exists but implementation needs to be improved. In fact, there are no special obstacles, only typical problems associated with a state in ztransition.</p>	<p>Basic strategic and policy documents exist but the elaboration of needed regulations and bylaws is slow.</p> <p>Mechanisms for the regulatory function are in pace but a sound staff policy is missing, as is a separate forest service. Local institutional structures are effective.</p> <p>Decentralization is based in law but the implementation strategy is too centralized. The functional and institutional basis is absent and laws on co-ordination across sectors are not effective.</p> <p>Implementation of the NFP is behind schedule due to lack of financial and other resources as well as a co-ordination committee.</p> <p>Harmonization of forest legislation with laws in other sectors is underway but participation of other actors and stakeholders is generally weak.</p>	<p>Administrative decentralization is weak and the extent to which it has been implemented is low. Functions are defined in law but much duplication exists among the different levels.</p> <p>The budget is still mainly controlled by the state.</p> <p>Forestry is not profitable, in part because of weak financial management/capacity</p> <p>Economic functions are not separated from control, nor is a line drawn between environment/conservation and control</p> <p>Technical equipment is wanting efforts are being made to improve the situation.</p>	<p>A draft law provides for a separate forest service but it is not yet in place</p> <p>The main actors in forestry are the public and private sectors, with some involvement of NGO. Communes especially are not active.</p> <p>The potential to involve the private sector is not fully tapped and there are no financial mechanisms to encourage greater participation.</p> <p>Forest extension services are not yet developed.</p> <p>Information should be more accessible.</p> <p>current educational establishments and the experimental centre of the Ministry of Nature Conservation provide enhancement training but teaching staff is not sufficient.</p>

	Regulatory	Management (economic)	Facilitation
<p>Georgia</p> <p>The state needs to be ready and willing to adhere to political imperatives and promote forest sector development, a direction which is not always consistent with the internal context and government priorities.</p>	<p>A strategy and vision for forest sector development has been adopted but it is difficult to sell it at the intersectoral level.</p> <p>A new environmental code will cover forestry issues but lack of experience makes collaboration across sectors difficult.</p> <p>Forestry regulations under general legislation for the sector are not keeping pace with the changing legal environment and the principles of sustainable forest management.</p> <p>Cancellation and updating of outdated regulations are time consuming and resource intensive.</p> <p>Implementation mechanisms within the forest sector are working but not outside the sector</p> <p>Indicators and mechanisms to evaluate and adapt forest policy are lacking.</p> <p>In general, the forest policy is consistent with policies in other sectors, except in budgetary terms.</p>	<p>Decentralization of management, including financial management and planning, is not currently on the political agenda.</p> <p>The budget allocation for the sector is not based on profitability and mechanisms to re-invest are absent.</p> <p>Resources for technical management are inadequate.</p> <p>Administrative functions for forestry and other actors are defined but are not clear or separated between forestry and municipal (local) authorities.</p> <p>Economic and control functions are separate, as are production and protection functions, but resources for technical management are poor both in terms of quality and availability.</p>	<p>Some intersectoral co-ordination exists but mechanisms are not fully formalized.</p> <p>Private and community involvement is promoted but environmental considerations risk being neglected and motivation at the community level is lacking.</p> <p>Comprehensive methodologies to identify capacity needs are non-existent.</p> <p>Possibilities for service provision are limited.</p>

	Regulatory	Management (economic)	Facilitation
<p>Kyrgyzstan</p> <p>The readiness and political willingness of the state to engage in the development of the forest sector is expressed through the elaboration of all the necessary political documents but it remains declarative, not supported by budget allocations.</p>	<ul style="list-style-type: none"> • A national strategy for development of and coordination within the forest sector is underway and will include collaboration with forest users (tourism) and public relations aspects. • Separate forest policy elements are reflected in the policies of other sector but a comprehensive forest policy which is harmonized with those in other sectors is missing. • There is basic forestry legislation but no long-term state forest policy. • Different types of forest tenure are defined but private ownership of forests and other types of forest tenure have no basis in law. • Co-ordination and harmonization with legislation in other sectors could be improved, for example on tax legislation and licensing. • Forestry legislation is being improved but state priorities prevail in law making, without properly considering forestry interests. • The mechanisms to enforce laws are weak, often because there is insufficient time to consider them. 	<ul style="list-style-type: none"> • Administrative decentralization in forest sector has been implemented. Legally, the functions of management and control are separated but co-ordination among sectors is not happening. • A decentralization strategy for forest management is in place but the newly responsible institutions do not execute their rights and duties to control and supervise forest management locally. • Forest management units retained forest protection, conservation and regeneration but the economic/production activities have been transferred/privatized. Due to excessive privatization, forestry enterprises have lost some processing facilities by which they can meet their own needs through payable services. • The functions and responsibilities of public bodies and forest users are defined in regulations but the functions of public/civil society are not defined. • In line with fiscal decentralization, forestry is financed from national and local budgets and forest organizations. Local budgets are usually allocated on the basis of "what is left". Moreover, the definition of payable services and the regulations for organizations to generate revenue are unclear. • There are approved norms for technical means and for the human resources needed for technical forest management but the real situation does not always correspond to the norms. • Forestry's budget is not based on profitability but on the ecological (protective) importance of forests and financial capacities of the state. • For the technical management, the availability of human and material resources is not always adequate (including sometimes professional level). That is why forest cover is not increasing although the incidence of forest fires and illegal logging have dropped. 	<ul style="list-style-type: none"> • Some elements of forest policy touch on how to harmonize with policies of other sectors but the forestry administration is not authorized to control the sustainability of forest use. • Legal provisions exist for private sector involvement in forest management but rules and mechanisms for state support to private forests are missing. • There is a network of educational establishments for higher and medium level forestry professionals as well as capacity for enhancement training but the quality is not always good and a systematic approach is needed to cover all categories of specialists. • The list of mainly technical services to be provided by leshozes (territorial forest management units) is limited and procedures/mechanisms are not defined.

	Regulatory	Management (economic)	Facilitation
Kyrgyzstan	<ul style="list-style-type: none"> • Basic forest policy documents exist but is outdated. • Collaboration among sectors is insufficient when it comes to canceling or updating regulations. • There are separate regulations but no comprehensive implementation mechanisms and insufficient financing. • The 1st policy evaluation and adaptation took place in 2004 but self-evaluation is not undertaken regularly. • Elements of forest policy are more or less harmonized with ecological and agrarian policies and with the state development strategies but it is not adequately considered in the policies of other sectors. 	<ul style="list-style-type: none"> • Normative documents (presidential decrees, law on local self-government) support administrative decentralization but, in practice, implementation mechanisms are non-existent, qualifications are insufficient and institutions are not independent, including in financial terms. • Financial decentralization: a presidential decree established national and local funds but budgets are small and capacities are limited for fundraising. • Although resources are available, including special means, the difficulty is the complex conditions of high mountains. • A regulatory basis exists for administrative decentralization but no implementation mechanism is in place and professional capacity is weak. 	<ul style="list-style-type: none"> • A regulatory basis (including the Aarhus convention) exists for inter-sectoral co-ordination but the link between sectors is weak. • There is no system to identify future professional needs neither from the market nor the professionals themselves.

	Regulatory	Management (economic)	Facilitation
Uzbekistan	<ul style="list-style-type: none"> • The legal basis for forestry development has not been updated but a forest code is being drafted. Regulations are not yet being considered. • The strategy for forest sector development is defined in the NFP but policy evaluation and adaptation as well as its harmonization with the policies of other sectors will be defined as the policy is implemented. • The new forest policy is open to other actors. 	<ul style="list-style-type: none"> • As part of financial decentralization, the leshozes are financed from the state budget and they are allowed to retain income they earn from secondary forest use. Forestry enterprises do not pay taxes. • There are sufficient resources for technical management • The separation and re-distribution of functions related to institutional decentralization are defined in the new draft forest code. • Local forest management is rather inefficient due to lack of trained specialists but organization is improving. • The quality of technical forest management (protection/regeneration) is good, as is forest guarding. 	<ul style="list-style-type: none"> • Other sectors and stakeholders underestimate the importance of the forest sector. • The establishment of a council for intersectoral co-ordination is planned. • Private sector is involved in forest management. • The capacity needs for professionals have been assessed but it is not possible to meet these needs. • Forest services are provided to the population.