Illegal Logging in South Eastern Europe

Regional Report





REGIONAL ENVIRONMENTAL CENTER

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Regional Report

REC WORKING PAPER

By
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The core project team comprised Aniko Nemeth, project manager; Mihail Dimovski, project director; and Gordana Kozuharova, ENVSEC regional desk officer for South Eastern Europe.

About the REC

The Regional Environmental Center for Central and Eastern Europe (REC) is an international organisation with a mission to assist in solving environmental problems. The REC fulfils this mission by promoting cooperation among governments, non-governmental organisations, businesses and other environmental stakeholders, and by supporting the free exchange of information and public participation in environmental decision making.

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AAC	Annual allowable cut
Acquis Communautaire	Legislation of the European Union
CCD	(Albanian) Coordination and Control Directorate
CIDA	Canadian International Development Agency
CITES	Convention on International Trade in Endangered Species
CMMU	(Montenegro) Central Management and Monitoring Unit
COC	Chain of custody
CPI	Corruption perceptions index
CSR	Corporate social responsibility
DF	Directorate of Forests
DFS	District Forestry Service
DGFP	(Albanian) Directorate General of Forests and Pastures
ECA	Europe and Central Asia
EE	Eastern Europe
EFICS	European Forestry Information and Communication System
ENA	Europe and North Asia
ENVSEC	Environment and Security Initiative
EU	European Union
EUR	Euro
FAO	Food and Agriculture Organization
FBiH	Federation of Bosnia and Herzegovina
FC	Forestry chamber
FDI	Foreign direct investment
FI	Financial inspectors
FI	(Montenegro) Forest Inspectorate
FLEGT	Forest Law Enforcement, Governance and Trade
FODEMO	Forestry Development in Montenegro
FSC	Forest Stewardship Council (forest certification scheme)
FSD	(Albanian) Forest Service Directorate
GDP	Gross domestic product
GDP PPP	Gross domestic product by purchasing power parity
GEF	Global Environment Fund
GIS	Geographical information system
GPS	Global positioning system
ha	Hectare
IG	Inspectorate general
IPA	Instrument for Pre-Accession Assistance
KFA	Kosovo Forest Agency
KFOR	Kosovo Peacekeeping Force
LEAP	Local environmental action plan

LGU	Local government unit
m^3	Cubic metres
MAFRD	(Kosovo) Ministry of Agriculture, Forestry and Rural Development
MAFWM	(Montenegro) Ministry of Agriculture, Forestry and Water Management
MCPFE	Ministerial Conference on the Protection of Forests in Europe
MEA	Multilateral environmental agreements
MEST	(Kosovo) Ministry of Education, Science and Technology
MoEFWA	(Albanian) Ministry of Environment, Forest and Water Administration
MoFTER	Bosnia and Herzegovina Ministry of Foreign Trade and Economic Relations
NAP	National action plan
NEAP	National environmental action plan
NFI	National forest inventory
NGO	Non-governmental organisation
NSDI	(Albanian) National Strategy for Development and Integration
OSCE	Organization for Security and Co-operation in Europe
PDA	Personal digital assistant
PE	Public enterprise
PEFC	Pan-European Forest Council (forest certification scheme)
PFOA	Private forest owners associations
REC	Regional Environmental Center for Central and Eastern Europe
RS	Republika Srpska
SCPC	(Albanian) Sector of Coordination and Police Control
SEE	South Eastern Europe
SFDS	Serbian Forestry Development Strategy
SIDA	Swedish International Development Cooperation Agency
SNV	Stichting Nederlandse Vrijwilligers (Netherlands Development Organization)
T	ton
TAIEX	Technical Assistance and Information Exchange Programme
TI	Transparency International
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNMIK	United Nations Interim Administration Mission in Kosovo
UNSCR	United Nations Security Council Resolution
USD	United States Dollar
VAT	Value added tax
WB	World Bank
WWF	World Wildlife Fund

Foreword

Forests are our common heritage and have ecological, economic, social, aesthetic and cultural values that are impossible to quantify. Illegal logging is a major threat to our forest resources and gives rise to a wide range of devastating economic, social and ecological problems. Although the issue is receiving increasing attention both regionally and internationally, the necessary political drive is still lacking and policy and legal mechanisms still need to be put in place at national and regional level. There is also a general absence of binding international and regional conventions obliging parties to take measures for prevention and control.

Illegal logging is frequently associated with transnational organised crime, breakdowns in institutional controls, and ineffective institutions. Illegal trade in forest resources can increase tensions across borders and with the international community. The effects of illegal logging are wide ranging and include loss of habitat and biodiversity, erosion and land degradation, desertification, social disruption and adverse economic impacts.

Although it varies in local character and scope, illegal logging is a global phenomenon with common characteristics: in general, it is less apparent in nations and regions with a strong rule of law, transparent procedures, knowledgeable and engaged citizens, an efficient judicial system, strong supervisory and control authorities, respect for forestry governance principles and sustainable forestry management.

Under the Environment and Security Initiative (ENVSEC), the Regional Environmental Center for Central and Eastern Europe (REC), in cooperation with the Belgian Federal Government and the Canadian International Development Agency (CIDA), is implementing a project aimed at identifying actions to combat this form of environmental crime in South Eastern Europe (SEE) and Ukraine, as well as at enhancing dialogue and cooperation among SEE countries. One of the goals of the project is to identify concrete activities by which key actors can close the existing gaps in legislation, policy, implementation and enforcement in order to reduce or eliminate illegal logging in SEE and Ukraine. The core project team comprised Aniko Nemeth, project manager; Mihail Dimovski, project director; and Gordana Kozuharova, ENVSEC regional desk officer for SEE.

The present project report, covering SEE countries exclusively and financed by the Belgian Federal Government, is the first step towards the ultimate objective of establishing a regional network of experts, academics, decision makers and other stakeholders to combat and prevent illegal logging in SEE. A network of this kind has a potentially important role at regional and international level, especially in sharing information and know-how and pooling financial resources for common projects and strategies.

The REC has a solid track record in the field, with 20 years of experience in building capacities towards environmental management in SEE countries. The REC is committed to the security aspects implicit in addressing environmental challenges. It participates in and manages a number of important projects implemented under the ENVSEC Initiative, strengthening key decision makers in SEE to ensure peace and stability while safeguarding the environment.

Marta Szigeti Bonifert
Executive Director of the REC

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The present study was compiled in the context of the project "Illegal Logging in South Eastern Europe and Eastern Europe: Governance, Implementation and Enforcement", which is financed by the Belgian Federal Government and implemented under the ENVSEC Initiative. It covers Albania, Bosnia and Herzegovina, Kosovo (as defined under UNSCR 1244), the former Yugoslav Republic of Macedonia, Montenegro and Serbia.

The report was prepared by the following REC staff, listed according to the extent of their contribution: Miriam Markus-Johansson, Bruno Mesquita, Aniko Nemeth, Mihail Dimovski, Cecile Monnier and Peter Kiss-Parciu.

It is based on national reports prepared by national forestry experts from South Eastern Europe. We would like to express our gratitude to the following national experts: Mr. Thimaq Lako (Albania); Mrs. Amila Selmanagic, expert, and Mr. Viktor Bjelic of REC Country Office Bosnia and Herzegovina; Mrs. Nysrete Doda-Gashi (Kosovo [as defined under UNSCR 1244]); Mrs. Julijana Pecalevska of the NGO Proaktiva (former Yugoslav Republic of Macedonia); Mr. Zarko Vucinic (Montenegro); and Mr. Aleksandar Vasiljevic (Serbia).

Disclaimer

The information contained in this report is based mainly on the findings of the national reports prepared by the local forest experts referred in the Acknowledgements. In each country, a contractor was commissioned to carry out a diagnostic audit, as well as a country fact-finding study. In the case of Montenegro and Albania, information is also based on other important recent studies (the World Bank Background Study on Illegal Logging and Other Forest Crimes, covering Montenegro [Zarko Vucinic 2008]; and the World Bank Study on Illegal Logging in Albania [Thimaq Lako 2008]).

Some gaps in information have been filled through additional research. It is also important to bear in mind the general lack of hard statistical data in the forestry sector, a problem that is particularly pronounced in some countries. In addition, statistical data are often available only up to 2007/2008, and data regarding the extent of illegal logging in particular are often significantly underestimated. Due to gaps and inconsistencies in information, it was often necessary to resort to a certain degree of generalisation and extrapolation. The main objective of the report is therefore not to provide completely accurate figures and data about all aspects of forest management and illegal logging, but rather to present general observations and trends with a view to drawing overall conclusions and suggesting recommendations for improvement. It remains the task of the national governments and relevant international organisations to develop more reliable and uniform data collection mechanisms and methodologies.

Given the above, the authors do not assume responsibility for any mistakes or misinterpretations that may appear in the document. However, the REC welcomes any comments and suggestions that can be discussed at national, regional and international level and that can be taken into account in future, related policy and strategy papers.

Executive summary

Status quo

In South Eastern Europe, the forestry sector has significant untapped potential that could contribute to the social and economic development of a large stratum of the population. It is therefore vital to identify trends, such as illegal logging, that prevent the realisation of the full potential of forestry in the region.

There are general patterns that can be discerned in the analysed countries:

- sizeable state-owned forest areas, and areas (especially near borders) particularly vulnerable to the illegal harvesting of timber;
- a mix of young and old forests, with a tendency towards a decrease in high-quality forests;
- a lack of reliable and aggregate data on forests and forest management structures; and
- the recent loss of substantial forest areas, through clear cutting and forest fires.

The impacts of the democratic changes that took place in the late 1990s and early 2000s are varied, but the changes can be said to have led to positive results, including reduced recourse to corruption; new laws establishing public procurement procedures and the improved regulation of private forest companies; stricter financial regulations etc. However, further action is necessary in order to reduce the pressure on forests. Many people rely on forests to supplement their income, especially in rural areas where there is widespread poverty and where state control and monitoring are frequently inadequate due to lack of human resources and technical capacity. Nonetheless, illegal logging is also driven by market forces: it provides manufacturing plants with easy-to-access, cheap timber and allows them to save on the high permitting and harvesting costs of using legally sourced wood.

The main types of illegal logging in South Eastern Europe are:

- Logging without permission or concession from public forests.
- Wood theft or illegal logging from private forests.
- False declaration of volumes, species, values or origins of harvested wood.
- Logging in non-marked or prohibited areas.
- Obtaining logging authorisation through bribes.
- Killing or burning trees so that they can be logged.
- Logging in prohibited or protected areas such as national parks

All of the studied countries have established the legal foundation for regulating forestry activities, mainly in the form of a forestry act. However, the regulation of forestry is also enshrined in sectoral legislation, for example environmental protection law, penal code, spatial planning, hunting legislation, tourism legislation etc, leading to a loss of power on the part of the implementing organisations and creating overall coordination problems.

One of the most pressing regional obstacles, common to most of the countries, is the overall lack of coordination, and even inconsistencies, between the various institutional and administrative frameworks. Institutional capacities need further strengthening. There is an overall lack of well-established bilateral processes with neighbouring countries to combat illegal trade in timber. Joint actions in controlling cross-border traffic are not sufficiently implemented. Data collection and monitoring systems are still inadequate and do not provide regulators with enough accurate and accessible information, vital for forest management and for tracking down offenders. The participation of civil society in the forestry sector remains largely symbolic. Sanctions (administrative and judicial) are in general weak, and authorities may even lack a basic knowledge of forestry crimes and procedures. This is a particularly serious problem in the judicial system, where, for instance, illegal forestry activities rarely lead to an enforced court sentence. Enforcement is inefficient in private forests, where national forest agencies are limited to providing forestry and consulting services – apparently without much success since the private forestry sector is underdeveloped and lacks professionalism. Shortcomings

can be reported in the equipment of forest inspectors and police, for example a lack of vehicles, fuel and technical monitoring equipment. Financial audits of forestry operators are also inefficient: they are based solely on documentation and the correctness of the data is not verified against actual forest activities.

Recommendations

The current international and regional legal and policy frameworks for tackling illegal logging and related domestic and international trade lack essential components for dealing with the more sophisticated and organised illegal forestry activities. It is clear that more concerted efforts are needed on all levels, including networks promoting the development of efficient policies against illegal logging; joint efforts; and the sharing of information and experiences. Informal networks can provide a platform for further policy measures, such as regional and sub-regional agreements, as well as pilot projects.

The authors of this report recommend that the countries concerned, in cooperation with international donors, consider the possibility of establishing a network to assist them to control illegal logging activities. Networking is a powerful tool for gathering and sharing practical information and for developing a problem-driven solution, using a bottom-up approach and encouraging experimental learning. It is an efficient tool for advancing reforms and for helping to implement the vast array of regionally relevant recommendations presented in this report:

- Efficient administrative procedures based on a clear legal framework.
- Capacity-building trainings for the relevant professional services and the judicial sector.
- Bilateral and regional cooperation.
- Increased public participation and awareness.
- Support for the development of the private forestry sector.
- Development of control and monitoring mechanisms, as well as data collection (including an inventory and forestry registry).
- Regulation of the timber market and increased control over wood processing plants.
- Development of national strategies and related action plans, in coordination with an energy strategy (to reduce the impact of illegal firewood) and in line with an ecosystem preservation approach.
- Development of a concession system to exploit forestry produce.
- Sufficient funds for forest management.

Përmbledhje ekzekutive

Gjendja e tanishme

Sektori i pyjeve në rajonin e Ballkanit Perëndimor zotëron potenciale të pashfrytëzuara, që mund të kontribojnë në zhvillimin ekonomik dhe shoqëror të një një pjese të madhe të popullsisë. Në këto kushte identifikimi i tendencave, që kanë të bëjnë me përdorimin ilegal të pyjeve, i cili dëmton shfrytëzimin e plotë të potencialeve në rajon, merr një rëndësi të dorës së parë.

Ka disa modele që mund të veçohen për vendet që janë objekt analize.

- Zonat pyjore në pronësi të shtetit (sidomos në kufijtë rrethues të tyre) gjenden veçanërisht të ekspozuara ndaj përdorimit ilegal të lëndës drusore.
- Përzierja e pyjeve të reja me ato të vjetra, me prirje të orientuar drejt uljes së cilësisë së pyjeve
- Mungesa e të dhënave të besueshme dhe të agreguara në lidhje me pyjet dhe strukturat menaxhuese të pyjeve
- Humbjet aktuale në sipërfaqet e pyjeve, përmes prerjes dhe zjarreve

Ndikimi që shoqëroi ndryshimet demokratike në fund të viteve 1990 ose në fillim të viteve 2000 është i ndryshëm, megjithatë mund të thuhet se rezultatet kanë qenë kryesisht pozitive, si p.sh, qasje më e vogël ndaj korrupsionit, krijimi i një legjislacioni të ri, krijimi i procedurave të prokurimit publik, përmirësimi i rregulloreve për kompanitë private të pyjeve, krijimi i procedurave më të shtrënguara financiare, etj. Sidoqoftë, me qëllim që të zvogëlohet presioni mbi pyjet kërkohet marrja e masave dhe veprimeve të tjera, në vazhdimësi. Popullsitë lokale, sidomos në zonat rurale ku edhe përhapja e varfërisë është më e madhe, varen nga pyjet përsa i përket të ardhurave që sigurojnë përmes tij. Kontrolli që ushtron shteti dhe sistemet monitoruese janë shpesh herë të papërshtatshme, për shkak të mungesës së kapaciteteve teknike dhe të pushtetit të nevojshëm. Gjithsesi, përdorimi ilegal i pyjeve udhëhiqet edhe nga forcat e tregut; ai ofron bimë që gjenden lehtë, lëndë drusore të lirë, përkundër burimeve legale të drurit, që kanë kosto më të lartë për shkak të procedurave të lejes së shfrytëzimit dhe të përpunimit, të cilat e rrisin koston e drurit.

Llojet kryesore të përdorimit ilegal të pyjeve në Ballkanin Perëndimor, përfshijnë:

- Përdorimin e pyjeve publikë pa leje ose koncesion.
- Vjedhjen ose përdorimin ilegal të lëndës drusore nga pyjet privatë.
- Deklarimin e rremë të volumeve, llojeve, vlerave ose origjinës së lëndës drusore të kultivuar.
- Përdorimin e pyjeve në zona të ndaluara ose të palejuara.
- Zotërimin e autorizimeve për përdorimin e pyjeve përmes rryshfetit.
- Dëmtimin ose djegien e lëndës drusore me qëllim përdorimin e tyre.
- Përdorimin e pyjeve në zona të ndaluara siç janë parqet kombëtare.

Të gjitha vendet kanë hedhur themelet ligjore përsa i përket rregullimit të aktiviteteve që lidhen me pyjet, kryesisht në formën e një Akti për Pyjet. Megjithatë, rregullorja për pyjet gjendet gjithashtu e shpërndarë në legjislacionin e sektorëve të ndryshëm, si p.sh në ligjin për mbrojtjen e mjedisit, kodin penal, planifikimin hapsinor, legjislacionin për gjuetinë, turizmin, etj., gjë e cila zbeh fuqinë e organizmave zbatuese dhe krijon probleme për koordinimin në tërësi të veprimtarive.

Në fakt një prej pengesave rajonale më të mëdha, që paraqet shumica e vendeve është mungesa e përgjithshme e koordinimit, madje dhe mungesa e përputhshmërisë mes kornizave të ndryshme institucionale dhe administrative. Për më tepër, nevojitet fuqizimi i mëtejshëm i kapaciteteve institucionalë. Po ashtu vihet re mungesa në tërësi e mardhënieve dy palëshe mes vendeve, përsa i përket luftës ndaj tregtimit ilegal të lëndës drusore.

Aktivitetet e përbashkëta për kontrollin ndër kufitar të trafikut të lëndës drusore nuk zbatohen sa duhet dhe në mënyrë të mjaftueshme. Mbledhja e të dhënave dhe sistemet monitoruese janë akoma të papërshtatshme duke mos ofruar informacion të mjaftueshëm dhe të aksesueshëm, i cili është jetik për menaxhimin e pyjeve dhe ndjekjen e shkelësve të ligjit. Pjesëmarrja e shoqërisë civile në sektorin e pyjeve mbetet kryesisht simbolike. Sistemet sanksionuese (administrative dhe juridike) janë përgjithësisht të dobëta , madje dhe pa njohuritë bazë në lidhje me krimet dhe procedurat pyjore. Kjo është veçanërisht serioze në sistemet juridike, ku p.sh aktivitetet ilegale në pyje ndodh rrallë të ndëshkohen sipas vendimit të gjykatës.

Fuqizimi i sektorit privat të pyjeve është jo efiçent, pasi agjensitë kombëtare të pyjeve kanë kufizime në dhënien e shërbimeve të konsulencës për pyjet – pa shumë sukses, sikundër është e dukshme, sektori privat i pyjeve është i pazhvilluar dhe paraqet mungesë profesionalizmi. Mangësitë mund të vihen re në bazën materiale të inspektorëve dhe të policisë së pyjeve, p.sh mungesa e mjeteve, shkurtimi i sasisë së karburantit, mungesa e pajisjeve teknike të monitorimit, etj. Auditet financiare të operatorëve pyjorë janë jo efiçente¸ ato bazohen vetëm tek dokumentacioni. Korrektësia e të dhënave nuk verifikohet përkundërdrejt aktivitetit aktual në pyll.

Rekomandime

Kuadrit të tanishëm ligjor dhe politik, ndërkombëtar dhe rajonal, që rregullon rastet e përdorimit ilegal të lëndës drusore dhe tregtimin brenda dhe jashtë vendit, i mungojnë komponentët thelbësorë që bëjnë të mundur luftën ndaj aktiviteteve ilegale më të sofistikuara dhe të organizuara, të përdorimit të pyjeve. Është e qartë nevoja për përpjekje më të orkestruara në të gjitha nivelet, përfshi rrjetet që promovojnë zhvillimin e politikave efiçente kundër shfrytëzimit ilegal të pyjeve dhe veprimtaritë e përbashkëta në përdorimin e informacioneve dhe të përvojave. Rrjetet informale mund të ofrojnë platformën e nevojshme për masa të mëtejshme politike, siç mund të jenë marrëveshjet rajonale dhe ndër-rajonale, si dhe projektet pilot.

Përsa i përket kësaj, autorët e këtij raporti rekomandojnë për vendet që ndajnë këtë shqetësim, që me ndihmën dhe bashkëpunimin e organizatave ndërkombëtare, të shihet mundësia e krijimit të një rrjeti që kontrollon veprimtaritë ilegale të përdorimit të pyjeve. Rrjetëzimi është një mjet i fuqishëm në mbledhjen dhe shpërndarjen e informacionit praktik dhe në zhvillimin e një pakete zgjidhjesh sipas problemit, që mbështetet në qasjen nga poshtë lart dhe nxit të mësuarin eksperimental. Përshpejtimi i reformave është një mjet efiçent që ndihmon zbatimin e një spektri të gjerë rekomandimesh të paraqitura në këtë raport, mes të cilave mund të veçojmë (sipas rëndësisë në rend zbritës):

- Proçedura administrative të efektshme që bazohen në një kuadër të qartë ligjor
- Trajnime për rritjen e kapaciteteve të sektorit të shërbimeve profesionale dhe atij juridik
- Bashkëpunim dypalësh dhe rajonal
- Rritje të ndërgjegjësimit dhe të pjesëmarrjes publike
- Mbështetje për sektorin privat të pyjeve
- Zhvillim të mekanizmave të kontrollit e monitorimit, si dhe të mbledhjes e grumbullimit të të dhënave (përfshirë regjistrin e inventarit pyjor)
- Rregullimi i tregut të lëndës drusore dhe rritja e kontrollit mbi procesin e përpunimit të bimëve për prodhimin e lëndës drusore
- Zhvillimi i strategjive kombëtare dhe planeve përkatëse të veprimit, i koordinuar me punën për strategjinë e energjisë (me qëllim që të zvogëlohet ndikimi i zjarreve ilegale) dhe në përputhje me parimet për ruajtjen e ekosistemeve.
- Zhvillimi i sistemit të koncesioneve për shfrytëzimin e pyjeve.
- Sigurimi i fondeve të mjaftueshme për menaxhimin e pyjeve.

Izvršni pregled

Trenutno stanje

U regionu Zapadnog Balkana, šume imaju značajan neiskorišten potencijal koji može doprinijeti društvenom i ekonomskom razvoju širokog sloja stanovništva. Zato je od vitalne važnosti identifikovati radnje kao što je nezakonita sječa šume, koje narušavaju šumski potencijal u regionu.

Postoje neke opšte karakteristike, po kojima su prepoznatljive sve zemlje koje su predmet analize:

- znatna šumska područja u državnom vlasništvu, sa područjima koja su posebno podložna nezakonitoj sječi drveta (pogotovo pogranična područja);
- mješavina mlade i stare šume, sa tendecijom smanjenja površine pod visokokvalitetnom šumom;
- nedostatak pouzdanih i zbirnih podataka o šumama i strukturama za upravljanje šumama;
- nedavni značajni gubici šumskih područja usljed krčenja šume i šumskih požara

Uticaj demokratskih promjena koje su se desile kasnih devedesetih godine ili početkom dvije hiljaditih godina se razlikuje, ali se može reći da je uzrokovao pozitivne rezultate kao što su: smanjenje korupcije, novo zakonodavstvo koje obuhvata zakone koji uspostavljaju procedure javnih nabavki te poboljšane propise za privatna šumska preduzeća, strožije finansijske propise itd. Ipak je potrebno preduzeti daljnje aktivnosti kako bi se smanjio pritisak na šume. Stanovništvo se oslanja na šume kao na izvor dodatnog prihoda, pogotovo u ruralnim područjima gdje je rasprostranjeno siromaštvo i gdje, usljed nedostatka radne snage i tehničkih kapaciteta, ne postoji adekvatni monitoring i kontrola dotičnih aktivnosti od strane države. Međutim, tržište takođe podstiče nezakonitu sječu: proizvodni kapaciteti se na taj način snabdjevaju jeftinom i lako dostupnom građom, nasuprot zakonito obezbjeđenoj drvnoj građi čija je cijena viša zbog procedure dobijanja dozvola za sječu.

Glavni tipovi nezakonite sječe šume na području Zapadnog Balkana uključuju:

- Sječu bez dozvole ili koncesije javnih šumskih preduzeća.
- Krađu drveta ili nezakonitu sječu iz privatnih šuma.
- Neispravne deklaracije o količinama, vrsti, vrijednosti ili porijeklu posječene šume.
- Sječu u neobilježenim ili zabranjenim područjima.
- Dobijanje ovlaštenja za sječu podmićivanjem.
- Uništavanje ili spaljivanje drveća kako bi bila predviđena za sječu.
- Sječa u zabranjenim ili zaštićenim područjima kao što su nacionalni parkovi.

Sve su države uspostavile zakonski temelj za regulisanje aktivnosti po pitanju šuma, uglavnom u formi Zakona o šumama. Međutim, regulisanje područja šumarstva je takođe sastavni dio zakonodavstva drugih sektora, npr. okolišno zakonodavstvo, krivični zakon, prostorno planiranje, lovno zakonodavstvo, turističko zakonodavstvo, itd., što ima za uzrok da organizacije za implementaciju vide neefiksnost te se na taj način stvaraju sveobuhvatni problemi u koordinaciji.

Jedna od najvećih prepreka u cijelom regionu, koja predstavlja problem mnogim zemljama, jeste sveukupan nedostatak koordinacije, čak i nedosljednost između različitih institucija i administrativnih okvira. Nadalje, potrebno je dalje jačati institucionalne kapacitete. Nedostaju dobro uspostavljeni bilateralni procesi sa susjednim zemljama s ciljem borbe protiv nezakonite trgovine drvnom građom. Dovoljno se ne sprovode aktivnosti u kontrolisanju prekograničnog saobraćaja. Sistemi prikupljanja podataka i monitoring su još uvijek neadekvatni i nadzornim organima ne obezbjeđuju dovoljno tačnih i dostupnih podataka koje su od vitalnog značaja za upravljanje šumama i za praćenje aktivnosti kršenja zakona. Učešće civilnog društva u sektoru šumarstva je uglavnom na simboličnom nivou. Sistemi sankcionisanja (administrativni i sudski) su, uopšteno govoreći, veoma slabi i tu možda čak

nedostaje i osnovno poznavanje kriminala i procedura u oblasti šumarstva. Ovo je posebno ozbiljno u sudstvu gdje, na primjer, rijetko dođe do izvršenja sudske presude po pitanju nezakonitih aktivnosti u šumskom sektoru. Sprovođenje zakona je neefikasno u sektoru privatnih šuma gdje državne agencije za šumarstvo imaju ograničenu nadležnost u obezbjeđivanju savjetodavnih usluga – bez mnogo uspjeha, jer je vidljivo da je privatni šumarski sektor nerazvijen i da mu nedostaje profesionalnost. Nedostaci se mogu prijaviti šumarskim inspektorima i policiji po pitanju opreme, npr. nedostatak vozila, nedovoljna količina goriva, oprema za tehničko nadgledanje. Finansijske revizije koje sprovode šumarski rukovodioci su neefikasne; uglavnom se oslanjaju na dokumentaciju a tačnost podataka se ne provjerava i ne poredi sa stvarnim aktivnostima u šumama.

Preporuke

Postojećim međunarodnim i regionalnim zakonsko – političkim okvirima koji regulišu pojave nezakonite sječe i lokalne i međunarodne trgovine, nedostaju suštinske komponente kako bi pružili mogućnosti za preduzimanje konkretnijih i organizovanijih aktivnosti borbe protiv nezakonite sječe šume. Očito je da su potrebni usklađeniji napori na svim nivoima, uključujući i mreže koje promovišu razvoj efikasne politike protiv nezakonite sječe šuma, ujedinjenje napora i širenje informacija i iskustava. Nezvanične mreže mogu da obezbjede neophodnu platformu za daljnje mjere, što podrazumijeva regionalne i podregionalne sporazume, kao i pilot projekte.

U vezi s ovim, autori ovog izvještaja su dali preporuku da dotične države, u saradnji sa međunarodnim donatorima, razmotre mogućnost uspostavljanja mreže podrške kontrolisanju aktivnosti nezakonite sječe šume. Umrežavanje je snažno sredstvo prikupljanja i širenja praktičnih informacija i razvoja sredstva za rješavanje problema, nakon čega slijedi pristup "odozdo prema gore" i podsticajno eksperimentalno sticanje znanja. To je efikasno sredstvo u obezbjeđivanju napretka reformi i pomoći u implementaciji širokog područja preporuka datih u ovom izvještaju od kojih možemo izdvojiti sljedeće (od najvećeg regionalnog značaja):

- Efikasne administrativne procedure zasnovane na jasnom pravnom okviru
- Treninge za izgradnju kapaciteta za relevantne stručne službe i sektor sudstva
- Bilateralna i regionalna saradnja
- Povećano javno učešće i podizanje nivoa svijesti
- Podrška razvoju privatnog šumarskog sektora
- Razvijanje mehanizama kontrole i monitoringa, kao i prikupljanja podataka (uključujući i inventuru i registar šuma)
- Regulisanje tržišta drvne građe i porast kontrole preduzeća za preradu drveta
- Razvoj nacionalnih strategija i izvedenih akcionih planova, u koordinaciji sa energetskom strategijom (s ciljem smanjenja uticaja nezakonito posječenog ogrevnog drveta), a u skladu sa pristupom orjentisanim ka očuvanju ekosistema.
- Razvoj sistema koncesija za eksploataciju šumarskih proizvoda
- Osiguranje dovoljnih sredstava za upravljanje šumama

Извршно резиме

Статус Кво

Во регионот на земјите од Западен Балкан, шумарството е мошне значаен сектор, кој може да придонесе кон социјалниот и економскиот развој на поголем број од населението, а чиј потенцијал и понатаму не е доволно искористен. Токму поради тоа, од витално значење претставува идентификувањето на трендовите, особено во поглед на бесправната сеча, која во секој поглед го попречува одржливото искористување на вкупниот потенцијал од шумарството во регионот.

Постојат генерални модели, кои можат да се препознаат во секоја од земјите:

- Големи шумски подрачја се под државна сопственост, подрачја (посебно во пограничните предели), кои се посебно ранливи во однос на нелегалната сеча на дрвна маса
- Мешавина од млади и стари шуми, со тенденција на намалување на високиот квалитет на шумите;
- Недостаток на веродостојни и обработени податоци во врска со расположливите шумски подрачја и институциите задолжени за управување со шумски подрачја
- Во последно време загуби на значајни шумски подрачја, преку масовно сечење на шуми или од шумски пожари

Влијанијата, што демократските промени ги имаа кон крајот на деведесетите и почетокот на 2000-та година се разликуваат, но во секој случај може да се каже дека истите поттикнаа позитивни резултати, како: намалена појава на корупција, ново законодавство во кое се содржани и законите за водење на постапките за јавни набавки и унапредена регулатива која се однесува на приватните претпријатија што управуваат со шумското стопанство, построги финансиски прописи, итн. Сепак, неопходно е, идните активности значително да го намалат притисокот врз шумскиот сектор. Населението се потпира врз шумите како извор на дополнителен приход, особено во руралните области, каде што е застапена сиромаштијата и каде што државната контрола и следењето, често се неадекватни поради недостаток на работна сила и технички капацитет. Во секој случај, бесправната шумска сеча, исто така, е управувана од трендовите на пазарот: имено, тоа обезбедува преработка на растенија кои се лесни за пристап, евтини дрва, наспроти дрвната суровина до која се доаѓа по правен пат, при тоа наметнувајќи повисоки цени за на тој начин добиената суровина (дрво кое има дозвола за сеча).

Главните видови на бесправна сеча во земјите од Западен Балкан вклучуваат:

- Шумска сеча без дозвола или дадена концесија од јавните шумски стопанства.
- Кражба на дрво или бесправната сеча од приватни шуми.
- Лажно декларирање на волуменот, видовите дрво, пазарна вредност или потеклото на дрвната маса
- Сеча во неозначени или забранети подрачја.
- Добивање овластување за сеча по пат на корупција
- Уништување или горење на дрва, за потоа тие да бидат исечени.
- Сеча во забранети или заштитении подрачја, како што се националните паркови

Сите земји имаат воспоставено правна основа за регулирање на дејности во шумарството, главно во форма на Акт за шумарство. Сепак, регулативи за шумарството се содржани во различни секторски легислативи, на пример, закон за заштита на животната средина, кривичен законик, закон за просторно планирање, закон за ловство, легислатива во делот на туризмот, итн. Ова придонесува правните субјекти и институции задолжени да водат грижа за управувањето со

шумите, да имаат намалени надлежности што придонесува да се створи проблем на институционална координација.

Всушност, една од најголемите пречки во регионот, што беше споделена од страна на повеќето земји, претставува недостатокот од координација, па дури и низа недоследности, во рамки на различните институционални и административни системи. Институционалните капацитети имаат потреба од натамошно зајакнување. Постои потполн недостаток од добро воспоставени билатерални односи помеѓу соседните земји, во борбата против нелегалната трговија со дрвна суровина. Доволно не се имплементирани заеднички акции за контрола на прекуграничниот сообраќај. Собирањето на податоци, како и системите за следење на состојбите во управувањето со шумите и понатаму се несоодветни, и не обезбедуваат доволно точни и достапни информации за надлежните органи, што се од витално значење за стопанисувањето со шумите и изнаоѓањето на прекршителите. Учеството на граѓанскиот сектор во проблематиките од областа на шумарството, главно е симболично. Системите за санкционирање (административни и судски), генерално покажуваат слабо, може да се рече, дури и недоволно основно познавање на постапките и кривичното законодавство од областа на шумарството. Ова е посебно случај во судскиот систем, каде што, на пример, незаконските дејствија во шумското стопанство, ретко се казнуваат со правосилни судскио длуки препишувајќи повисоки казни. Нивното извршување е потешко применливо за шумите кои се во приватна сопственост, затоа што во тој случај, националните шумски агенции немаат пристап во обезбедувањето на консултантски услуги од областа на шумарството – правејќи го тоа без многу успех, како што впрочем е видливо, дека приватното шумско стопанство не е доволно развиено и му недостасува професионалност. Недостатоци може да се забележат во поглед на основната опрема што треба да им се стави на располагање на шумските инспектори и полицијата, како на пример, недостаток од возила, недостиг на горива, техничка опрема за следење. Финансиските ревизии спроведени врз шумските оператори се неефикасни, тие се потпираат единствено на документација и точноста на податоците, кои по правило не се во согласност со актуелните активности во шумското стопанство.

Препораки

Сегашните меѓународни и регионални правно-политички рамки, ја регулираат појавата на бесправна сеча, како и домашната и меѓународната трговија, недостатокот од основни компоненти, за да може да се справи со посовремени и далеку поорганизираниот незаконски дејствија во шумарството. Јасно е дека се потребни повеќе заеднички напори на сите нивоа, вклучувајќи ги и мрежите за унапредување и развој на ефикасни политики против бесправната сеча, преку заеднички напори и со споделување на информации и искуства. Неформалните мрежи може да ја обезбедат потребната платформа за понатамошни политички мерки, имено, регионални и суб-регионални договори, како и пилот-проекти.

Во овој поглед, авторите на овој извештај препорачуваат, земјите за кои станува збор, во соработка со меѓународни донатори, да ја разгледаат можноста за воспоставување на мрежа, со цел да им помогне во контролирањето на бесправната сеча. Вмрежувањето е моќна алатка за прибирање и споделување на практични информации и развивање на алатка за управување со решенијата во врска со настанатите проблеми, проследено со примена на пристапот од долу – нагоре и преку охрабрување за експериментално учење. Тоа е ефикасно средство, за да се унапредат реформите и да се помогне во спроведувањето на огромниот спектар на препораки присутни во овој извештај, меѓу кои се издвојуваат (со највисока регионална релевантност):

- Ефикасни административни процедури врз основа на јасна правна рамка
- Обуки за јакнење на капацитетите за релевантните професионални дејности, како и за судскиот сектор
- Билатерална и регионална соработка
- Зголемување на учеството на јавноста и зајакнување на јавната свест
- Поддршка за развој на приватниот шумски сектор
- Развивање на механизми за контрола и следење, како и собирање на податоци (вклучувајќи и подготовка на инвентар и шумски регистар)
- Регулирање на пазарот на дрвни индустрии и зголемување на контролата врз преработка на дрвото

- Развивање на национални стратегии и произлезените акциони планови, во координација со енергетска стратегија (да се намали влијанието на нелегалната трговија со огревно дрво), и во согласност со пристапот за зачувување на екосистемите.
- Развивање на постапка за давање под концесија на системот за искористување шумското производство
- Обезбедување на достаточни средства за стопанисување со шумите

Rezime

Trenutno stanje

U regionu Zapadnog Balkana, šume imaju značajan neiskorišćen potencijal koji može da doprinese društvenom i ekonomskom razvoju širokog sloja stanovništva. Zbog toga je od vitalne važnosti da se identifikuju aktivnosti poput nezakonite seče šuma, koje narušavaju šumski potencijal u regionu.

Opšte karakteristike, po kojima su prepoznatljive sve zemlje koje su predmet analize, su:

- značajne površine šumskih područja su u državnom vlasništvu, a pojedine njihove zone su posebno izložne nezakonitoj seči (naročito pogranična područja);
- pomešane mlade i stare šume, sa tendecijom smanjenja površina pod visokokvalitetnom šumom;
- nedostatak pouzdanih i objedinjenih podataka o šumama i strukturama za upravljanje šumama;
- nedavni značajni gubici šumskih područja usled krčenja šuma, čistih seča i šumskih požara

Uticaj demokratskih promena koje su se desile kasnih devedesetih godina i početkom XXI veka se razlikuje, ali se može reći da je doveo do pozitivnih promena kao što su: smanjenje korupcije, novo zakonodavstvo koje obuhvata zakone za uspostavljanje procedure javnih nabavki, poboljšanje propisa za privatna šumska preduzeća, stroži finansijski propisi itd. Ipak, potrebno je preduzeti dalje aktivnosti kako bi se smanjio pritisak na šume. Stanovništvo se oslanja na šume kao na izvor dodatnog prihoda. Ovo se posebno odnosi na ruralna područja gde je rasprostranjeno siromaštvo i gde, usled nedostatka radne snage i tehničkih kapaciteta, ne postoji adekvatni monitoring i kontrola navedenih aktivnosti od strane države. Tržište takođe podstiče nezakonitu seču: proizvođači se na taj način snabdevaju jeftinom i lako dostupnom građom, nasuprot legalno obezbeđenoj drvnoj građi čija je cena viša zbog procedure dobijanja dozvola za seču.

Osnovni tipovi nezakonite seče šuma na području Zapadnog Balkana su:

- Seča bez dozvole ili koncesije javnih šumskih preduzeća.
- Krađa drveta ili nezakonita seča iz privatnih šuma.
- Neispravne deklaracije o količinama, vrsti, vrednosti ili poreklu posečenog drveta.
- Seča u neobeleženim ili zabranjenim područjima.
- Dobijanje ovlašćenja za seču podmićivanjem.
- Uništavanje ili spaljivanje drveća kako bi bilo predviđeno za seču.
- Seča u zabranjenim ili zaštićenim područjima kao što su nacionalni parkovi.

Sve države su uspostavile zakonske osnove za regulisanje aktivnosti u oblasti šumarstva, uglavnom u formi Zakona o šumama. Međutim, područje šumarstva je regulisano i kroz zakonodavstvo u drugim sektorima, npr. kroz zakonodavstvo u oblasti životne sredine, krivičnog prava, prostornog planiranja, lovstva, turizma, itd., što uzrokuje neefikasnost implementacionih tela i sveobuhvatne probleme u koordinaciji aktivnosti.

Jedna od najvećih prepreka u celom regionu, koja predstavlja problem mnogim zemljama, jeste sveukupan nedostatak koordinacije, čak i protivrečnost u radu različitih institucija i regulisanju administrativnih okvira. Takođe, potrebno je dodatno jačati institucionalne kapacitete. U cilju borbe protiv nezakonite trgovine drvnom građom potrebno je dobro regulisati bilateralne procese između susednih zemalja. Još uvek se u dovoljnoj meri ne sprovode aktivnosti na kontrolisanju prekograničnog transporta. Mehanizmi za prikupljanje podataka i monitoring su još uvek neadekvatni i nadzornim organima ne obezbeđuju dovoljno tačnih i dostupnih podataka koji su od vitalnog značaja za upravljanje šumama i za praćenje protivzakonitih aktivnosti. Učešće civilnog društva u sektoru šumarstva je uglavnom na simboličnom nivou. Sistemi sankcionisanja (administrativni i sudski) su, generalno posmatrano, veoma slabi, i u ovoj oblasti možda nedostaje i osnovno poznavanje kriminala i

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Preporuke

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- Efikasne administrativne procedure zasnovane na jasnom zakonodavnom okviru
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- Razvijanje mehanizama za kontrolu, monitoring, kao i prikupljanje podataka (uključujući formiranje baze podataka)
- Regulisanje tržišta drvne građe i povećanje nivoa kontrole preduzeća za preradu drveta
- Razvoj nacionalnih strategija i akcionih planova koji su u saglasnosti sa energetskom strategijom (s ciljem da se smanje količine nezakonito posečenog ogrevnog drveta), i u skladu sa pristupom orjentisanim ka očuvanju ekosistema.
- Razvoj sistema koncesija za eksploataciju šumarskih proizvoda
- Obezbedjivanje dovoljnih finansijskih sredstava za upravljanje šumama

Rezime

Trenutno stanje

U regionu Zapadnog Balkana, šume imaju značajan neiskorišćen potencijal koji može da doprinese društvenom i ekonomskom razvoju širokog sloja stanovništva. Zbog toga je od vitalne važnosti da se identifikuju aktivnosti poput nezakonite seče šuma, koje narušavaju šumski potencijal u regionu.

Opšte karakteristike, po kojima su prepoznatljive sve zemlje koje su predmet analize, su:

- značajne površine šumskih područja su u državnom vlasništvu, a pojedine njihove zone su posebno izložne nezakonitoj seči (naročito pogranična područja);
- pomešane mlade i stare šume, sa tendecijom smanjenja površina pod visokokvalitetnom šumom;
- nedostatak pouzdanih i objedinjenih podataka o šumama i strukturama za upravljanje šumama;
- nedavni značajni gubici šumskih područja usled krčenja šuma, čistih seča i šumskih požara

Uticaj demokratskih promena koje su se desile kasnih devedesetih godina i početkom XXI veka se razlikuje, ali se može reći da je doveo do pozitivnih promena kao što su: smanjenje korupcije, novo zakonodavstvo koje obuhvata zakone za uspostavljanje procedure javnih nabavki, poboljšanje propisa za privatna šumska preduzeća, stroži finansijski propisi itd. Ipak, potrebno je preduzeti dalje aktivnosti kako bi se smanjio pritisak na šume. Stanovništvo se oslanja na šume kao na izvor dodatnog prihoda. Ovo se posebno odnosi na ruralna područja gde je rasprostranjeno siromaštvo i gde, usled nedostatka radne snage i tehničkih kapaciteta, ne postoji adekvatni monitoring i kontrola navedenih aktivnosti od strane države. Tržište takođe podstiče nezakonitu seču: proizvođači se na taj način snabdevaju jeftinom i lako dostupnom građom, nasuprot legalno obezbeđenoj drvnoj građi čija je cena viša zbog procedure dobijanja dozvola za seču.

Osnovni tipovi nezakonite seče šuma na području Zapadnog Balkana su:

- Seča bez dozvole ili koncesije javnih šumskih preduzeća.
- Krađa drveta ili nezakonita seča iz privatnih šuma.
- Neispravne deklaracije o količinama, vrsti, vrednosti ili poreklu posečenog drveta.
- Seča u neobeleženim ili zabranjenim područjima.
- Dobijanje ovlašćenja za seču podmićivanjem.
- Uništavanje ili spaljivanje drveća kako bi bilo predviđeno za seču.
- Seča u zabranjenim ili zaštićenim područjima kao što su nacionalni parkovi.

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Introduction

Overall global and regional context

Illegal logging involves transnational organised crime, breakdowns in institutional controls and ineffective institutions and can increase tensions across borders and with the international community. The effects of illegal logging are wide ranging, some of the most obvious being loss of habitat and biodiversity, erosion and land degradation, desertification, as well as social disruption and adverse economic impacts.

While illegal logging is an urgent and topical issue, it has a long history throughout the world, especially where governance structures and legal frameworks are weak and where there are ineffective sanctions, inefficient enforcement and high levels of corruption. Particularly in the SEE region, a strong link can be detected between levels of illegal forest activities and the prevailing social and economic conditions for the rural population.

Although illegal logging is a global problem it is coloured by regional and local peculiarities and conditions, such as the available market for illegal wood, the socio-economic context and the robustness of controls on logging, trade and imports/exports.

While this report examines the occurrence of illegal logging in South Eastern Europe (Albania, Bosnia and Herzegovina, Kosovo [as defined under UNSCR 1244], the former Yugoslav Republic of Macedonia, Montenegro and Serbia), it is also important briefly to examine the problem of illegal logging and trade in illegally logged wood at EU level.

Estimated imports of illegal and suspicious wood from four critical non-EU regions (Eastern Europe and Russia, South East Asia and China, Latin America and Africa) range between 26.5 and 31 million m^3. The largest quantity of illegal timber (more than 10 million m^3) is imported from Russia, mainly in the form of round and sawn spruce and pine logs. At European level, it is estimated that 9 percent of illegal EU charcoal imports derive from Bosnia and Herzegovina, mainly through Germany and Italy. Italy also imports substantial quantities of firewood (estimated at 280,000 m^3) from Bosnia and Herzegovina. Indonesia is in second place, but is expected to be overtaken by China in the coming years. In addition, it was estimated in 2008 (WWF 2008) that 30 percent of the wood-based products imported from Latin America come from illegal sources, mainly from Brazil. The share of illegal wood products from Africa is at least 36 percent, although the actual figure is probably significantly higher as the scale of illegal logging is unknown in several African countries.

The regional regulatory framework for wood can be described as a patchwork of different initiatives, including policy and semi-legal frameworks. Under the UN system, one of the most effective regulatory instruments is the UN embargo, which prohibits imports of wood from certain problematic countries entirely.

In 2003, the European Commission adopted the Action Plan for Forest and Law Enforcement, Governance and Trade (FLEGT) to address the problem of illegal logging and the trade in illegally logged timber. Under this umbrella, the EU negotiates voluntary but binding partnership agreements with several of its trade partners, especially in those countries in which there are high levels of exports of illegal wood to the EU. These partnership agreements aim at excluding or minimising exports of illegal wood to the EU through a licensing scheme, mainly by including commitments and action from both parties of the agreement to halve trade in illegal timber. The agreements are also aimed at improving the enforcement of forest laws and promote an approach that involves civil society and the

private sector. The agreements help bring about a reform of the forestry sector in wood-producing countries in an effort to combat illegal activities and their underlying causes, including corruption and inefficient legal protection.

Under FLEGT, it is important for a common understanding of the definition of legality to be accepted by all stakeholders. The reforms that FLEGT is attempting to promote also include the development of credible legal and administrative structures, institutional strengthening, capacity building, and the creation of technical systems to verify that timber is produced in accordance with national laws (e.g. verification systems).

Overall, transparency and accountability in forest governance need to be improved. Some of the weaknesses of FLEGT include the voluntary nature of the scheme, the narrow scope of wood currently covered (i.e. round logs, sawn wood, plywood and veneer), and the fact that the licensing scheme only covers direct imports from the partnership country (although in many cases wood is first exported to a third country where it is processed at a lower cost than in the EU and later exported as a finished or semi-finished wood product from an "untainted source"). Another significant drawback is that the partnership agreements only apply to imports and not to illegal trade in wood at national or local level. Again, the parties can negotiate the inclusion of the domestic market on a voluntary basis.

As described above, the problem of illegal logging is widespread and EU forestry policies and possible partnership agreements are not in themselves sufficient to address the issue of illegal logging in the SEE region, especially since most of the illegal wood is destined for national and local markets rather than extensive exports.

Aim and scope of the report

The project "Illegal Logging in South Eastern Europe and Eastern Europe: Governance, Implementation and Enforcement" is financed by the Belgian Federal Government and is implemented under the ENVSEC Initiative. It covers Albania, Bosnia and Herzegovina, Kosovo (as defined under UNSCR 1244), the former Yugoslav Republic of Macedonia, Montenegro and Serbia. The present regional report provides an overview of the state of play in the forestry sector in SEE, with respect to both the general framework for forest protection and management and the occurrence of illegal logging and other directly related illegal forestry activities.

Illegal logging is a vast and complex issue that covers a large spectrum of forestry activities, including commercial activities associated with transport and sale on the market (including public procurement policies). In the broadest sense, illegal logging covers both wood (i.e. timber) and wood-derived products. This regional report focuses predominantly on illegal logging for a wide range of common wood types, such as fuel wood, round wood, sawn wood, veneer and plywood, as well as wood species specific to the SEE region.

The overall aim is to map the illegal logging situation in the countries concerned and to identify concrete regional priorities and actions to be taken by key stakeholders in order to close the gaps in legislation, policy, implementation and enforcement.

Methodology and structure

The report is based predominantly on information obtained from experienced, nationally recognised forestry experts. These experts were contracted in 2009 to produce both national diagnostic audits and fact-finding reports. The structure of these reports is set out in Annex I. These reports focused mainly on describing the forestry sector at national level; the organisation of forest management, including the authorities and control mechanisms; the legal and policy regimes for the authorisation of forestry activities; the main causes of illegal logging; and the main illegal logging activities. The individual country reports contained only limited recommendations. Most of the recommendations set out in this regional report are made by the REC, mainly on the basis of the information received in the reports but also in relation to the broader regional and international context.

The regional report is divided into the following sections:

1 Introduction, including background, aims and methodology.
2 Executive summary, presenting the most important findings and main conclusions.
3 Overview of forest management.
4 Authorisation and other procedures in forest use.
5 Illegal logging.
6 Recommendations.
7 Final conclusions.

Since there are such a wide range of causes, preconditions, drivers and effects linked to the issue of illegal logging that affect its form, extent, control and prevention, it is important to provide an appropriate introduction and background information before focusing specifically on illegal logging. For instance, the legal and policy frameworks and the applicable authorisation procedures and monitoring systems are crucial in the effective control and combating of illegal logging. A contextual framework is therefore necessary before exploring illegal logging in depth.

Regarding the methodological approach, the regional report is structured and formulated in such a way as to highlight the general trends in SEE countries and some of the common denominators, as well as the most noteworthy differences. It does not examine every aspect of illegal logging and the precise extent of the activities, as this would require more reliable and comparable data and statistics. The report focuses mainly on illegal logging from the perspective of its causes, drivers, short- and long-term effects and possible solutions.

Chapter 1: **Overview of forests and forest management**

Introduction

General geographic, topographic and climate conditions of the region

South Eastern Europe (SEE) is a sub-region comprising Albania, Bosnia and Herzegovina, Croatia, Kosovo (as defined under UNSCR 1244), the former Yugoslav Republic of Macedonia, Montenegro and Serbia. With the exception of Albania, the SEE countries were formerly constituent republics of the Federal Republic of Yugoslavia. The 1990s were a turbulent decade in the region, with the break-up of the Federal Republic of Yugoslavia and the creation of new countries. Ethnic and civil wars affected all the countries of the region, either directly or indirectly, exacting a high price.

From a geographical point of view, SEE countries are either landlocked, such as Serbia, Kosovo (as defined under UNSCR 1244) and the former Yugoslav Republic of Macedonia, or have access to either the Adriatic or the Ionian Sea. Although the 20 km coastline of Bosnia and Herzegovina is surrounded by Croatian peninsulas, according to United Nations law the country has a right of passage to the outer sea.

The topography of the region is characterised by vast mountainous areas that cover up to 70 percent, or even 80 percent, of the territory. The last ice age caused massive erosion in several parts of the mountain ranges. The rugged peaks of the Dinaric and Rodope mountains reach heights of well over 2,000 meters, making it difficult to access certain areas. The region is crossed by a number of rivers, including the Sava, Drina and Vardar, creating terrain ideal for agriculture. The Pannonian basin, from the northern part of Bosnia and Herzegovina and Serbia, as well as some of the areas with a Mediterranean climate lying southeast of the Dinaric Mountains and bordering the Adriatic Sea, are also suitable for agriculture.

A variety of unique fauna and flora can be found in the region, increasing its natural value. Large parts of the territory are covered by forests, ranging from 27 percent in Serbia to 39 percent in Kosovo (as defined under UNSCR 1244) and up to 50 percent in Bosnia and Herzegovina.

Climate

Although the six countries do not cover a large geographical area, their climatic conditions vary. From the west, there is a strong Adriatic and Mediterranean influence that fades as it meets the Dinaric Alps and other mountain ranges, as well as the large continental air mass coming down through the Pannonian and Wallachian Plains. The coastal regions have a typically Mediterranean climate, with hot and dry summers and mild, wet winters. In the mountainous areas the air is cooler and the average annual rainfall is far higher, although in the valleys there is a mild continental climate with occasionally extremely high summer temperatures and relatively cold winters. The northern parts of Serbia and Bosnia and Herzegovina enjoy a typically continental climate with very hot summers and it is common for temperatures to fall below -15 or even -20 Celsius during the winter season. Despite its small size, Albania has a high number of climate regions and includes the area with the highest precipitation in Europe due to the convergence of the prevailing airflow from the Mediterranean Sea and the continental air mass.

Demography

The demographic shifts and lack of censuses in most of the countries covered by this report mean that the total population of the region can only be estimated. A figure slightly exceeding 20 million is likely, with a tendency to decrease due to significantly ageing populations and the high level of emigration resulting from the wars and ethnic/religious conflicts in the region. The Albanian populations of Kosovo (as defined under UNSCR 1244) and Albania are very young (the average age in Albania is 28.9), but although the birth rate until the 1990s was relatively high (over four children per woman), it has now fallen to replacement level or even lower. None of the countries, with the exception of Albania, are ethnically homogenous. Minorities can constitute as much as 31 percent or even 33 percent of the total population (in Bosnia and the former Yugoslav Republic of Macedonia respectively). The remarkably low fertility rate in Serbia,

as well as the emigration of approximately 500,000 people, have created one of the oldest populations in the world, although it is currently home to the largest European refugee population (7 percent of the total population). In Bosnia, severe tension between the three nationalities/religious groups (Bosniaks, Serbs and Croats; or Muslims, Serbian Orthodox and Roman Catholics) have created a long-lasting conflict that has also resulted in strong migration towards Western Europe and led to the loss of over half a million of its 4.3 million population. Albania experienced strong internal migration, starting in the 1990s, which led to a reduction in the population of the northern districts and a significant increase in the south, in particular in the cities of Tirana and Durres.

General socioeconomic conditions

The 1990s was an extremely difficult decade in the history of the SEE region, when constant hostilities led to the emergence of a number of new nation states. The effects of the war and the legacy of the former centrally planned economy created obstacles to the adoption of effective reforms and hindered socioeconomic progress. Delayed and often unimplemented reform programmes made it impossible to establish fully functioning market economies, which led to inferior economic performance, declining living standards, rising unemployment and increased poverty.

Nevertheless, the region has growth potential. In the past decade, it has outperformed other European economies as a result of efforts towards macroeconomic stability and reform. However, the recent global crisis also struck the region, and a number of significant factors continue to hold back the economy. These include underdeveloped infrastructure networks, low levels of foreign direct investment and weak administrative structures and project promoters. The year 2009 saw a sharp drop in external trade and industrial production and a significant slowdown in economic growth. In addition, unemployment rates, which had been decreasing from very high levels, are predicted to rise sharply again and the level of public debt also remains very high across the region. (Regional Cooperation Council 2010)

Studies show that, after the outstanding performance of most of the SEE countries, all the economies, with the exception of Albania, are declining due to the economic crises and the decrease in foreign direct investment (FDI) in the region. The high dependency on FDI makes the region more susceptible to external shocks and high export-import trade deficits, which are most apparent in the case of Montenegro. Although Albania was the only country to have recorded economic growth in 2009, its gross domestic product, calculated on the basis of purchasing power parity (GDP PPP),[1] stands at 25 percent of the EU average and it is still a region of low interest among investors due to power shortages, lack of water supplies and illegal activities (SETimes.com 2009). With its damaged economy, ethnic conflicts, international sanctions and poor external commerce, **Kosovo** (as defined under UNSCR 1244) has the greatest poverty in the region (still considered a developing country according to the World Bank) with USD 2,100 GDP PPP per capita (CIA 2009). The other four countries have a relatively higher GDP PPP per capita, with Bosnia and Herzegovina the lowest at 30 percent and Montenegro the highest, reaching 46 percent (Eurostat 2009). Although the financial crisis has cut back the economic expansion of the so-called Balkan Tiger, Serbia, it is the fastest growing economy of the region with significant FDI (Serbia Investment and Export Promotion Agency).

In South Eastern Europe, as in more developed regions of the world, the service sector employs the largest proportion of the labour force and has the highest share of GDP, with the exception of Albania, where agriculture is still the most significant sector taking a 58 percent share of the labour market. Although the unemployment rate has been decreasing, it is still extremely high, ranging from 14 percent in Serbia to as high as 37 percent in the former Yugoslav Republic of Macedonia and even 50 percent in Kosovo (as defined under UNSCR 1244). In spite of its high unemployment rate, the former Yugoslav Republic of Macedonia was recently ranked by the World Bank as the "fourth best reformatory state" out of 178 countries, having undergone considerable reform and having created an open economy. Nevertheless, the poverty rate still stands at 22 percent, which shows that, despite the significant progress, there are still a large number of issues to be addressed (World Bank 2010). All the countries covered are progressing with the necessary economic and institutional reforms as a step in the EU integration process.

Forests cover on average 40 percent of the SEE countries while the EU average is 42 percent (UNECE, Geneva, December 2, 2009). Wood is used extensively in several countries of the region, but rather inefficiently. One of the main goals is to increase the efficient use of wood energy by the introduction of new technologies. To achieve this, commitment is needed at the political level, both nationally and locally, as well as closer cooperation between the various public and private bodies with an interest in forest management and energy. Forests are an important resource for survival, especially in terms of the

provision of firewood. Per capita GDP and total nominal GDP are low in many areas, especially since the war, thus increasing the pressure on forestry resources.

The forestry sector contributes to poverty alleviation among rural populations. In some countries, such as Albania, the distribution of the rural population and the distribution of forest resources do not correspond, resulting in a significant impact on forests. The rural plains, for example, which are home to 65.4 percent of the rural population, include only 40 percent of the country's forested area, 39 percent of its pastures and 73 percent of its agricultural land. The mountainous areas, which are home to 34.5 percent of the population, include 60 percent of the country's forests, 61 percent of its pastures and 27 percent of its agricultural land (World Bank 1992).

In Albania, forage and grazing for livestock are also important forestry products but are not included in official statistics, nor is their value reflected in the GDP. Similarly, the environment services provided by the forests are not reflected in the (real) contribution of the forestry sector to the national economy. Such services include the protection of soil and water resources; the conservation of biodiversity; the protection of agricultural crops from climatic hazards; carbon sequestration and the slowing of climate change; the provision of shade, amenity and recreation; and the protection of coastal areas and fishing.

In summary, agriculture and forestry are significant in the region, although in some countries show a decreasing trend. In many SEE countries current migration patterns are characterised by young people moving from rural to urban areas. As a consequence, fewer young people are involved in forestry. In addition, people that have moved to more populated areas may be living at a distance from forests they still own. As these forests are more vulnerable to theft, owners are often forced to sell them below their market value and to non-local proprietors, increasing the danger of abuse and overexploitation of the forestry resources.

Area and state of forests

Total forest coverage

A short overview of forest coverage in individual SEE countries is presented below. The countries do not take a consistent methodological approach to the classification of forestland, which should be taken into account when comparing statistics and aggregate data. In Kosovo (as defined under UNSCR 1244), most of the forest area was classified as forestland through the interpretation of aerial photographs and field surveys. Another way of classifying forestland is through photo interpretation without a field survey – which is particularly convenient for inaccessible areas.

Recent figures (mainly from 2008) show that the percentage of forest coverage ranges from 29 percent in Serbia to 54 percent in Montenegro. The average coverage is about 40 percent, compared to the EU average of 42 percent. A steady decline in forestland due to urbanisation and land-intensive activities, such as agriculture, mining and heavy industry, is common to most countries. Increasing efforts are being made towards the afforestation of degraded land, often as an integral part of overall strategies towards sustainable forestry.

Albania

Forests cover about 52 percent of the national territory and, together with pastureland, the coverage reaches 69 percent (AGROTEC 2004). Pastures and forests have been degraded significantly over the past five to 10 years as a consequence of the country's transition to democracy and a market economy. The degradation has mainly been caused by human pressure, coupled with a lack of control over forest resources (i.e. uncontrolled woodcutting and overgrazing).

Bosnia and Herzegovina

Forests and forestland are significant natural resources. Forests cover 2,709,769 ha of the country (500,037, or approximately 10 percent, are barren land) and represent approximately 53 percent of the total area of the country (Bosnia and Herzegovina 2003), making forestry one of the most important nature-based resource sectors in Bosnia and Herzegovina. Since forests cover a major part of the country's area, the quality of forest management and the use or misuse of forest resources are vital issues in Bosnia and Herzegovina.

Kosovo (as defined under UNSCR 1244)

The total forest area is 464,800 ha, corresponding to 42 percent of the territory. Out of this total, it is estimated that approximately 278,880 ha are public forestland and 185,920 private forests. Some 379,200 ha were classified as forestland through the interpretation of aerial photographs and field surveys. Another 85,600 were classified as forestland through photo interpretation but could not be surveyed due to the presence of mines and another logistical constrains. The territory has extensive mountainous areas with elevations of between 400 and 700 metres above sea level and surrounded by peaks of between 2,000 and 2,500 meters. Forested areas are concentrated mainly in the north, west and south. Public forestland is under the control of the Kosovo Forest

Agency (KFA), which is organised into six geographical regions. The KFA has responsibilities at the central level and falls under the Ministry of Agriculture, Forestry and Rural Development.

The former Yugoslav Republic of Macedonia

Total forestland covers 1,159,600 ha, of which forests represent 947,653 ha, translating to a forest coverage of 45.1 percent. The total wood mass is 74,343,000 m^3 and the total annual increase is 1,830,000 m^3. More than 140,000 ha of bare land were planted with the help of the Afforestation Fund. This fund was active between 1965 and 1990 and was one of the institutions responsible for afforestation in the then Socialist Republic of Macedonia, achieving an increase of 60 percent of the total afforested area. The dendroflora of the former Yugoslav Republic of Macedonia consists of 319 species of trees and shrubs, with over 80 sub-species and varieties within 119 genera and 54 families. Some 16 percent of the total number of species are endemic or sub-endemic Balkan species. In the period between 2000 and 2007, total forest area was at its lowest in 2007.

Montenegro

Forests and woodland cover 54 percent (743,609 ha) of the total area of land. The country has substantial forest coverage, among the highest in Europe, with 0.9 ha per capita compared to 46 percent forest cover in Slovenia (0.6/ha per capita); 37 percent in Croatia (0.47 ha per capita); 25 percent in Serbia (0.3 ha per capita); 41 percent in Bosnia and Herzegovina; 30 percent in Spain; and 38 percent in Austria. Of the total woodland surface, forests cover 620,872 ha, while slow-growing forestland covers 122,737 ha. Forests in state ownership total 500,041 ha (67.25 percent) and in private ownership 243,568 ha (32.75 percent). The total standing forest stock is estimated at 72,056.699 m^3, comprising 29,527.555 m^3 (40.98 percent) conifers and 42,529.144 m^3 (59.02 percent) deciduous trees.

Serbia

Data received from the Serbian National Forest Inventory (Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia 2009) referring to the period 2006 to 2008 show that forests in Serbia cover an area of 2,252,400 ha or 29.1 percent of the total area of the country. In historical terms, this is a drastic reduction from the Middle Ages, when the forest coverage can be estimated as around 80 percent of the whole territory. At the beginning of the nineteenth century, Serbia's population patterns, along with agricultural and mining activities, led to deforestation. The reduction of the forest area continued until the middle of the twentieth century, when the forest cover dropped to 21.4 percent. Mass deforestation was especially pronounced in the period between the two world wars, when huge areas were permanently devastated mainly due to erosion and flash floods in many villages. In the period after the Second World War, awareness of the importance of forests began to grow and important work began towards afforestation and the intensive development of forestry. According to the National Forest Inventory, other forested land as well as unproductive land covers an area of 474,400 ha (6.1 percent), making Serbia a medium forested country.

Forest structure

Some general patterns can be discerned in the SEE region in terms of forest structure. Common traits include:

- Relatively large forest areas with some areas particularly affected by, or vulnerable to, illegal harvesting.
- Dominance of broadleaved forests.
- A mix of young and older forests.
- A proportionally smaller share of high-quality stands.

It is important to remark that in all countries there are gaps in aggregate or condensed data on forest structures. In some countries, such information is simply not available and it is therefore difficult to assess the real situation and design appropriate measures.

Albania

Natural coppices and maquis are degraded in Albania (Tahiri et al. 2003). About 50 percent of the forest area is managed directly by the forest service; 49 percent (over 600,000 ha) is available for communal use by villages; and over 1 percent is private forest restored to its former owners. A comparison of percentages of area with volume shows that communal forests have significantly lower productivity than state-owned ones. Communal forests are typically degraded due to their proximity to villages and to increased cutting and grazing pressure. Up to 4 percent of the total forest area is expected to be restored to its former owners.

Bosnia and Herzegovina

High forest represents 48 percent of the total forest area and coppice makes up 34 percent. The remainder is forestland, 14 percent of it productive and 4 percent un-

productive (Bosnia and Herzegovina 1986). However, less than 1 percent of the territory of Bosnia and Herzegovina is classed as protected areas, such as national park and other nature protection area, which puts pressure on its biodiversity and natural resources potential. Forest cover is dominated by deciduous species (mostly beech [*Fagus spp*.], which accounts for almost 40 percent of all species cover in the country, and oak [*Quercus spp*.], which accounts for a further 20 percent). The ratio of deciduous to conifer species is around 2:1, and beech and oak combined make up almost 50 percent of the forest composition countrywide. There is also a significant area suitable for reforestation (over 350,000 ha), which might, in the future, enhance forest activities.

Kosovo (as defined under UNSCR 1244)

The total standing volume of public forestland is estimated at about 33.5 million m^3. Of this volume, 25.9 million m^3 are trees with a diameter greater than 7 cm at chest height. On private forestland, the total standing volume is estimated at about 19.5 million m^3, of which 14.5 million m^3 are trees with a diameter greater than 7 cm. Kosovan forests are mainly young forest: 58 percent of public forests and 81 percent of private forests are below 60 years old. The publicly owned forests comprise mainly broadleaved species created through the process of natural seeding. The forest structure falls into three categories:

- Broadleaved forest, created through natural seeding, covers more than 90 percent of the forest area. The predominant broadleaved species are oak and beech.
- Coniferous forest, covering 7 percent of the total forest area, is dominated by *Abies alba, Picea abies and Pinus* species.
- The remaining 3 percent comprises a variety of broadleaved species.

The former Yugoslav Republic of Macedonia

Data from special plans for the management of forests for commercial use in the former Yugoslav Republic of Macedonia for 2008 show that the total forest cover was 1,091,857.59 ha, of which 835,055.82 ha (76 percent) were overgrown forest area and 256,801.77 ha (23 percent) not overgrown. In the overgrown forest area there were 255,444.74 ha (30 percent) of high forest plantations (tall-growing trees); 546,179.40 ha (63.4 percent) of low forest plantations (low-growing trees); and 14,459.50 ha (approximately 2 percent) of forest cultures. According to the same source, the total wood mass reserve was 75,939,573 m^3, or 91 m^3/ha. The total annual increase was 1,616,782 m^3, or 1.93 m^3/ha. The total provided cut for a 10-year period was 10,948,149 m^3, and the annual provided cut was 1,094,815 m^3/ha. The range of species included pure tree stands of oak (29 percent); pure stands of beech (24 percent), followed by mixed tree stands of oaks and other broadleaved trees (18 percent) and mixed stands of broadleaved trees and conifers (beech, spruce, fir) (1 percent). The pure stands of oaks and beeches in the period 2000 to 2007 occupied on average 54 percent of the forest area.

Montenegro

Much of the high forest is of relatively poor quality hardwood, due to a history of coppicing (especially in privately owned forests) and of sub-standard forest management in state-owned forests over the past few decades that has typically removed better quality trees while leaving the poorer quality trees. To improve the quality, forest management plans typically recommend that a large volume of the poorer quality trees be removed gradually over the next 10 to 30 years to allow better quality trees to flourish. Until this happens, the majority of the annual increment (growth in wood volume) is added to poor-quality trees that have a low end value.

Serbia

The condition of the state-owned forests can be characterised as satisfactory. The average volume in these forests is 184 m^3/ha, and the current volume increment is 4.5 m^3/ha (2.4 percent), which is a positive indicator of the potential for improvement in Serbian forests through sustainable use and good forest practice. Privately owned forests are in a worse situation, with an average volume of 133 m^3/ha and an annual volume increment of 3.5 m^3/ha (2.6 percent). The slightly higher volume increment in these forests is due to the dominant coppice origin and age structure.

The 1991 Law on Forests divided forests into 27 forest districts, six of which are in Kosovo and Metohija and thus under international administration according to UNSCR 1244.

The forest districts include state-owned and privately owned forests. State-owned forests that are not included in the forest districts and belong to national parks are managed by special public enterprises. Forest districts have been designed according to geographical and natural conditions. As such, the boundaries of the forest areas do not necessarily coincide with the boundaries of administrative districts. Available data indicate that the level of coppice forests is very high (1.45 million ha or 64.7

percent of the total forest area). Since these forests have a low average volume (124.4 m^3/ha) and increment (3.1 m^3/ha), their production and their ecological and aesthetic potential are minimal. Some 27 percent of forest area are attenuated stands, and 2.5 percent are totally devastated forests. On the positive side, there are 174,800 ha (7.8 percent) registered as artificially raised forests, which is the result of intensive afforestation since the middle of the twentieth century. A total of 70.6 percent are preserved, high and coppice stands, which represent good natural potential for forest production. Other indicators of the condition of forests in Serbia include wood volume, which is 362.5 million m^3. Compared to the previous forest inventory, which was compiled in 1979, the difference is positive, with 270,000 ha of additional forests and approximately 9,000 ha of new forest per year. Wood volume has also increased annually at a rate of 2 m^3/ha. These indicators, and wood volume per hectare in particular, are significantly below the optimal values, which indicate that the production potential is still not being fully used.

Ownership structure

The forest ownership structure in SEE is in general divided into two categories: private ownership and public ownership. Despite serious efforts towards the privatisation of important economic sectors in the region, largely as part of the EU integration process, public ownership is still clearly dominant. Most of the forest area is state property, although the share of privately owned forests is growing. The highest proportion of state-owned forest is in Albania, with some 99 percent in state ownership, followed by the former Yugoslav Republic of Macedonia (90 percent), Bosnia and Herzegovina (81 percent), and Montenegro (67 percent). Kosovo (as defined under UNSCR 1244) has the highest percentage of private ownership at approximately 40 percent.

Albania

Up until 1990, all forests and pastures were state owned. After the political, economic and social changes of the 1990s, three forms of ownership were introduced: state, communal and private. About 50 percent of the forest area is managed directly by the forest service; 49 percent (over 600,000 ha) is available for communal use by villages to supply their needs; and around 1 percent is private forest restored to its former owners. About 4 percent of the total forest area is expected to be restored to its former owners.

Bosnia and Herzegovina

Forests and forestland cover about 2.7 million ha of the total area of the country, of which approximately 81 percent is state owned and approximately 19 percent is in private ownership distributed in scattered, small parcels.

Kosovo (as defined under UNSCR 1244)

Out of the total area of surveyed and non-surveyed forestlands, 278,880 ha (60 percent) are classified as public forestlands and 185,920 ha (40 percent) as private forestlands.

The former Yugoslav Republic of Macedonia

The Macedonian Constitution guarantees the right to forest ownership, and all types of forest ownership are equal under the law. Of the total forest area, the state owns 90.14 percent, representing 92.2 percent of the total wood mass. Privately owned forests make up 9.86 percent (94,146 ha) of the total area, which is 7.8 percent of the total wood mass (Macedonian Statistical Yearbook, 2004, 10.01 Forestry). The share of private forests out of the total forest resources of the country is expected to rise in the future due to the denationalisation process as well as the updating of land survey records and the identification of ownership where areas of agricultural land have been overgrown by natural forest.

Another important issue is the application of old legal solutions that negatively affect the rising trend in private forest ownership. Article 47 of the Law on the Use of Rural Agricultural Land (Official Gazette of SFRY No.12/67) states that if a landowner does not use the land for more than 10 years, and during that period neither submits a claim for recognition of ownership nor pays public charges, this land will be transferred into state ownership.

Montenegro

Forests in state ownership total 500,041 ha (67.25 percent) and forests in private ownership 243,568 ha (32.75 percent).

Serbia

State-owned forests are mostly located in major mountain massifs that are generally not populated, thus allowing for better organisation, management and protection mechanisms. On the other hand, private forests are mostly in, or close to, inhabited areas. Privately owned forests in Serbia are also characterised by small average plot size, estimated at around 0.3 ha.

TABLE 1: **Stabilisation and Association Agreements**

COUNTRY	STATE OWNED	PRIVATELY OWNED
Albania	99%	1% (12244.8 ha)
Bosnia and Herzegovina	81% (2.19 million ha)	9% (0.51%)
Kosovo (as defined under UNSCR 1244)	60% (278.880 ha)	40% (185.920 ha)
The former Yugoslav Republic of Macedonia	90.14% (860,681.6 ha)	9.86% (94,146 ha)
Montenegro	67.25% (500.041 ha)	32.75% (243.568 ha)

The number of private forest owners is very high, at about 500,000. This means that the average private forest owner possesses about 2 ha of forests divided into six or seven plots that are often not spatially related. The large number of small forest owners leads to the impossibility of organising private forests and also creates difficulties with the implementation sustainable forest management measures. Due to the small size and low productivity of their forests, owners cannot afford to pay for, or implement, professional forest management.

Private forests in Serbia are characterised by an insufficient proportion of high forest and a high percentage of coppice, scrub and brushwood.

Forestry trends

Positive trends

Overall, the current state of forests in the SEE region is generally unsatisfactory, in spite of the marked increase in forest cover in the region during the last 20 to 30 years. This increase is mainly the result of intensive afforestation and the natural afforestation of abandoned agricultural land in mountainous areas. Migration trends, declining populations in rural areas, particularly mountain areas, and the termination of extensive agricultural production in this area also contribute to the extension of forestlands, since the agricultural land can be sold and converted back into forestland. Urban migration puts less pressure on forests, in terms of logging for household firewood.

Negative trends

In some countries, the main problem is loss of forest area through, for example, clear cutting and forest fires. In others, it is the lower quality of the forests. Even in Montenegro, with its extensive forest coverage, new forestry policy and institutional framework, there are concerns regarding forest quality. Montenegro's high forest is of relatively poor quality hardwood, due to a history of coppicing (especially in privately owned forests) and the substandard management of state-owned forests over the past few decades that has typically removed better quality trees while leaving the poorer quality trunks from all accessible forest areas. To improve the quality of such forests, forest management plans typically recommend that a large volume of the poorer quality trees be removed gradually over the next 10 to 30 years to allow better quality trees to flourish. Until then, the majority of the annual growth in wood volume is added to poor-quality trees that have a low end value. Since these forests have a very low average volume (124.4 m^3/ha) and increment (3.1 m^3/ha), their production as well as their ecological, aesthetic and other potential uses are also minimal.

Short description of the forestry economic sector

Role in the economic sector

Forestry is of immeasurable social and economic importance to the region's overall growth and wellbeing. Given the relatively large forest area in the region, the wood industry should be an important contributor to the development of local economies. In some countries, such as Montenegro, the sector's contribution to GDP is high at 8 percent, although it ranges between 0.5 and 2.5 percent in other countries (the former Yugoslav Republic of Macedonia and Serbia respectively). In many rural areas, where opportunities to earn income are scarce, forest resources provide employment, fuel and additional income.

The forestry sector has great potential for substantial growth, not only in wood-related activities, including construction material production, but also in ancillary products and services, such as biomass, mushrooms, medicinal herbs, hunting and eco-tourism. The value of the forests could be several times higher if better managed through measures related to forest infrastructure, silviculture (cleaning and thinning) and increased awareness of forest

protection among inhabitants. The overall value of wood products and services is often vastly underestimated.

In some countries, the importance of forestry is better assessed and recognised and appropriate control and management measures are put in place to protect forestry resources while emphasising their value as a source of income for both the state and individuals. In Montenegro, for instance, this sector contributes some 6 percent to the national economy, but this figure could be many times higher. Given that around 60 percent of the population of Montenegro is linked to forested areas, and that forestry and wood processing are traditionally one of their basic activities, the share in the national economy could increase to as much as 15 percent. Elsewhere, as in Kosovo (as defined under UNSCR 1244) and Albania, forests resources are important not only for economic development but also for the social and environmental wellbeing of inhabitants. In Kosovo (as defined under UNSCR 1244), the estimated value of wood products and services is in the range of EUR 50 to 75 million, contributing to GDP by 1.8 to 2.6 percent, and approximately 10 percent of the population is dependent on the forestry and wood industry. In the former Yugoslav Republic of Macedonia, forestry's contribution to GDP is 0.3 to 0.5 percent. However, this figure is an underestimate and would be many times higher if the multiple forestry uses were valorised. The forest industry's contribution including paper and cellulose, primary and secondary wood processing, furniture etc. is between 2.5 and 3 percent.

Forest use and volume

Most countries determine and regulate the volume of high- and low-quality cutting through legislation, provisional annual cutting plans and rigorous controls. The limits set out in legislation are largely based on natural conditions, sustainable forestry management policies and the principles of sustainable forestry management. Exceeding the permitted, planned volume usually leads to forest degradation, thus rigorous controls and respect for forest management plans are essential. Practices differ among the countries, with more generous volume limits in some countries and more efficient controls, monitoring and data collection for forestry inventories in others. In the interests of sustainable forestry, it is crucial to have reliable data on the current state of the forests in national forest inventories. This includes data about regions on international borders, where control and data collection may have to be carried out jointly. However, figures for the volume of logging are not available for all countries, especially since there is a large difference between the officially registered volume of logging and the real figures (that include illegally logged wood).

In general, volumes are easier to estimate and control in state-owned forests than in privately owned forests. In the latter, accurate information about the annual volume of production does not normally exist, mainly because only small amounts are harvested, which owners use for their own needs often without going through the required permitting procedures, thus falling outside the official records kept by the forestry management authorities. The official figures for logging are thus more accurate in state-owned forests.

Another problem is that forest management plans are not always drawn up for private forests in the region and the volume of logging is often determined on the basis of provisional annual plans, including calculations of yield and estimations of the possible scale of annual logging. The possible annual volume of wood that can be cut in private forests is calculated as a certain percentage of the total annual increment of these forests. The fact that there is a lack of accurate data indicates a need to keep better records of all logged wood, to improve the control of wood flows and trade routes, and to monitor access to forest areas by controlling traffic on forest roads.

In general, the scarcity and divergence of the data available in national forest inventories and other information sources, such as data collected through forestry management companies, public surveys etc, significantly restrict the possibility of measuring and controlling harvested volumes. A short summary of the situation in the individual countries is presented below.

Albania

The general lack of reliable forestry data masks the real figures. The estimated consumption of firewood is unreliable – the degree of certainty has been estimated at 80 percent. Since a large proportion of the illegally cut wood is destined for firewood, it is difficult to draw conclusions on exact volume. However, the official figures show a decreasing trend. There are no specific data regarding the volumes of annual harvesting for Albania. The volume peaked in 1997 with over 500,000 m^3 of illegal logging recorded. In 2007, the official figure had come down to 10,064 m^3, representing 7 percent of wood volume reported officially as legal supply. (Indufor 2008)

Bosnia and Herzegovina

No precise figures are available for volumes of logging. However, according to a report by Savcor Indufor Oy (Nonic, Stajic and Jovic 2005), volumes of illegally har-

vested timber were officially reported as between 0.3 and 2.2 percent of the legal timber supply, with an estimated value of between USD 10 and 20 million.

Kosovo (as defined under UNSCR 1244)

The volume of official cutting/logging is around 200,000m^3/year, and most of this timber is used for heating. Demand is currently higher: it is estimated that national timber requirements are 1 million m^3/year.

The former Yugoslav Republic of Macedonia

According to the State Statistical Office (Census of Agriculture, 2007: Basic statistics for agriculture, forestry and fisheries in the Republic of Macedonia in the individual sector, by municipalities; Book II) the volume of logged timber in households (56,311) in the former Yugoslav Republic of Macedonia is 518,805 m^3, of which 437,057 m^3 was wood mass logged for personal needs and 81,748 m^3 for selling. The largest number of individual households owning the biggest forest area are in the municipality of Berovo, with 4,088.81 m^3. The municipality of Berovo also has the highest total logged wood mass, totalling 28,320 m^3.

Montenegro

A trend towards reduced harvesting has been perceptible since 1989. Based on the assumption that the permitted annual cut is two-thirds of annual growth, around 815,000 m^3 of forestland can be harvested annually. The Forest Administration issues a tender for concessions and auctions for a volume slightly over 400,000 m^3. With the addition of wood for fuel, as well as retail and sanitary harvesting, the annual cut is around 700,000 m^3. Harvesting is therefore more or less equal to projected volumes.

Serbia

In Serbia, the gross figure for logged wood ranges from 3 to 3.5 million m^3 annually. For 2008, based on the country's forest management reports, the volume of logging in state forests amounted to 2.3 million m^3, and in private forests 0.8 million m^3.

However, the official statistical data differ from the data collected by forest management companies. For instance, in 2007, only 2.2 million m^3 were harvested, which does not correspond to the real extent of cutting (3.1 million m^3).

The volume of registered logging in private forests in Serbia is lower than the recorded amounts, mainly because a significant number of forest owners harvest wood for their own purposes without the consent of professional services, thus these logged quantities are not registered.

At a rough estimate, based on the experience of professional services, the real amount of logged wood in private forests is twice as high as the registered amount at approximately 1.6 million m^3. Based on the available data, it can be concluded that the exact volume of logging in Serbian forests is not known but can be estimated at between 4 and 5 million m^3. However, according to the highest estimations it might be as much as 9 million m^3 (gross amount).

Consumption of firewood

The consumption of firewood is relatively high throughout the region, but especially in Albania, Kosovo (as defined under UNSCR 1244), the former Yugoslav Republic of Macedonia and Serbia. Firewood consumption in Montenegro is less significant. Given the unfavourable socioeconomic conditions, wood is an affordable energy source for many households. A few general conclusions can be drawn on the basis of the national reports:

1. *Consumption of firewood is most significant in rural areas, especially where other sources of energy are scarce*
   Firewood is a common source of livelihood and income in mountainous zones, where other economic activities are limited.
2. *Firewood is collected and consumed mainly by rural households*
   Firewood is collected and used mainly by the rural population, although firewood use may also be significant in urban areas where firewood is used for heating and cooking throughout the year (e.g. in Albania, Bosnia and Herzegovina and Kosovo [as defined under UNSCR 1244]). Households form the biggest group of firewood consumers, although public institutions and charcoal and lime producers also use significant volumes. Part of the supply comes from industrial residues and areas outside the forest sector.
3. *Use of firewood is high, but decreasing slowly*
   In Albania, Kosovo (as defined under UNSCR 1244) and Serbia, firewood is a significant energy source. In Kosovo (as defined under UNSCR 1244), for instance, official cutting/logging is around 200,000 m^3/year, although demand is estimated at 1 million m^3/year. In Serbia, a significant proportion of firewood (estimated at 100,000 m^3 annually) is imported from abroad. In Albania, firewood meets one-third or more of the total energy demand for heating and accounts for almost 90 percent of wood use. (EESDC 2008)

Although firewood is still very important for heating and cooking, its use has been declining over the last 15 to 20 years. However, this trend is too slow to offset the current pressures on forestry resources in the short to medium term, since overall demand for firewood, in absolute terms, remains high. Combined with other pressures on forestry resources, the decline in firewood use offers little basis for optimism in the long run.

4. *Demand exceeds supply, providing incentives for illegal logging*
   In several countries, including Albania, actual firewood consumption exceeds the supply officially provided by the forestry service, which suggests that either the forestry service estimates are too conservative or, which is more likely, that illegal logging is widespread. This conclusion is confirmed by various studies.[2] The use of firewood has declined over the past 15 years due to the rise in average income in Albania, which has led to increased use of other sources of energy. Nevertheless, demand for firewood is still a problem for the Albanian forestry sector.

   In Kosovo (as defined under UNSCR 1244), demand for firewood is four times higher than supply, providing ample incentive for illegal logging wherever imports are either not possible or too expensive. Satisfying the high demand for firewood leads to pressure on forest resources, especially in the lowlands and around villages and towns. Firewood produced at low cost and in small quantities to meet the demands of rural families has always been available for harvesting free of charge in rural areas. Currently, demand for energy can be met only in rural areas adjacent to forests.

5. *The main source of firewood are public forest estates*
   With a few exceptions, the main source of firewood are public forest estates, where firewood comprises authorised cutting, illegal cutting, the collection of small branches and deadwood (authorised and non-authorised), industrial wood waste and industrial wood residues. In addition, firewood is harvested outside the forests from farms (e.g. fruit trees), for example in Albania.

6. A shortage of alternative energy sources triggers overexploitation of forests
   In areas affected by energy shortages (e.g. an irregular or inadequate electricity supply), forests tend to be overexploited. Programmes for the development of rural energy supply aim to ensure that forests, including biomass from farms, are able to meet the energy demands of the local population and industry.

The wood industry

The wood industry presents rather a mixed picture in terms of the number and share of large and small companies. One problem is that many wood processors are not properly registered. As a general trend, there are not enough qualified staff working in the wood industry. In Montenegro, for example, the wood processing industry employed 55 engineers (four engineers per enterprise), whereas in 2007 the sector employed 22 engineers, that is, one engineer for every 19 enterprises.[3] Other trends include a growing number of smaller wood processing enterprises, and problems with outdated processing technology, which puts the regional processing industry at a disadvantage both domestically and on the wider European market.

Short summaries of the situation in the individual countries are presented below.

Albania

Based on data collected and investigations undertaken within the World Bank co-funded Forestry Project, income from the forestry sector (firewood, timber, grazing and fodder) represents about 20 percent of the total annual income of rural families. Annual income from the use of forestry and pasture resources accounts for between USD 1 and 1.8 million, of which income from wood is estimated at between 50 and 75 percent. (Lako 2008)

Bosnia and Herzegovina

Although the forestry and wood processing industries are regarded as very significant contributors to the national economy, the sector is held back due to outdated technology. Vast areas of forests and around 50 percent of land cover have the potential to provide almost 7 million m^3 of roundwood annually. Wood processors have a long tradition and extensive experience in the industry. Beech, oak, ash, pine and fir, as well as more specialised woods such as walnut, apple and cherry, are exported as raw material, semi-processed products and finished products (FIPA 2006)[4]. The wood processing sector has huge potential as a target for small and medium-sized investments in Bosnia and Herzegovina.

Extensive sources of hardwood and softwood, as well as a cheap but skilled labour force in conjunction with manufacturing facilities capable of timber and furniture production that exceeds domestic demand, mean that this sector is export oriented. The largest markets for wood products are currently Germany, Italy and other SEE countries.

Kosovo (as defined under UNSCR 1244)

The total value of goods from forestry is estimated at EUR 50 to 75 million. The contribution of the forestry sector to GDP is between 1.8 and 2.6 percent. In general, between 8 and 10 percent of the population generates income from forestry and forest industry, although in rural areas the figure is estimated at around 20 percent.

Some 1,480 enterprises are registered as wood processors with the Ministry of Trade and Industry. Six of these have a turnover of above EUR 1 million. Wood processing companies use mostly beech, oak and other broadleaved species. Wood processors produce items such as doors, window frames, furniture, flooring materials, boxes, fencing materials and garden equipment. Finished products represent more than 75 percent of production, while semi-finished products make up less than 25 percent.

A high percentage of the harvested wood is suitable for the processing industry. Out of the total annual felling allowance, 43 percent is categorised as technical wood, while the remainder is used for heating. Given the high capacity for supply, primary wood production can, to a certain extent, cover the demands of the local processing industry. Furthermore, owing to low wood prices per cubic metre, Kosovan wood has the potential to become an important item in foreign trade, although wood products are currently sold mainly on the local market. Most sawmills only saw logs into rough, mixed-grade lumber and have not fully explored the potential value of waste products from lumber production (e.g. sawdust and wood chips).

The former Yugoslav Republic of Macedonia

Forestry contributes between 0.3 and 0.5 percent to the country's GDP. However, if its multifunction uses are valorised, the contribution of forestry is far greater. The contribution of forestry to industry (paper and cellulose, primary and secondary wood processing, furniture etc.) raises its GDP contribution to between 2.5 and 3 percent.

The number of people employed in the forestry sector fell steadily between 2000 (3,006 employees) and 2007 (2,250 employees). However, these figures are for officially registered employees: bearing in mind common practice in the forestry labour market, the true employment figures are likely to be considerably higher.

Montenegro

The Ministry of Agriculture, Forestry and Water Management calculates that forestry and wood processing contributes between 6 and 8 percent of GDP. In rural areas, the contribution to the local economy is far greater, especially in the heavily forested north.

As in other countries, much of the forests' contribution to GDP goes unrecognised – for example the collection of high-value products such as wild fruits, mushrooms and medicinal plants is not registered, except when exports are concerned, and even then the true market values are typically under-declared. Household consumption of forest products is not recorded at all. Similarly, trade in firewood is grossly under-recorded, if at all. The true economic value of the forestry sector and its potential to alleviate poverty in rural households are not sufficiently recognised and the forestry sector receives less financial and political support, as a pillar of rural development objectives, compared to agriculture and tourism.

The wood processing potential in Montenegro is confirmed by the relatively large number of enterprises dealing with wood processing and the production of wood products. The majority of these enterprises are located in the north and north-east of Montenegro. By 2007, almost all the enterprises in the former public sector had been privatised. Production is growing steadily in enterprises that were privatised early on, whereas enterprises privatised later are still in the process of recovery.

Wood processing represented 3.2 percent of Montenegro's total exports in 2006, and furniture production 0.15 percent. The situation is the reverse in terms of imports. Furniture production represented 3.1 percent and wood processing 1.4 percent. Despite an increase in production in recent years, the rapid expansion of the housing market and the high demand for final wood products have forced local producers to turn to imports. Exports are at the level of EUR 20 million, but the trade deficit is growing. In 2006, the deficit was EUR 45.3 million, compared to EUR 15.7 million in 2005. Imports of furniture have had the biggest influence on this imbalance, although the demand for locally produced furniture is now on the rise.

An analysis of the structure of wood product exports shows a high share of products with low added value. Sawn timber and logs represented 84 percent of the value of exports in 2006. The most significant markets for furniture exports in 2006 were Serbia (55 percent), followed by Bosnia and Herzegovina (13 percent) and Croatia (9 percent). Wood products are mostly imported from Serbia (22 percent), Croatia (16 percent), Slovenia (12 percent), Hungary (8 percent), Bosnia and Herzegovina (7 percent) and Austria (6 percent).

Serbia

The registered contribution of forestry is only 0.3 percent of total GDP, and the forest industry contributes 2.5 percent, which translates to a total contribution of 2.8 per-

cent from the forestry sector as a whole. Forest management in general achieves positive business results, albeit modest[5], providing small investments in simple forest reproduction and related areas. Many stakeholders consider the forestry sector as insignificant, with little importance to the national economy and national development. However, forests cover some 29 percent of the land area.

During the past two decades, relations between the forestry sector and the wood industry have been unsatisfactory, largely as a result of the structure inherited from the socialist era. In the late 1980s, in the initial phase of the transition to a market economy, the forestry and wood industry were completely separate in terms of organisational structure and prevailing political conditions. However, as a result of a clash with the previous development policy, the capacity for primary wood processing was many times higher than forest production capacities. This discrepancy led to persistent conflicts between the forestry and wood processing sectors. This was followed by intensive privatisation in the wood processing sector, mostly in the form of the entry of new, private companies rather than the privatisation of existing public ones, which further increased demand for wood and led to trade between the state enterprise, as a monopoly supplier, and private companies. The combination of an increased demand for wood, especially on the part of new private companies, the negative effects of the economic blockade and the war, and insufficient controls, led to a situation in which the private sector explored all means, legal and illegal (corruption, false classification of goods, fraudulent payment) to obtain the required quantity of wood at the lowest possible price. As a consequence, most of the former public enterprises for wood processing disappeared. Since the democratic changes in 2000, the situation has improved: the legislative framework has been reinforced, control over the sale of wood has been strengthened; and new financial mechanisms have been introduced. However, there is still a gap between wood processing capacity and the available resources. The existing number[6] of sawmills and the installed capacity in wood processing industries are several times higher than the quantity of raw materials available. This, combined with outdated technologies, has led to low levels of productivity, capacity utilisation and manufacturing efficiency. The wood processing and furniture industries are in stagnation, a situation exacerbated by the global recession.

Wood trade

Exports of logs and wood products have fallen significantly since 2000. Export figures for the former Yugoslav Republic of Macedonia, for example, fell from 6 million m^3 to around 2 million m^3 in 2007. During the past decade the quantity of imported wood products has increased significantly. During the 1980s, exports and imports within the forestry sector were almost balanced. However, in the 1990s, both exports and imports (but primarily exports) declined. In countries affected by the war and the UN trade embargo, such as Serbia, the fall was dramatic and had long-term negative consequences for the domestic wood industry. After the political changes in 2000, the transition to a market economy in the forestry sector, the restructuring of the wood industry and increasing investments in modern technology, the wood industry is now growing, in terms of both imports and exports.

The countries of SEE currently have the potential to cover most of the domestic demand from the local processing industry and energy sector. Most of the countries have access to good-quality hardwood and softwood and, increasingly, have the capacity for greater supply. Virtually all of the countries therefore have the potential to expand their wood supply for both the domestic and export market. The trade potential is greatest where there are several favourable conditions: adequate access to hardwood and softwood; a cheap labour force; low wood prices; and manufacturing facilities with sufficient capacity.

Some countries are more successful in terms of exports, including Bosnia and Herzegovina, which mainly exports to Germany, Italy and the countries of the former Yugoslavia. Bosnia and Herzegovina has an extensive source of hardwood and softwood as well as a low-cost, skilled labour force combined with manufacturing facilities with capacities for timber and furniture production that surpass domestic demand, making this sector export oriented. Serbia is also a traditional exporter of wood and wood products. However, during recent decades the quantity of imported wood products has increased significantly, leading to a trade deficit affecting both primary and forest industry products.[7]

A common trend in the region is a shift in the trade balance towards excess imports with a negative trend towards export deficit. According to data from 2005/2006, exports in Montenegro were at a level of EUR 20 million. Montenegro also imported a large volume of wood and furniture: in 2006, the export deficit was EUR 45.3 million, representing a rapid growth compared to the previous year. Imports of furniture had the biggest influence on the increase in deficit (EUR 46.2 million in 2006 and EUR 26.8 million in 2005). Because of increased demand on the local market, exports of furniture fell from EUR 1.49 million in 2005 to EUR 0.96 million in 2006. Within the total value of furniture imports, some items do not belong to the figures for wooden furniture: the true value of imports of wood furniture and wood-based

materials (boards) was EUR 38.2 million. In Albania, the import-export balance is heavily negative for roundwood and sawn timber. Roundwood imports are almost double the exports, and in the case of sawn wood the figure can be up to 10 times higher. Large exports of herbs and charcoal stabilise the trade balance somewhat. The negative trade balance exacerbates the problem of illegal logging. Imports of roundwood also increased significantly after the abolition of import tariffs. This measure generally reduces the price of timber, which also makes it less profitable to engage in illegal logging. However, it is also possible that reduced prices make commercial forestry activities less attractive, leaving room for other (uncontrolled) activities to expand in forestry land.

Legal and policy framework

National acts on forest protection

All the countries have some kind of legal framework regulating the procedures for permitting, marking, logging and monitoring, as well as precautionary planning measures in the interests of sustainable forest management. In some countries, such as Montenegro and the former Yugoslav Republic of Macedonia, the old forestry laws have been subject to extensive revision, making them wider in scope and more in line with EU and international forestry definitions and standards. However, the forestry legislation adopted in the 1990s and early 2000s, in the early phase of the transition from socialism to a market economy, is largely out of date and full of legislative and governance gaps.

The revision of existing legislation needs to be stepped up, including addressing all relevant secondary legislation to ensure the efficient application and implementation of the legislative provisions. For example, the former Yugoslav Republic of Macedonia's new Law on Forests[8] (which also provides the basis for financing forest reproduction activities) entered into force in June 2009, but the new secondary legislation that will replace the existing regulations is only expected by 2011.

The divergence in the scope, aims and wording of forest legislation between the countries in the region is far greater than that of environmental legislation in general, for several reasons. As the countries are potential candidates for EU accession, they are in the process of harmonising their national legislation with the EU acquis. However, in the area of forestry, the EU does not have exclusive competence, thus there are only non-binding norms (such as FLEGT) applicable, which means a large degree of freedom in the way that legislation and norms are defined.

It is not only forest acts that are important for the governance of forest resources. There are a wide range of other interrelated laws, often falling under the competency of the ministries of environment, trade, and internal affairs. Montenegro, for example, has a series of interlinked laws in the forestry sector that involve different administration areas (Law on Nature Protection, Law on Environment, Law on National Parks, Law on Property, Concession Law, Criminal Procedure Code, Law on Administrative Procedure, Law on Plant Protection, Law on Local Government, as well as Law on Forest Reproductive Material).

Since forestry protection and management spans several sectors and ministries and comprises different sectoral legislation (e.g. environmental protection law, penal code, spatial planning, forestry legislation, hunting legislation, tourism legislation, local administrative regulations) there is often a lack of coordination, and even inconsistencies, in the laws.

The legislation should be seen in a wider context and should be implemented through national strategies and action programmes targeting specific needs and problems at the national and local level.

Case Study 1: **Legal Framework in Kosovo (as defined under UNSCR 1244)**

The legal framework prior to 1989 had to be significantly revised and procedures established for public participation and local management. The earlier framework was not in compliance with the new circumstances and the move towards a free market business environment. Discrepancies were regulated through the temporary regulations of the United Nations Interim Mission in Kosovo (UNMIK). Forest Law No. 2003/03 was created in cooperation with the United Nations Food and Agriculture Organisation (UN FAO) and was based on the principles of transparency and a free market. It is also based on the principles of major global policies on sustainable forest management, as set out in Annex III to the Report of the United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro on June 3 to 14, 1992.

According to this law, "the forests of Kosovo are a national resource. They shall be managed in such a way as to provide a valuable yield and at the same time preserve biodiversity. Forest management shall also take into account other public interests." Forest Law No. 2003/3 filled most of the legal gaps and governs the management of national resources, including forests. The law was submitted to the Kosovo Assembly in December 2009 for amendment.

One of the key issues is the management of national parks, which will be withdrawn from the among the responsibilities of the Kosovo Forestry Agency.

The following weaknesses were identified:

- The current legislation regulates the licensing procedure through tendering, but through the amendments the Kosovo Forestry Agency is aiming to reduce the activities of private companies in services provision.
- The property of the Kosovo Forestry Agency is not clearly defined.
- Foresters are unarmed.
- A forest restoration fund is "hereby established as a special-purpose dedicated fund within the ministry's budget for the purposes of enabling the ministry to invest and encourage others to invest in forestry and to support other forestland-related services or projects." However, it is not used in practice due to contradiction with the legal financing procedures of the Kosovo Consolidated Budget.
- The law does not define the role of municipalities and there are discrepancies in competencies at central and local level.
- Public participation is weak.

Forest development strategies/planning frameworks

All the countries have some type of strategic or planning framework in place, developed and formulated in the context of the legal and political framework for the forestry sector. Those that were developed during the last five years are likely to better reflect the current situation, be more streamlined, and be in line with international and EU definitions and standards on forestry protection and management. Examples of new types of forestry structure, underpinned by a comprehensive legislative and policy framework and concrete actions, are those recently developed in Montenegro, the former Yugoslav Republic of Macedonia and Serbia. As part of the EU integration process, Albania has also adopted the National Strategy for Development and Integration (NSDI) 2007-2013, which partly covers the forestry sector.

Albania

The forestry policy framework mainly comprises the Government Strategy for Agricultural Development ("Green Strategy", 1999) and the Strategy for the Development of the Forestry and Pasture Sector in Albania (2004), which builds on the Green Strategy. It is based on certain assumptions and sets out policy objectives such as:

- maintaining the territorial and ecological integrity of forests and pastures;
- promoting and maintaining the sustainable management of forests and pasture resources;
- improving and strengthening the forestry sector vis-à-vis market conditions;
- involving local stakeholders and users in the development and maintenance of forest resources; and
- carrying out the institutional and legal reform of the forest sector at national and local level.

The strategy has a strong emphasis on transferring ownership of, or use rights to, public land (most land is state owned in Albania) to local government units in order to increase the profits from forestry activities for rural families.

An action plan tackling illegal logging was developed by the Forestry Administration with the support of the FAO and was adopted in 2004. However, the action plan has not received much attention, because the government has been focusing on institutional and legal reform since 2005. One of the consequences of this reform, which has been completed at central level but which is ongoing at district level, is the division of control and management functions.

In the context of the Stabilisation and Association Process with the EU, Albania adopted the National Strategy for Development and Integration (NSDI) 2007-2013, which, for the first time, sets out in a single strategic document the perspectives for sustainable economic and social development, integration into EU and NATO structures, as well as the achievement of Millennium Development Goals. The strategy also covers the forestry sector, defining as its main objectives:

- encouraging forest and pasture management in the direction of nature conservation;
- maintaining biodiversity and the development of ecotourism;
- rehabilitating degraded forests and restoring them to an optimal state;
- continuing the transfer of forests and pastures to local government units; and
- taking measures against illegal logging.

Bosnia and Herzegovina

As in Albania, the forestry policy framework is relatively new. The Action Plan to Combat Illegal Activities in the Forest and Wood Processing Sectors in Bosnia and Herzegovina was adopted in 2005 and covers all types of illegal activities in the forest sector, including theft and corruption-related crime. In the description of its scope it identifies the latter issue as the more serious in terms of "causing damage and financial losses". A key strategy is to increase the cost of illegal activities through improved control and to provide incentives for legal suppliers (improving market access through certification).

A forestry programme will be developed in both entities (the Federation of Bosnia and Herzegovina and Republika Srpska), which will be the basic document defining the participative, comprehensive, inter-sectoral and permanent processes for planning, implementing, monitoring and evaluating forestry policy, with the aim of achieving the sustainable forest management of all forest property modules. An action plan for its implementation will also be developed by the relevant ministry and adopted by the governments and parliaments. The forestry programme will be developed on the basis of the forestry development strategy, which is under preparation, thus neither the forestry programme nor the Forestry Development Strategy has been adopted at entity level.

Kosovo (as defined under UNSCR 1244)

The Ministry of Agriculture, Forestry and Rural Development (MAFRD) developed the "Strategy for Forest Development 2010-2020" in cooperation with an inter-ministerial working group and with the support of international experts from UN FAO and the Swedish International Development Cooperation Agency (SIDA). The strategy was approved in November 2009 and is an official guiding document for the improvement of the forestry sector, defining certain fields for intervention identified through close consultation with forestry experts and other stakeholders.

In 2007, the Kosovo Forestry Agency prepared a five-year forest management plan covering some 21,000 ha of forest. The plan is based on Forest Law No. 2003/03, as is the Annual Operational Plan for Forest Management, which covers:

- protection of forests against illegal logging;
- protection against forest fires; and
- measures for silviculture management (afforestration, commercial thinning, etc.).

In connection with logging authorisation and planning procedures, the Forestry Agency must adopt annual operational management plans for each area of public forest under its administration. These plans describe both forest improvement activities and harvest activities.

The former Yugoslav Republic of Macedonia:

The forestry sector has been subject to comprehensive reform. At the centre of the new policy and institutional framework is the Strategy for the Sustainable Development of Forestry, which was developed by the Ministry of Agriculture, Forestry and Water Economy in 2006 as a result of institutional development and capacity building in the forestry and forest industrial sectors. The strategy was adopted on the basis of the Law on Forests (Art. 23) and is applicable for a period of 20 years. It is based on a thorough analysis of the forestry sector and identifies key challenges, key goals and expected results in the forestry sector from the point of view of sustainability.

Among its long-term goals is the improvement of the forestry and rural economy in terms of social and regional cohesion. It also includes the prevention and combating of illegal logging and organised crime as short- to medium-term goals. The government provided EUR 15 million, which covers 60 percent of the activities planned for the following two years. The strategy sets out the national forestry policy, underpinning the national obligation to strive towards sustainable forest management. One of the main priorities is sustainable development through increasing the forest surface but also through improving forest quality, in accordance with the 2004 Spatial Plan. Other key activities set out in the strategy include establishing the Agency for Forestry and Hunting, transforming the public enterprise Macedonian Forests in order to increase its competitiveness, introducing forest certification and forest registration, and purchasing forest fire trucks. The emphasis of the strategy is on exploiting the total socioeconomic value of the forestland and raising awareness of environmental issues. The strategy was supplemented by an action plan (2007-2009), which was approved by the government in July 2006. The action plan includes specific actions that are related directly or indirectly to the activities required in order to suppress illegal activities in the forestry sector. These include institutional changes (e.g. the restructuring of the State Inspectorate on Forestry and Hunting with 25 inspectors); modifications to the legislative framework, such as the new Law on Forests (2009) and the Law on the State Inspectorate on Forestry and Hunting[9]; as well as building capacity through enhanced tech-

nical equipment. The national action plan is in turn implemented through the local environmental action plans (LEAPs) of the municipalities that have forests within their territory.

Montenegro

The forest sector has been subject to major reform in order to adapt its institutional structure to the market economy and to make it comparable with EU member states. In April 2008, the government adopted the National Strategy for Sustainable Development, which sets out the goals and priorities for future development in all areas. This document formulates 35 policy statements, which cover the institutional, environmental, socioeconomic and market aspects of forestry and which represent an official commitment to recognise national and global responsibility for the sustainable management of forests as an important natural resource. One particularly interesting element of this strategy is that it is an integrating strategy defining priorities for different fields that are directly or indirectly related to the forestry sector. It pursues overall socioeconomic goals through a process with strong stakeholder involvement, which also aims at reinforcing the institutional structures and the monitoring and control system. It promotes multiple forest functions and the fair distribution of the benefits generated by forest ecosystems. In addition, the National Policy for Forest and Forestland Administration was adopted in 2008 and recognises national and global responsibility for the sustainable management of forests.

The major shortcomings of the institutional set-up are the lack of clear reporting lines and organisational arrangements, and the lack of adequately trained staff. The overall forestry policy and planning framework will be finalised by the development of forestry and hunting laws, the Forestry Sector Development Programme (strategies and budgets), and the reform of government institutions and forestry services. Further measures are necessary to enhance human resources skills and efficiency and to establish a sustainable private sector.

Serbia

One of the first major policy frameworks for forestry development was the Spatial Plan of the Republic of Serbia and Projections for Forestry Development by 2050 (adopted in 1996), which defined strategic goals and directions for development. The most important objectives were to:

- increase forest cover from 27.6 percent to 31.7 percent by 2010, and to 41.4 percent by 2050;
- raise the annual increment from 2.6 m^3/ha to 6.5 m^3/ha, and the total annual volume increment from the current 6.6 million m^3 to around 13 million m^3;
- increase annual cutting, with an improvement in the existing state of the forests and an increase in their area from 3 million m^3 to around 11.9 million m^3 by 2050.

In 1997, the Ministry of Agriculture, Forestry and Water Management published the Strategy and Development Policy in the Forestry Sector of Serbia. However, the document had little impact since it covered already known facts and reproduced the attitudes that had prevailed in the previous forestry organisation, based mainly on state planning as a basis for forestry management.

After the democratic changes in 2000, the government launched a series of reform initiatives in all sectors, including forestry, through the definition of new development strategies, draft laws and institutional changes. The inter-sectoral coordination of policies and strategies was also improved: any forestry-related policy should take into consideration the Strategy on Biodiversity Conservation, the National Strategy for the Sustainable Use of Natural Resources and the National Programme for Environmental Protection.

In 2006, the Forestry Development Strategy was adopted as the basic forest policy document. It defined the general development objectives of the forestry sector and set out measures to achieve those goals. The aim was to create a favourable climate for economic development, preserve the ecological values of forests in Serbia, and define the social functions of forests, to be achieved through a new legal framework for forestry and a National Forest Action Plan.

Funding mechanisms

A forestry policy framework can only be effective if backed by sufficient funding. Funding is normally provided in accordance with a financial framework defined by law. Activities usually included in the funding framework are:

- forest reproduction, support and preservation;
- the sustainable use of forests;
- the protection and improvement of the environment; and
- the preparation, implementation and development of programmes and projects for environmental protection and improvement.

TABLE 2: **Overview of policy documents**

COUNTRY	DOCUMENT	ACTION PROGRAMME /PLAN	DOES IT COVER ILLEGAL FORESTRY ACTIVITIES?
Albania	• National Strategy for Development and Integration (NSDI) 2007-2013 • Government Strategy for Agricultural Development • Strategy for the Development of the Forestry and Pasture Sector (2004) • Action Plan designed by Albanian Forest Administration (2004)	Action Plan for Illegal Logging	Yes
Bosnia and Herzegovina	• Forestry Development Strategy (under development) • Forestry programme to be developed in both entities aimed at achieving sustainable forestry management	Action Plan to Combat Illegal Activities in the Forest and Wood Processing Sectors (2005) for both entities	Yes
The former Yugoslav Republic of Macedonia	• Strategy for the Sustainable Development of Forestry • Spatial Plan of the former Yugoslav Republic of Macedonia (2004)	Action Plan (2007-2009)	Not explicitly
Kosovo (as defined under UNSCR 1244)	• Strategy for Forest Development 2010-2020 (2009)	• Forest Management Plan (2007) • Annual Operational Plan for Forest Management	Yes
Montenegro	• National Strategy for Sustainable Development (2007) • National Policy on Forest and Forest Land Administration • National Forest Programme	National Action Plan (NAP) for Combating Illegal Logging (2008)	Yes
Serbia	• Spatial Plan and Projections for Forestry Development by 2050 (adopted in 1996) • Draft Strategy for the Development of the Forestry Sector (expected to be adopted in 2010)	Action Plan on the Prevention of Illegal Activities in Forestry	Yes

Funds can come from a wide range of sources, including:

- payments and fees from legal or physical persons paid to the state budget (e.g. fines for polluting environmental sources, permits for waste-related activities, permits for the use of natural resources, import tariffs on certain products etc.); and
- donations from international partners, bilateral donors and domestic legal or physical persons.

There is little available information on how the countries finance activities in the forestry sector. The most detailed information exists for the former Yugoslav Republic of Macedonia, where the Law on Environment and the Law on Forests provide the legal basis for financing activities in relation to forest policies.

Case Study 2: **The funding of forestry activities in the former Yugoslav Republic of Macedonia**

In the former Yugoslav Republic of Macedonia, the basis for funding environment-related activities is elaborated in the Law on Environment and the Law on Forests (especially regarding forest reproduction activities). The means for financing forest policies are obtained from:

- various taxes on legal and physical persons;
- international collaboration/cooperation on programmes and projects;
- donations from domestic and foreign legal and physical persons;
- foundations and gifts; and
- other sources.

The funds are used according to the government's annual programme, in particular for:

- the afforestation of barren and eroded land and the amelioration of degraded forests;
- treating the consequences of forest fires on areas of over 50 ha through artificial renewal;
- care for forest cultures and restored natural forest;
- preventive measures in forests and forest cultures;
- the suppression of plant diseases and pests in forests and forest cultures and on areas where degraded forests have been ameliorated; and
- the provision of forest seeds and seedlings.

The forestry sector is mostly self-financed through the sale of timber and primary wood processing. This revenue corresponds to approximately 90 percent of the total state budget available for the forestry sector. Regarding forest reproduction (e.g. the cultivation and protection of existing forests, the construction of forest roads, technical equipment for performing forest protection work and plan preparation for forest management), funds are provided from the subjects that manage the state-owned forests to the amount of 10 percent of the value of harvested wood. Up to 40 percent of these funds can be used for the design and construction of forest roads, technical equipment for performing forest protection work and the preparation of plans for forest management. These revenues accrue to a separate account of the authorities that manage the state-owned forests or of a legal person that carries out the nurturing and protection of forests for special use. Public companies and legal entities that carry out the cultivation and protection of forests for special use generate revenues totalling 2 percent of the value of sold wood for financing the Forestry Police. For expanded reproduction (i.e. raising new forests by the afforestation of barren and eroded lands, the amelioration of unproductive degraded forests, preventive care and the protection of forests and forests cultures, the suppression of plant diseases and pests in forests and forest cultures raised on barren land and areas that have been ameliorated, the provision of forest seeds and seedlings, the construction of infrastructure facilities in the forest and technical equipment for expanded forest reproduction), funds come from the subjects that manage state-owned forests, private forests and companies carrying out wood processing (3 percent of the value of the timber sold) and from the state budget.

These funds are channelled into a separate account of the Ministry of Agriculture, Forestry and Water Economy and are used to contribute to the financing of the Forestry Police.

Case Study 3: **Funding in Serbia**

Serbia has introduced earmarked funds for forest protection and, in particular, for the prevention of illegal logging, the first of which was the Fund for Environmental Protection. Another potential source of funding is the budget of the Directorate for Forests, which receives revenue from logging fees that can be used according to the new Forest Law. The funds of forest management companies may also be allocated for this purpose. The situation is more favourable in terms of foreign funds. Most of the capacity-building activities in Serbia have been funded by Norway, Finland, Austria, Slovakia, the FAO, and EU Technical Assistance and Information Exchange instrument (TAIEX). The Instrument for Pre-accession Assistance (IPA) is another potential source of funding for projects related to capacity building for the prevention of illegal activities.

Institutional and administrative framework

Forestry authorities

The institutional and administrative frameworks differ only slightly between countries in the region. The main common features include:

- a single strong central authority and the delegation of certain tasks to local or regional authorities;
- issues that are dealt with by more than one ministry, requiring tight coordination in order to avoid overlaps and inconsistencies; and
- different institutional set-ups and management frameworks for public and privately owned forests.

In several countries, including Montenegro and Serbia, the overall institutional framework does not differ significantly from that in other European countries, although capacities and the level of coordination need further strengthening. It is important to emphasise that the economic and social context may vary from European standards, contributing to the larger scale of illegal forestry activities.

Albania

In recent decades forests have been administered mainly by the Directorate of Forests and Pastures of the

Ministry of Agriculture and Forestry, through district forest enterprises. However, the Directorate General of Forests and Pastures (DGFP) was established as a body outside the ministry.[10] In the 1990s, the process of restructuring the forest administration towards a market economy began. The previous structure was revamped with new forest service directorates under the aegis of the DGFP. By the end of 1997, the DGFP had five main directorates: (i) the Directorate of Forests and Pastures; (ii) the Directorate of Communal Forests and Pastures and Extension Service; (iii) the Directorate of Protected Areas Management; (iv) the Directorate of Forest Police; and (v) the Directorate of Finance and Marketing. The Department for Personnel and Foreign Relations, the Services Department, and the Judicial Office were also part of the DGFP. Forest control and forest management were delegated to 36 forest service directorates, functioning at district level.

In the period 2002 to 2003, the DGFP embarked on the institutional reform of the forestry sector. In September 2005, the DGFP was transferred under the Ministry of Environment, Forests and Water Administration (MoEFWA), and in February 2006 it was reformed in conformity with the Institutional Reform and the Strategy for the Development of the Forest and Pasture Sector in Albania[11]. The reform aimed at dividing regulatory and managerial functions by splitting the Forest Police from forest management. Regarding illegal logging, the key body in the MoEFWA was the Department of Coordination and Police Control (SCPC) under the Coordination and Control Directorate (CCD), which is responsible for planning and coordinating activities related to forest protection. The 36 forest service directorates report indirectly to the SCPC through the general secretary of the MoEFWA. Each of them has a specialised Department of Forestry Police, responsible for control and monitoring.

The institutional reform of the forestry sector has not been finalised at the level of the district forest service directorates, which carry out control and monitoring, the management of forest resources and the management of protected areas and hunting. This means that regulatory and managerial functions have not yet been fully separated in the field. At the beginning of 2010 the MoEFWA therefore began the ongoing reorganisation of the Forest Service on a regional basis, splitting managerial functions and forest extension services, and regulatory and control functions into two separate bodies.

Bosnia and Herzegovina

The forestry sector has been regulated at entity level (the Federation of Bosnia and Herzegovina; Republika Srpska, as well as Brcko District). The Ministry of Agriculture, Water Management and Forestry in the Federation of Bosnia and Herzegovina and the Ministry of Agriculture, Forestry and Water Management in Republika Srpska are responsible for forest-related policies and strategies, legislation frameworks and monitoring aspects. The coordination of external and international activities, especially in the environmental field, has been the responsibility of the Ministry of Foreign Trade and Economic Relations (MoFTER) at state level. Pursuant to existing laws, the owners of forests are the Federation of Bosnia and Herzegovina, Republika Srpska and Brcko District. At canton level, the cantonal ministries are mainly competent in forestry issues in the Federation of Bosnia and Herzegovina. The competencies of forest management companies are divided between Sume Republike Srpske in Republika Sprska and 10 cantonal forest management companies in the Federation of Bosnia and Herzegovina.

The Republika Srpska Forest Agency is responsible for:

- developing a long-term programme for managing karst and a programme for utilising other forest products;
- monitoring the implementation of planning documents and maintaining a register;
- carrying out a forest inventory for larger areas;
- maintaining records and a cadastre of forests and forestland;
- monitoring the health of the forests;
- monitoring the spending of special-purpose funds for forests;
- the expert coordination of private forests and supporting measures for private forest owners;
- general forest development and hunting planning;
- providing information on the market for wood and other forest products;
- cooperating in applied research;
- transferring knowledge; and
- promoting interest groups in the planning process and the sustainable management of forest resources in all types of ownership.

Kosovo (as defined under UNSCR 1244)

The forestry institutions are relatively new, the Ministry of Agriculture, Forestry and Rural Development (MAFRD) being established on April 27, 2000[12], along with the Administrative Department of Agriculture, Forestry and Rural Development. The MAFRD is managed solely by Kosovan institutions reporting directly to the prime minister as the head of government and the parliament. The MAFRD carries out forestry management through the Forest Department, which is responsible for the development of policies, legal infrastructure, inspection and human resources. It reports directly to the permanent secretary to the minister. This department includes a division for management policies for forests, wild animals and trainings; and a division for inspection and control.

The prevalence of illegal logging indicates that the current organisational and legal infrastructure is not fully functional, mainly due to:

- the insufficient number of employees in the Kosovo Forest Agency;
- age and gender issues;
- the low level of skills and inadequate capacity among the personnel;
- the lack of the rule of law;
- delays in the juridical system; and
- lack of educational institutions on forestry and the wood industry.

However, during the past few years steps have been taken to improve the situation, including the development of agricultural educational schools and some educational and training initiatives established by foreign entities or foreign development agencies. These include a training centre for technical wood training; and the project "Support to forestry education and training in Kosovo", which is implemented by the Swedish International Development Cooperation Agency (SIDA) in cooperation with the Ministry of Agriculture, Forestry and Rural Development and the Ministry of Education, Science and Technology (MEST). These initiatives, and the latter in particular, are aimed at building the capacity of relevant actors, including private foresters; providing a foundation for professional forestry education, including advanced education at university level; and providing trainings, courses and study visits. Existing projects and studies highlight the need to:

- improve the rule of law/law enforcement;
- increase combined patrolling by forest guards and police officers;
- raise awareness of wood customers (the need to request receipts, check the origin of wood, etc.);
- ensure control of the market by financial officers of the Ministry of Economy and Finance;
- raise awareness of the need for environmental/forest protection among the general population, and especially among those living in the vicinity of forested areas;
- increase cooperation between the public and the Kosovo Forestry Agency;
- increase the efficiency of juridical institutions; and
- enforce fines and penalties in the event of illegal logging.

The former Yugoslav Republic of Macedonia

Forests and forestlands in state ownership are administered through the following institutions:

- the Ministry of Agriculture, Forestry and Water Economy, including its regional offices, the Forestry Department and the State Inspectorate for Forestry and Hunting;
- the Ministry of Environment and Physical Planning;
- the public enterprises "Macedonian Forests" and "Jasen"; and
- national parks and hunting grounds.

The Ministry of Agriculture, Forestry and Water Economy has competencies related to agriculture, forestry and water supply, the utilisation of agricultural land, forests and other natural treasures, hunting and fishing, and the protection of cattle and plants from diseases and pests. There are 33 regional offices of the Ministry of Agriculture, Forestry and Water Economy.

Within the ministry there is a Forestry Department comprising the Department for Forestation and the Cultivation of Forests, the Department of Forest Protection, the Department for Regulation and Forest Use and the Department of Hunting. The State Inspectorate for Forestry and Hunting is also an integral body of the ministry and is responsible for supervising and inspecting the application and enforcement of legal regulations and by-laws. The inspectorate's tasks are carried out through the Department of Forestry and Hunting, a specialised department for administrative affairs.

Montenegro

The institutional set-up is divided between the public and private sector. The public sector comprises:

- the Ministry of Agriculture, Forestry and Water Management (MAFWM);
- the Forest Inspectorate (part of the MAFWM);
- the Forest Administration; and
- a college in Berane (one class for forestry and wood processing technology).

The private sector is governed by:

- private forest owners;
- the Forestry Institute;
- former state-owned logging companies;
- private companies, concessionaires combining logging and wood processing; and
- forest workers working under contracts with concessionaires.

The Ministry of Agriculture, Forestry and Water Management is responsible for the overall control of the forest sector and plays the leading role in the process of forest resources management, the development of economic and other sectoral policies; and the implementation of these policies. The Forest Department comprises three units: the Strategic Planning Unit, the Central Management and Monitoring Unit, and the Forest Inspectorate. At present, the ministry is understaffed and relies heavily on support from international donor projects to fulfil its responsibilities. The Strategic Planning Unit is also weak and is staffed by just two experts. This unit is expected to be strengthened in order to carry out its central functions: overall policy formulation; legal drafting; the planning and supervision of the National Forest Strategy; budget planning and control; participation in cross-sectoral coordination; international relations; and public relations.

The Law on Local Government does not define municipal responsibility for forests and forestry but generally states that municipalities are responsible for environmental protection, municipal services and spatial regulation. According to the Law on Public Administration, certain functions of the state administration, for the purposes of their more efficient and more economic implementation, are legally decentralised to local government level. According to the Law on Local Government, municipalities receive 30 percent of the fees paid for the utilisation of forests on their territory.

The Forest Administration is currently under review, since it does not adequately cover the private forest sector. Training and education are also needed within the ministry. In general, the problems are largely related to weak capacities and the shortage of experts in the forestry authorities. The ministry is unable to fulfil its role under the recently approved National Forest Policy, nor can it implement the draft Forest Law that is expected to be adopted in the coming years. Institution-strengthening activities are expected to result in improved efficiency, a motivated staff, greater transparency, the increased absorption of EU and other donor funding, and improved public perception of forests and forestry.

Serbia

Forestry is centrally organised, with the Ministry of Agriculture, Forestry and Water Management at the top of the pyramid, and the Directorate for Forests as its operational unit. At the next organisational level are two forest management companies that were created by the division of the public enterprise "Srbijasume" in 2003. These companies manage all forests under state ownership, except the national parks. The companies also carry out professional activities in private forests. The forest hierarchy is complemented by educational and scientific institutions and professional associations. Institutions and organisations play a pivotal role in the achievement of policy goals and the implementation of forestry strategy and programmes. Recent changes in the demand for goods and services from forests, and the adoption of appropriate measures to satisfy this demand, have initiated changes in forestry institutions.

As part of the legislative and policy changes and the overall sectoral reform, the Assembly of Serbia has changed the organisation of forestry within the state administration on several occasions in the interests of ensuring progress in the sector. In 2002, for example, positions in the state administration relating to forestry were transferred from the Ministry of Agriculture, Forestry and Water Management to the newly formed Directorate for Forests within the Ministry for the Protection of Natural Resources and the Environment. In organisational terms, with the formation of an independent administrative body the forest sector has gained in importance within the state administration, which has resulted in the improvement of the quality and capacity of the directorate itself. The directorate performs delegated tasks and has become the highest national body with respect to forestry. The directorate has its own budget. The position of the director has also been enhanced: rather than assistant minister, which was the third level in the decision-making process below the minister, the position is now director of the state authority,

which is almost equivalent to deputy minister, thus higher than assistant minister and with far greater authority and decision-making power.

Forestry management entities

Several countries have taken measures to split the competencies and institutional frameworks between regulation, management and enforcement to ensure a clear division of powers and competencies.

A significant share of the competencies and responsibilities have been delegated and outsourced to public or private management companies. The management is typically most developed in the state-owned forests. while the management of private forests could be improved significantly. Private forest associations comprising individual owners of private forestland also have an important role to play in communication, education and forest management.

The responsibilities of forest management public enterprises typically include:

- cultivation, protection, conservation and utilisation of forests;
- raising and utilisation of game;
- engineering, construction and maintenance of forest roads;
- preparation of management programmes and plans;
- technical operations in private forests;
- advancement and utilisation of forest functions of public benefit; and
- wholesale and retail trade in forest products.

Albania

Before 2005, the main body responsible for controlling illegal logging was the Directorate General of Forests and Pastures (DGFP), under the Ministry of Agriculture and Food. The DGFP had full competencies for the administration, protection and sustainable utilisation of forests and pasture resources. The DGFP performed its tasks through 36 district forestry services (DFS). In September 2005, the DGFP was transferred under the Ministry of Environment, Forests and Water Administration (MoEFWA), and in February 2006 was reformed in conformity with the institutional reform and the Strategy for the Development of the Forest and Pasture Sector in Albania, 2004. The reform aimed to separate regulatory functions from managerial functions, splitting the forest police from forest management. With respect to illegal logging, the key body in the MoEFWA is the Coordination and Control Directorate, Department of Coordination and Police Control, which is responsible for planning and coordinating activities related to forest protection. The DFSs report indirectly to the Department of Coordination and Police Control through the MoEFWA General Secretary. Each of them has a specialised unit of forestry police responsible for control and monitoring.

The institutional reform of the forestry sector has not been completed at the level of the DFS directorates, which carry out control and monitoring, the management of forest resources and the management of protected areas and hunting. This means that regulatory and managerial functions have not yet been fully separated in the field. In 2010, the ministry began the regional reorganisation of the DFS, splitting managerial functions and forest extension service and regulatory and control functions into two separate bodies.

Bosnia and Herzegovina

According to the existing Law on Forests from 2002, forests in the Federation of Bosnia and Herzegovina are governed by the Federal Forest Administration, which has a head office in Sarajevo that coordinates the cantonal forest administrations. Forest governance is carried out by the cantonal public companies (forest economic companies) organised in nine cantons (there is no company in Posavina due to the absence of forested area).

In Republika Srpska, forests are governed by the Ministry for Agriculture, Forestry and Water Management through the Forestry Agency.

Forest governance in Bosnia and Herzegovina is regulated by entity laws on forests. The protection of natural resources is regulated by other laws (Law on Nature Protection, Law on Environmental Protection, Law on Water, Law on Hunting, Law on National Parks); strategic documents such as the National Environmental Action Plan (NEAP); numerous local environmental action plans (LEAPs); and the National Strategy and Biodiversity and Landscape Diversity Protection Action Plan that are under preparation.

Besides the entity laws on forests, this area is regulated by environmental entity laws on nature protection in the Federation of Bosnia and Herzegovina and Republika Srpska, entity nature protection laws, as well as entity laws on hunting.

According to the 2008 Law on Forests in Republika Srpska, and on the basis of a special contract made with the ministry, part of forestland management (the use of

forests and forestland owned by the republic, including the obligation of conservation) is performed by the public forestry company Forests of Republika Srpska and its organisational components. The use of forests is defined as tree cutting, the production and transportation of timber assortments, the use (collection) of other forest products, as well as trade in wood and other forest products.

Montenegro

Forestry management is divided among several bodies:

1. **The Central Management and Monitoring Unit (CMMU),** which is in charge of approving management plans prepared by private companies; monitoring and control in cooperation with the Forest Inspectorate; interfacing between donor projects, the ministry and forest stakeholders; overseeing the preparation of the National Forest Inventory; and performing environmental and social functions and services.
2. **The Forest Inspectorate (FI),** which is responsible for controlling harvesting activities, for example checking tree marking by the Forest Administration and the timber of logging companies. The Forestry Inspectorate conducts some 1,500 inspection reviews annually, and the number would be higher if shortcomings in the logistical and technical equipment were remedied.
3. **The Forest Administration** is the state administration authority responsible for the management of both private and state-owned forests. It strives to improve forest management through adequate organisation and greater attention to forest protection. The responsibilities of the Forest Administration are wide ranging and include forest protection, reforestation and improvement activities, the selection of seed stands, the conservation of natural and artificial forest values, protection against fires, reporting and forest management planning, the development of forest road programmes, the procurement of forest utilisation, and advisory services. It is divided into 15 regional units with its headquarters in Pljevlja. While the execution of work in the forests and the processing of forest products are left to the private sector and the market, the Forest Administration will have a key role in the acceptance and practical implementation of EU standards. The Forest Administration is the largest forest-related institution with approximately 400 staff, of which 85 have a university degree (67 forest engineers) and 206 are forest wardens in charge of forest management units, although in general without adequate education.

The former Yugoslav Republic of Macedonia

Forest resources are managed by the Ministry of Agriculture, Forestry and Water Economy in coordination with the public enterprise Macedonian Forests. This enterprise manages state-owned forests through 30 branch offices with a wide range of responsibilities related to high and low forests, the revival of harvested areas, forest regeneration, forest protection measures, forest conservation, and sustainable forest management.

Employees of the enterprise attend trainings twice a year, mainly organised by the Faculty of Forestry at the St. Cyril and Methodius University in Skopje. These trainings include the exchange of experience with equivalent management companies from Serbia, Slovenia and Croatia. The Strategy for Sustainable Forestry aims to improve the management and capacities of the public enterprise, especially through the introduction of state-of-the-art technology, continued capacity building for employees, enhanced transparency and participation in international forums.

The 1997 Law on Forests defines the structure of private forest management as the responsibility of owners, private owners associations, as well as legal and physical persons to whom management, advisory and other professional tasks have been delegated in accordance with the Law on Licences for Performing Professional Works in Forestry. There are around 60,000 owners of private forests, which are mostly plots smaller than 0.6 ha on average. These forests are covered by the National Association of Owners of Private Forests, which is a non-governmental organisation formed in 1997 in response to the high prices and poor quality of services offered by the state. The association now has more than 1,000 active members, with total forest ownership of around 3,000 ha. The management of private forests is carried out on the basis of special private forest management plans and programmes that are drafted by the private owners but that need government approval. Although private owners have responsibility and a large margin of discretion for managing their forests, these tasks must be carried out in accordance with approved management plans and programmes and with the support of licensed services. On the basis of a forthcoming new Forest Law there is potentially an important role for associations of private forest owners, which can carry out special technical works and other forest-related activities.

The Action Plan for the Strategy for Sustainable Development of Forestry envisages the establishment of a State Forestry Agency with departments on forestry, hunting and financing forestry activities, which would have independent status and promote the forest sector within the state administration.

The involvement of NGOs in direct forest management is limited and, overall, the number of forest-related NGOs is small. However, the present afforestation drive emerged from civil society through the "Day of the Tree", an initiative supported by the Macedonian Government, the Association of Local Self-Government Units, the Macedonian Assembly, and the EU representative office in the former Yugoslav Republic of Macedonia. The first event took place in 2007 with the aim of planting 2 million trees, equivalent to the number of citizens in the country, and the following year 6 million trees were planted.

Serbia

The management of state-owned forests is divided between eight public enterprises[13], various water and agricultural organisations, and educational research centres of the Faculty of Forestry in Belgrade. The public enterprises for forest management are mainly established by the government on the basis of special laws[14] granting the right to manage state-owned forests. However, the government cannot deprive the public company of its right to use forests without the consent of the company. Changes in ownership can be implemented only by legislative amendment. The companies cannot sell wood or forestland on their own, with the exception of small isolated parcels connected to private properties. These can be sold with the consent of the Serbian Government.

Forest management entities are legally obliged to prevent illegal logging, as well as other illegal forest activities, with a view to conserving the available forest resources and their overall value. They are also responsible for ensuring sanctions for non-compliance. Protection and conservation activities include activities to prevent illegal logging.

In addition to the forest management entities, there are public enterprises responsible for the protection of Serbia's five national parks, comprising a total area of 159,525 ha (5 percent of the total forest cover). Separate public companies[15] have been established by law, the primary task of which is the management of the national parks.

Forests in the national parks are managed in accordance with special protection programmes, regulations, management plans and other documents, and primarily on the basis of the Law on National Parks, the Law on Forests and the Law on the Protection of Nature.

Private forests make up almost 50 percent of the total forest area, which represents significant resources. However, the average forest plot is 0.3 ha, and very often the implementation of forest management measures is inadequate. There are about 500,000 individual forest owners, mainly unorganised, with relatively few local associations of private owners. The public forest enterprises carry out some tasks in private forests. According to available data the total number of employees in private forests in the Srbijasume public enterprise is 320, including 53 graduates in forestry engineering and 267 technicians. This company performs professional services including annual plans, project documentation for afforestation, remittance for harvesting, tree marking and professional investigations. It also provides expert opinions and issues shipping/transportation documentation. (See Table 3.)

The management authorities fulfil their mandate largely in compliance with management plans that can vary in terms of content and time period.

Case Study 4: **Forest management plans in Montenegro**

There are several levels and types of forest management plans in Montenegro, most with a term of 10 years but not streamlined and not fully coherent:

- general 10-year plans for the districts;
- specific 10-year plans for management units;
- programmes for private forests by cadastre communities;
- annual detailed executive plans;
- afforestation plans; and
- annual fire prevention and control plans.

Half the forests in Montenegro currently have valid management plans. Areas not subject to management plans are mainly those in which old plans have expired or areas that have not so far been covered. This discrepancy makes it difficult to develop the entire set of plans for the country, even within a 10-year period. The hierarchy of plans could be streamlined (integrating afforestation plans into the district management plans, and fire management and private forest programmes into the unit management plans), and a phased approach could be introduced.

Enforcement authorities

The control and enforcement of forestry regulations and standards are often shared between the Forestry Inspectorate, (public) management entities, forest guards, the forest police and the state police services.

TABLE 3: **Division of roles in the forestry sector**

STRATEGIC PLANNING UNIT	CENTRAL MONITORING AND MANAGEMENT UNIT	FOREST INSPECTORATE	FOREST ADMINISTRATION
• Overall policy formulation • Legal drafting • Planning and supervision of National Forest Master Plan • Budget planning and control • Participation in cross-sectoral coordination (sectoral plans and SEA) • International relations • Public relations Serbia	• Review of inventory • Review/approval of forest management plans • Review/approval of forestland designation and ownership changes • Supervision of management effectiveness	• Supervision of compliance with law and regulations by Forest Service • Supervision of private sector forest owners by the Forest Service • Supervision of forest concessionaires	• Information system • Management planning for state (and private) forests (including inventory) • Management of forestlands • Operational planning and tree marking • Contracting out and managing concessions • Advice and day-to-day supervision in the forests • Management (and protection) for nature conservation, recreation and ecological functions • Emergency management • Services for private forest owners (extension service)

Case Study 5: **Forest Guardians in Serbia**

Some 650 forest security guardians, who have completed at least secondary education, are involved in forest protection. These forest guardians wear a uniform and have official identity cards but do not carry weapons. The forest guardians can investigate the origin of the wood they find in the forest, in a forest depot or on a forest road, and even wood that is in private possession if there are reasons to believe that it originates from illegal logging. Forest protection services are in permanent communication with the judicial authorities (e.g. state prosecutor) and competent police authorities, which, upon request, provide assistance in more serious cases.

Case Study 6: **Forestry Police in the former Yugoslav Republic of Macedonia**

Forests in state and private ownership are protected by the forestry police under the Ministry of Agriculture, Forestry and Water Economy.

Members of the forestry police are authorised to:

- stop and detain persons caught committing criminal offences relating to forests, or where there is reasonable suspicion that they have committed such acts;
- inspect all legal persons that transfer or transport wood and other forest products, in all places where they keep wood and other forest products;
- temporarily remove objects and resources related to a committed crime or offence;
- monitor and report on the state of forests in connection with illegal logging and forest theft, forest fires, plant diseases, forest pests and other disasters;
- inform the competent authorities of the illegal appropriation of forests and forestland; and
- bring proceedings against offenders before the competent authority.

Inter-institutional cooperation

There is no official body promoting inter-institutional cooperation in the management of forest resources in any of the countries covered. However, some countries do

have the legal basis for ensuring adequate coordination among interested parties, such as an inter-ministerial council comprising representatives of the government, the ministry responsible for forestry, other important ministries, local government, the private sector and other interested parties.

In most of the countries it is the police authorities that are responsible for preventing illegal forest activities and for taking action against perpetrators, together with the forestry police.

One weakness in existing forest administrations is the lack of permanent coordination between all participants (forest guardians, forestry and other inspectorates, police authorities, investigating authorities, prosecutor, and judicial authorities), based on mutual trust and jointly established goals. The current lack of forest guards in private forests is also a major problem, especially when migration to urban areas leaves many private forest areas unattended. These forests are practically without protection from illegal logging, because the legal obligation of guardianship, in most countries, rests with the owner. The problem is difficult to remedy since the establishment of a service for private forest guardianship requires financial resources that currently do not exist in the state budget. One partial solution would be joint forest guardianship through associations, in the broader framework of inter-institutional cooperation.

Forestry governance

In general, forestry governance is a new concept in the region although there has been an increasing tendency, since 2005, to incorporate forestry governance and sustainable forestry into strategies, forestry policies and laws. Examples include the Serbian Forestry Development Strategy (2006), which contains specific elements that are directly or indirectly related to the activities required in order to suppress illegal activities in forestry.

In addition to forest governance, corporate social responsibility (CSR) is also an emerging concept in the SEE region. It is influenced by consumer expectations of higher-quality products produced in accordance with international environmental and social principles; and the expectations of employees, civil society organisations and governments concerning private sector social investments in the local communities in which a company operates. The concept of CSR is hindered by the ongoing transition process, which is characterised by relatively underdeveloped markets, an inadequate legal framework and weak law enforcement.

Case Study 7: **Strengthened legislative and policy framework in Albania**

Past agrarian policies and practices, such as deforestation to create agricultural land; harvesting more than double the annual allowable cut; overgrazing; and forest and pasture fires have led to the degradation of the country's landscape, the acceleration of soil erosion and heavy impacts on biodiversity. Along with a decrease in forests and pastures, the consequences are reflected in the fall in their productivity. Indicators of irreversible forest degradation are the destruction of valuable ecosystems on the plains and the transformation of about 70 percent of high oak forests into coppices.

The misuse of natural resources for some decades, including forests and pastures, together with political and economic changes from a centralised economy towards a market-oriented economy, have had a great impact on the environment as a whole, and especially on forests and pastures close to villages, as well as green spaces in urban areas.

The government has made many changes to the legislation and regulations that make up the legal and policy structure for forestry. These changes are likely to continue as the government and society gain experience and identify the need for fine-tuning policies. In Albania, the significant reorientation of the socioeconomic model provides a number of macroeconomic and social policy mandates, within which all sector policies must be formulated. These mandates include:

- recognition of private property rights and the privatisation of public property;
- decentralisation and strengthening the role and capacity of local government;
- continued transformation to a market-driven economy;
- enhanced popular participation and support for the role of non-governmental organisations;
- rationalisation of the role of government, institutional reform and increased effectiveness and efficiency in the use of governmental resources; and
- strong commitment to the modernisation of agriculture and livestock husbandry.

Concept of sustainable forest management

The concept of sustainable forest management was defined in 1993 at the Second Ministerial Conference on the Protection of Forests in Europe as follows: "the stew-

ardship and use of forests and forestlands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national and global levels, and that does not cause damage to other ecosystems."

The forestry sector in the region has suffered great losses due to conflicts, war, isolation and lack of both human and financial resources. Between 1989 and 2000, the level of education and training fell and is still far below what is necessary to ensure the upgraded skills needed to fulfil all the requirements related to the sustainable management of forest resources, biodiversity and environmental issues.

The success of sustainable forestry policies and management is largely dependant on access to sufficient financial and human resources. Even the most elaborate and ambitious sustainable forestry management can only be truly effective if coupled with the necessary follow-up activities and if continuously evaluated and updated.

Case Study 8: **Green Strategy in Albania**

Recognising the fundamental changes that have taken place in the country since 1991 and the continuing importance of agriculture to the national economy, the Ministry of Agriculture and Food formulated the Strategy for Agricultural Development, also known as the Green Strategy, in 1998. It is based on the Constitution of the Republic of Albania, which proclaims that "The state aims at ... the rational use of forests, waters, and other natural resources according to the principles of sustainable development." The Green Strategy was also approved by the Council of Ministers. The strategy for the use of forests and pastures is incorporated in the Green Strategy.

Case Study 9: **Sustainable forestry management in Montenegro**

In Montenegro, the forestry sector faces the challenge of improving forest management practices, especially in forests devastated in the past. Montenegro has the long-term vision of improving the state of all forests in order to balance their protective, ecological, social and economic functions and to assure sustainability.

Montenegro has vast resources of young forests, planted on abandoned agricultural land and coastal maquis. This type of forest is vulnerable to regular wildfires and/or periodic non-selective cutting of larger trees for firewood. Poor forest management means that these young forests are locked into a cycle of low productivity and poor-quality trees. Productivity remains low because the forest is continually trying to re-establish itself from small trees that are in competition with weeds and can never achieve canopy cover (and therefore faster growth). Quality remains low because the trees are mostly pioneer species and small stems that are inappropriate for commercial use. If selectively thinned (via the gradual removal of low-quality, low-value pioneer species and the retention of better-quality, higher-value stems) and protected from fire and the illegal cutting of firewood under a sustained management schedule, these forests could be regenerated and become high forest with useful species over the next few decades. They could thus become a valuable future resource for economic rural enterprise and are also a substantial net carbon sink (absorbing and storing a large volume of carbon compared with young forests).

Since 2000, a gradual movement can be perceived towards more effective legislation and policy and stricter monitoring and control systems in several countries. For instance, in Montenegro the Forest Law was adopted in 2000 and the forest sector was reformed in order to adapt its institutional structure to the market economy and to make it comparable with EU member states. The competencies and responsibilities of the various central forest authorities have been better defined. The Montenegrin Forest Law defines forests as a resource of common interest, which are maintained and exploited under such conditions and in such a way that ensures the permanent preservation and long-term enhancement of their natural values and environmental functions; and their exploitation, protection against harmful influences, and continuous increase in increment. The relevant ministry monitors the enforcement of the provisions of the Forest Law, bylaws, plans, programmes and management plans through the inspection service. The key document in the policy framework for sustainable forest management is the National Strategy for Sustainable Development, 2008, which contains 35 policy statements covering institutional, environmental, socioeconomic and market aspects and recognising national and global responsibility for the sustainable management of forests as an important natural resource. The strategy is based on and linked to the National Forest Policy and the National Forest Programme, which form the basis for the current institutional reform in the forestry sector.

Adopted at the Ministerial Conference on the Protection of Forests in Europe in 2003, Vienna Resolution 1 "Strengthen Synergies for Sustainable Forest Management in Europe through Cross-sectoral Cooperation and National Forest Programmes" defines in greater detail the concept of the National Forest Programme. In Montengro, this involves:

- the development of National Forest Policy (completed);

- the development of forestry and hunting laws (under preparation);
- the development of the Forestry Sector Development Programme (strategies and budgets: under preparation);
- frequent participatory monitoring of programme implementation;
- the reform of government institutions and forestry services (under preparation);
- building the capacity of human resources at all levels; and
- support to the establishment of a sustainable private forestry sector.

Case Study 10: **Privatisation of Montenegro's sawmill**

Management systems in Montenegro changed dramatically when the state privatised sawmills between 2003 and 2008. The sawmills were in a critical condition, with outdated infrastructure, and using techniques and technology that did not meet modern market requirements. As part of the national economic strategy, the state contracted private sawmill companies and gave concessions for state forests for seven to 15 years (to secure the raw materials for the wood industry). The concession system has implications for the tasks and responsibilities of the state forest administration. It requires specific institutional and human resources to manage the concession contracts, control forestry work and extend sustainable forest management to the private sector. The concession system supports some wood processing industry but does not cover all the goods that forests could provide in a proper system. Concession holders are required by their contracts to follow the forest management plans prepared and approved by the state. However, according to these somewhat simplistic contracts, the concession holders pay a single price for the volume of broadleaved/coniferous timber that they remove, regardless of the quality. Since they pay the same price for low-quality timber, they inevitably prefer to harvest better-quality stems and to leave behind the poor-quality wood that is expensive to remove and has no end market.

The poorer-quality state (and private) forests remain unmanaged, typically with no valid management plan and no allocated concession holder. Trees are removed haphazardly (and typically illegally) and only generate low-quality biomass for firewood. There is only limited demand on the local domestic firewood market for the large volume of low-quality woody material that would be generated by recommended silviculture, and concession holders are reluctant to carry out the silvicultural operations required of them by the management plans, because they have no commercial end-use from the wood raw material that is generated.

Case Study 11: **Sustainable forest management in the former Yugoslav Republic of Macedonia**

The Strategy for the Sustainable Development of Forestry in the former Yugoslav Republic of Macedonia was approved by the government in July 2006. This strategy constitutes the national forest policy and was developed by the Ministry of Agriculture, Forestry and Water Economy in the context of institutional development and capacity building in the forestry and forest industry sectors and in line with other relevant documents from world organisations and the EU. The strategy also sets out conditions for identifying national and international funds to support the development of forestry, and defines the main directions for regulating the forestry sector in line with national interests and international obligations. The main priority is to achieve sustainable development by increasing forest surface.

In the 2009 Law on Forests, sustainable management is defined in Article 12, paragraph 20: "Sustainable management means managing and using forests and forestlands in a manner and to an extent that maintains their biodiversity, productivity, capability of regeneration, vitality and potential for meeting, now and in the future, their relevant environmental, economic and social functions at local, national and global level, in a way that does not cause damage to other ecosystems." This concept is applied in the preparation of special plans for the management of (state) forests, where growth has to exceed harvesting. There are series of measures that a manager is obliged to implement within the term of the plan. Sustainable management must be applied where the broader interests of society are more important than the economic interests of individuals or other stakeholders.

For privately owned plots located in state forests where a plan has been adopted that includes specific activities, the same measures and activities apply as for the state forests. Separate decisions apply to plots that fall outside the state forest, which are not subject to an adopted plan or specific activities.

Case Study 12: **Sustainable system of forest communities in Bosnia and Herzegovina**

Forests in Bosnia and Herzegovina are governed by the principle of sustainable productivity, which supports a sustainable system of forest communities and habitats. This principle favours natural forest renewal, diversity and the overall protection of all forest values. The system is elaborated in detail and is part of all management plans. Forest economic plans are developed for every forest area for a 10-year period and represent the basic document for planning forest management.

On the basis of geological-pedological and composition characteristics, forest economic units are further divided into departments and sections. The size of the department varies according to terrain characteristics, but is on average 50 ha. This scientific forest governance concept was developed over 100 years ago and is entirely in compliance with international criteria for sustainable forest governance.

International dimension

Bilateral relations

The countries lack defined official bilateral relations with neighbouring states to prevent illegal logging. Existing relations cover mainly the smuggling of goods, including wood. There is normally unofficial inter-institutional cooperation between these countries and neighbouring countries, mainly at ministerial level.

A more permanent exchange of experience is needed in order to build capacities in cooperation with other countries and international organisations. The exchange of experiences and capacity building takes place largely in the context of individual, isolated projects that have a limited duration.

Case Study 13: **Control of cross-border trade in Kosovo (as defined under UNSCR 1244)**

The customs authorities control cross-border trade and carry out market and phytosanitary inspections. Irregularities in documentation are a problem that has partly been addressed. Most trade is with Bosnia and Herzegovina, but there is also trade with Montenegro and Serbia, mainly in the form of imports. No significant amounts of illegal wood have been recorded, although there is likely to be a large margin of error. The Kosovan authorities work in cooperation with the Serbian border police to prevent illegal trade.

Further institutional and practical measures are needed in the border regions to combat trade in illegally logged wood. However, a lack of political will, funding and capacity have created a serious obstacle to efficient cross-border cooperation.

Joint actions to control the cross-border traffic of timber assortments are not implemented in practice due to the lack of obligations and mandates for carrying out such controls.

International legal and political commitments

The countries of South Eastern Europe are signatories to many important international multilateral environmental agreements (MEAs). These international commitments were made during the years of political change and in the aftermath of the war. Some countries, including Serbia, are in the process of reforming and modernising their development strategies and forestry policies in accordance with the new circumstances and their international commitments. Since gaining independence in 2006, Montenegro has become a signatory to a number of MEAs.[16] The status of MEA ratification in SEE countries is shown in Table 4.

In addition, most of the countries have signed the Vienna Declaration "European Forests – Common Benefits, Shared Responsibilities" and the two resolutions of the Warsaw Declaration: "Forests, Wood and Energy", and "Forests and Water".

In the context of EU accession negotiations, the countries also need to bring their national legislation into line with EU standards. Forestry issues are covered mainly in the chapter on environmental protection, one of 31 legislation chapters in acquis communautaire. All the above MEAs are expected to be ratified during the EU accession process. The countries will also have to achieve approximation to the following legislation:

1. Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora
2. Council Directive 409/79 on the conservation of wild birds (1979)
3. Council Directive 105/99 of 22 December 1999 on the marketing of forest reproductive material
4. Council Regulation (EEC) No. 2158/92 of 23 July 1992 on protection of the Community's forests against fire
5. Council Regulation (EEC) No. 3528/86 of 17 November 1986 on protection of the Community's forests against atmospheric pollution
6. Council Directive 68/89/EEC of 23 January 1968 on the approximation of the laws of the Member States concerning the classification of wood in the rough
7. Commission Regulation (EC) No. 1232/98 of 17 June 1998, amending Council Regulation (EEC) No. 3696/93 on the statistical classification of products by activity (CPA) in the European Economic Community

8. Council Regulation (EEC) No. 1615/89 of 29 May 1989 establishing a European Forestry Information and Communication System (Efics)

International financial support to the forestry sector

Significant international cooperation, in the form of bilateral and multilateral financial aid, began in the late 1990s and early 2000s. It reached its peak in around 2005 but is now slowly being phased out. In Kosovo (as defined under UNSCR 1244) and Serbia, for example, the main source of support in the forestry sector was UN FAO. Some of these projects were carried out in combination with funding from individual countries, in particular the Scandinavian countries and the USA. In Montenegro, international funding represents a significant proportion of the overall support for the ongoing reforms in the forestry sector. Recognising the importance of forestry for the development of Montenegro, such projects address governance weaknesses in the sector and attempt to prevent or mitigate obstacles to progress.

Some of the initial projects carried out in the region were aimed at strengthening the logistical basis and building the technical capacities of the institutional structures (vehicles, office furniture, computers and nursery development). They also included inventory projects and forest sector programmes. Financial support is increasingly being directed towards training and education in order to better prepare the countries for sustainable planning and management in the forestry sector. Forestry faculties are being established, offering higher vocational and educational programmes. Newer technologies, such as geographic information systems (GIS) are gradually being introduced in the region. Some funds extend to the wood processing sector, where the problem of outdated technology needs to be addressed in order to make the industry more competitive. However, most of the assistance is directed towards forest conservation, sustainable forest management, forest certification schemes, the implementation of reforms in the legislative and institutional frameworks, participatory management and biodiversity conservation.

Case Study 14: **Examples of forestry projects supported by international donors in Albania**

1. An FAO co-funded project between 2002 and 2003 supported the institutional reform of the forestry sector by the Directorate General of Forests and Pastures of the Ministry of Agriculture and Food.
2. An action plan was developed by the Directorate General of Forests and Pastures (DGFP) and the Ministry of Agriculture and Food, supported by the FAO. The main objectives were to establish a high-level inter-ministerial task force; to improve the judicial branch responsible for combating illegal logging; to enhance capacity, especially at regional and local level; and to define pilot areas and conduct an independent assessment of illegal logging.
3. The Forestry Project, funded by the Albanian Government and the World Bank, helped to reduce poverty in targeted areas.

Case Study 15: **Examples of forestry projects supported by international donors in Bosnia and Herzegovina**

1. World Bank: Forest Development Project
2. USAID: Cluster Competitiveness Activity (CCA)
3. World Bank: Economic Management Structural Adjustment Credit (EMSAC)
4. World Bank: Development of National Forest Standards
5. National forest inventory
6. A project co-financed by SIDA and USAID: Fostering Interventions for Rapid Market Advancements (FIRMA)
7. Department for International Development Cooperation (DIDC), Finland: Support to tertiary education in forest policy and economics through the European Forestry Institute (EFI)
8. European Commission Delegation: Support to regional development agencies involved in cross-sectoral education and training
9. EU Forces (EUFOR): Support to Bosnia and Herzegovina police, including assistance to stop the removal of illegal timber and the transportation of forest and wood products
10. EU Police Mission (EUPM): Support (including training) to Bosnia and Herzegovina police, especially with regard to organised crime
11. Gesellschaft fur Technische Zusammenarbeit (GTZ), Germany: Support to wood processing companies
12. Office of the High Representative (OHR): Assistance and support to Bosnia and Herzegovina governance pertaining to the illegal trade in timber and legislation

TABLE 4: **Ratification of key MEAs**

Convention on Long-range Transboundary Air Pollution (1979)	Albania (2005) Bosnia and Herzegovina (1992) The former Yugoslav Republic of Macedonia (1997) Montenegro (2006) Serbia (2001)
Convention concerning the Protection of the World Cultural and Natural Heritage (1972)	Albania (1989) Bosnia and Herzegovina (1993) The former Yugoslav Republic of Macedonia (1997) Montenegro (2006) Serbia (2001)
Convention on Wetlands of International Importance (Ramsar) (1977)	Albania (1996) Bosnia and Herzegovina (1992) The former Yugoslav Republic of Macedonia (1991) Montenegro (2006) Serbia (1992)
UN Framework Convention on Climate Change (1992)	Albania (1994) Bosnia and Herzegovina The former Yugoslav Republic of Macedonia (1997) Montenegro (2007) Serbia (2001)
Convention on Biological Diversity (1992)	Albania (1994) Bosnia and Herzegovina (2002) The former Yugoslav Republic of Macedonia (1997) Montenegro (2006) Serbia (1992)
Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) (1979)	Albania (1999) Bosnia and Herzegovina (2009) The former Yugoslav Republic of Macedonia (1999) Montenegro (2010) Serbia (2008)
Convention on International Trade in Endangered Species (CITES) (2001)	Albania (2003) Bosnia and Herzegovina (2009) The former Yugoslav Republic of Macedonia (2000) Montenegro (2007) Serbia (2006)
Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification	Albania (2000) Bosnia and Herzegovina (2002) The former Yugoslav Republic of Macedonia (2002) Montenegro (2007) Serbia (2007)
Access to Information, Public Participation in Environmental Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention) (1998)	Albania (2001) Bosnia and Herzegovina (2008) The former Yugoslav Republic of Macedonia (1999) Montenegro (2009) Serbia (2009)

Case Study 16: **Examples of forestry projects supported by international donors in Kosovo (as defined under UNSCR 1244)**

1. The Sustainable Forest Management (SFM) project, funded by the European Agency for Reconstruction (EAR). Farmers and forest owners benefited from the training and support that helped them to diversify rural farm activities. Other beneficiaries were the scientific community, state institutions and environmental NGOs, which were included in the process of Natura 2000 site identification and in the consultation process for the management of the national parks. Stakehold-

ers included institutions within the Ministry of Agriculture, Forestry and Rural Development, the Kosovo Forest Agency and the Ministry of Environment and Spatial Planning. Local forestry businesses benefited from better-managed forests in terms of the production of wood and non-wood products.

2. The Netherlands Development Organisation (SNV Balkans) and SIDA launched a four-year agreement in January 2009 on strengthening sustainable private and decentralised forestry by promoting economic development through capacity building for farmer-based forest management. The project addresses concrete issues at regional level with the aim of contributing to the economic development of forestry. SNV contributes by providing advisory services and by working closely with the actors involved in private and decentralised forestry. The programme is resulting in sustainably managed private and decentralised forests that provide appropriate products and services to society.

Case Study 17: **Examples of forestry projects supported by international donors in Serbia**

1. UN FAO technical cooperation programme (tcp/yug/2902): Institutional Development and Capacity Building for the National Forest Programme, 2003. This programme supported the development of the new Serbian forest policy, as well as the revision of the Forest Law.
2. UN FAO government cooperative programme (GCP/FRY/003/FIN): Development of the Forest Sector in Serbia, 2005-2008. The project was financed by the Government of Finland.
3. European Institute for Forestry (EFI) (based in Joensuu, Finalnd): Strengthening Capacities in Education and Training for Forest Policy and Economics Development in the Western Balkan Region (FOPER).
4. Bilateral assistance from the Government of Norway: Forest Sector Programme, Phases 1, 2 and 3 in the period 2003 to 2007. This programme was implemented by the Norwegian Forestry Group.
5. Official Development Assistance (ODA), Slovak Fund: Developing Capacities of the Private Sector for the Sustainable Management of Forests in the Republic of Serbia; and Strengthening Skills and Infrastructure for the Protection and Regeneration of Forests in Serbia, 2006
6. Austrian Development Agency (ADA): Project No. 8064-01/2004 – Participatory Development of a Plan for the Implementation of the Restructuring of the Public Enterprise, implemented by Austrian Federal Forests (OBf)

There were relatively few projects directly addressing the problem of illegal forest activities, with the exception of Montenegro, where three international donor projects directly target illegal logging. However, many of the projects mentioned here have at least indirectly contributed to ameliorating the situation through institution strengthening and the reform of the legislative and policy frameworks. The implemented projects are likely to contribute to the prevention of illegal forest activities.

Case Study 18: **Examples of forestry projects supported by international donors in Montenegro**

- The Ministry of Foreign Affairs, Finland, with co-financing from Montenegro: Environmental GIS for Montenegro. The project is implemented by UNDP Country Office in Podgorica and aims to ensure that decision making in the sustainable management of natural resources is adequately based on accurate GIS data.
- The Grand Duchy of Luxembourg, with co-financing from Montenegro (Ministry of the Economy): Forestry Development in Montenegro (FODEMO). The project is implemented by Lux-Development with the aim of improving the management of forest resources and their use for the sustainable development of the forestry sector.
- The Netherlands Development Organisation (SNV) and Montenegro through the Forestry Development in Montenegro project (FODEMO): Preparation of the National Forest Policy. Further activities of the SNV Montenegro office will include the setting up of private forest owners associations and their technical support (several associations have already been established).
- The World Bank and the Global Environment Facility (GEF): Integrated Management of the River Basins of the Tara and Lim. The project aims to reduce economic losses and to create new, more sustainable economic opportunities for communities in the Tara and Lim River basins through improved water and landscape management. The forestry component of the project focuses on forest degradation mapping and reforestation planning, as well as biodiversity and ecological mapping and planning.

In addition, there are projects that specifically target illegal forest activities:

- The World Bank: Developing and Implementing National Action Plans to Improve Forest Governance and Control Illegal logging in European and Central Asian Countries.

This projects supports the development of national action plans in Moldova, Serbia, Montenegro and Albania and strengthens cross-country capacity building.

- Organisation for Security and Cooperation in Europe (OSCE) Mission to Montenegro: Montenegrin Forests. The overall goal of the project is to help prevent illegal logging and trade by strengthening institutional and technical capacities and by enhancing inter-institutional cooperation through a clearer definition of their competencies and responsibilities. This project engages a wide range of stakeholders including ministries, forest administration, police, customs administration, national parks, environmental NGOs as well as the judiciary.
- The US Embassy in Podgorica: Green Telephone for Green Forests, implemented by Greens of Montenegro. The overall objective was to raise public awareness and to encourage active public involvement in reporting illegal logging and forest fires. The project was implemented in 2007 and 2008, and may be extended.

Case Study 19: **Examples of forestry projects supported by international donors in the former Yugoslav Republic of Macedonia**

The following projects were implemented between 2004 and 2009:

- UN FAO, technical cooperation programme (TCP/MCD/3201): Strengthening National Forest Fire Preparedness (2009)
- UN FAO, technical cooperation progromme (TCP/MCD/3002 (A)): Institutional Development and Capacity Building in the Forestry and Forest Industry Sub-sectors. The project developed the Strategy for the Sustainable Development of Forestry in the Republic of Macedonia (2005-2006)
- UN FAO: Introduction of Improved Agriculture, Mechanisation, Irrigation and Marketing (2004-2005)
- Balkan Foundation for Sustainable Development: Capacity Building for Private Forestry in Macedonia (2006)
- Balkan Foundation for Sustainable Development: Activities towards the Proclamation of Shara National Park (2007)
- Balkan Foundation for Sustainable Development: Classification of European Biomass Potential for Bioenergy Using Terrestrial and Earth Observations (CEUBIOM) (2008-2009)
- Confederation of European Forest Owners: Private and Community Forestry – Developing Livelihoods on the Basis of Secure Property Rights in Selected Countries of South Eastern Europe (2009)
- Swedish International Development Cooperation Agency (SIDA): Facilitation for the preparation of the National Strategy for the Sustainable Development of the Republic of Macedonia, financed by the Government of the Kingdom of Sweden (2006)
- The Netherlands Development Agency (SNV): many projects for the development of strategies for tourism development in Macedonian municipalities
- European Institute for Forestry (EFI): Strengthening Capacities in Education and Training for Forest Policy and Economic Development in the Western Balkan Region (FOPER)

Chapter 2: **Forest Use Authorisation and Other Relevant Procedures**

Procedures in state and private forests

It is common practice in the region to have separate procedures in state and private forests. The main difference between the two is that public forest management companies/entities, which are also users of forests in state ownership, have the legal right to carry out all the necessary procedures in the context of their professional services, and to establish the appropriate documentation. On the other hand, although private forest owners have big responsibilities in protecting and managing private forest parcels, they are not normally able to carry out professional tasks by themselves (e.g. the marking of wood to be harvested, and the harvesting of wood). These services are entrusted to the (public) management entities that operate in state-owned forests.

Case Study 20: **Logging procedures in Serbia**

In Serbia, logging procedures are prescribed in the Law on Forests. This legislation describes the various steps in meticulous detail, from the development of the forest management plan to the stage at which the timber or wood products reach the customer.

1. Procedures for state-owned forests

There are two initial mandatory planning steps. The first is the development of forest management plans (normally for a period of 10 years) by forest management companies, which must be approved by the Ministry of Agriculture, Forestry and Water Management. The second is the development of annual executive forest management plans, according to which the logging of previously marked trees is carried out by competent forestry engineers in line with the forest management plans.

These activities can either be carried out by forest management companies or contracted out in line with the public procurement procedures set out in the Law on Public Procurement (Official Gazette 39/02). Where logging is not carried out in accordance with the law, the forest management company is held responsible rather than the contractor. The contracting company receives the logged wood along with a registration document. Loading, shipment and sales are carried out by forest management companies. The loading bill issued by the forest management company states the class and quantity of each individual assortment, the final buyer and the means of transportation, and proves the origin of the wood. In addition, the assortment is marked with a number identifying the person that loaded the wood. Some companies also use a voluntary system of marking, which includes the serial number or bar code of the assortment. The loading bill reduces the risk of abuse, since several parties are controlled by forestry, financial and market inspections. Illegal activities are most likely to take place prior to the preparation of the shipping documentation, through the falsification of the type and quality of the wood. It is less common to provide incorrect data on quantity, since this is registered at the time the contractor receives the goods. Compliance with the above procedures could be improved through increased recourse to available information technologies such as global positioning systems (GPS) and field personal digital assistant (PDA) computers. Such technologies further reduce the risk of abuse and can also simplify procedures in the chain of controlling wood traffic from the site of logging to the wood processing facility. Progress in this area has been achieved in neighbouring forest organisations in Croatia and Slovenia.

2. Procedures in private forests

Procedures differ from those that apply in state forests, especially since they are based on distrust of private owners regarding their willingness, capacity and expertise to ensure appropriate forest management and the risk of them prioritising short-term economic gains without considering the long-term consequences. As in state-owned forests, logging can only take place according to mandatory procedural steps. The basic planning document is the private forest management programme, which is equivalent to the forest management plan in the state-owned forests. Although the Law on Forests makes such a document obligatory, enforcement is weak in practice due to the weakness of the available sanctions for non-compliance. The new Law on Forests will introduce a methodology for developing this document. According to the current law, private forests must be managed in accordance with provisional

annual management plans, as developed by the forest management companies and approved by the relevant ministry. However, private owners are often unaware of the existence and content of these documents and they are not part of the decision-making process. Owners may only harvest for their own use or for resale after having consulted the forest management companies and after submitting a written request to the local forest directorate. Applications must contain evidence of ownership and must be submitted in advance. Prior to logging, the forest management company marks, measures and registers the trees to be logged in the presence of the forest owner. They are listed in a specific document, which is signed by the owner who receives a payment slip (deducting 3 percent tax on the total value of the wood). Although most owners carry out the logging themselves, it is increasingly common for private companies to be hired, especially when the owner lives at a distance from their forest. Private owners may not move the logged wood until a professional service carries out on-the-spot controls and issues the shipping documentation. Transfer and sale may not be concluded before payment of all applicable forest use fees.

This system was established in order to combat illegal activities, but it is inadequate due to the huge number of plots and private owners (over 500,000) and the restricted number of forestry experts (approximately 320 professionals). The number of staff in the professional services cannot be increased due to lack of state funds. The forest use fees paid by the owners cover only 30 to 40 percent of the funds required. Procedures for private forests are criticised by both private forest owners and the professional forestry services as being too complicated, to implement. In addition, non-compliance is not addressed through efficient sanctions and deterrents. The system could be improved if private owners were more involved in forest management and decision making and if the responsibility for and costs of forest management were shifted to private owners. As a step in this direction, the creation of associations of private forest owners can be encouraged, as well as the provision of education and training in forest management.

Case Study 21: **Use of forests in Montenegro**

Forests in Montenegro are used mainly in the form of concessions regulated by the Law on Forests, or through the sale of wood by the roadside.

Concessions
At present, only one long term-concession (30 years) has been granted for the territory of Pljevlja. Until recently, concessions were awarded mainly on an annual basis. In April 2008, the Forest Administration announced a tender for more than 62 management unit concessions of between seven and 15 years. Concessions involve the transfer of the responsibility for and costs of most forest management tasks to the concessionaire. However, one significant risk is that the concessionaire will focus mainly on the exploitation of wood and will not consider ecological, protection and social functions. Concessionaires can range from large firms outside the region to small local enterprises.

Sale of wood at the roadside
This allows greater control over forest management and more direct revenues to the Forest Administration. Although it is labour intensive and requires highly trained forest wardens, this can also be seen as a benefit in that it provides regular employment on the local labour market. A system of concessions in combination with roadside sales also helps to control the operations of concessionaires.

Procurement procedures and utilisation fees
Technical and organisational criteria are being identified for long-term concessions, including processing capacity. Potential concessionaires must comply with these criteria in the tendering procedure. The volume of timber to be used will be divided into lots in proportion to the capacities of the concessionaries in order to ensure a fair distribution of access to timber. In the initial phase, these criteria will take into account the existing condition of the wood processing and forestry enterprises. In the pre-accession period, they will also introduce international standards and good practices in terms of quality assurance, technology, organisation, safety at work and environmental protection. The contracts will define the responsibilities and duties of users, which may include responsibilities related to silviculture, the construction of forest roads, forest protection, the prevention of fires and protection from fires under the supervision of the Forest Administration. These responsibilities and duties may increase in the case of long-term contracts.

The current trend is towards contracts for use that are awarded for at least five years, which can also be extended to cover wood processing companies. There are also possibilities for joint management by public management companies and associations of private owners in certain areas.

Utilisation fees will be regulated in the tendering process, in line with market conditions. The fees mainly depend on tree species and class, forest accessibility, transportation distance, harvesting intensity per hectare, the market value of the assortments, and the capacity of the concession holder to take on management-related responsibilities in relation to the implementation of forest functions.

The renewal of utilisation contracts will depend on the results achieved by the users in the foregoing contractual period and on the meeting of technical and organisational

standards. Enterprises will be licensed by the Ministry of Agriculture, Forestry and Water Management, based on the opinion of the Forestry Council, which is obliged to develop guidelines that define the criteria to be met by enterprises in order to get a license.

Legal procedures for logging

A logging licence is often a requirement of national law and is normally issued by the ministry in charge of agriculture and forestry. Logging must be carried out in accordance with logging management plans, which are often prepared by other authorities, such as the forest agency. Licences to harvest trees in a public forest are valid only if the harvest is consistent with a valid operational management plan for the forest.

Another important precondition for logging is the prior selection and marking of trees, as well as the marking of the area and of the wood mass. This is normally done in accordance with special plans a few months before logging is carried out. Trees must be marked in accordance with certain requirements by a person with a licence for performing professional forest services. The marking must be recorded in a registry. The means for marking trees normally need to be provided by the owner/user of the forest. The marking is followed by a control, normally by the forestry inspector.

Other procedural tasks are normally under the responsibility of the forestry ministry or forest protection agency. These include setting minimum prices for various kinds and qualities of wood; and setting and collecting licence and marking fees.

Felling and transportation procedures differ to some extent between public and private forests. Harvesting in public forests is based on a long-term management plan, while harvesting in private forests is based exclusively on an annual management plan. State forests require transparent procurement procedures. Procedures in relation to tree marking, the registration of marked trees and the issuing of permits for felling and transportation are very similar for both types of forest. One major difference is that the law has stricter requirements for the monitoring of contract implementation in the case of publicly contracted companies than for entities harvesting in private forests.

Case Study 22: **Legal infrastructure on logging and transportation in Kosovo (as defined under UNSCR 1244)**

The legal infrastructure in place is well designed and is adequate to prevent illegal logging and control forest harvesting. It was created by local professionals in close cooperation with international bodies. It draws on foreign experience and is in harmony with EU legislation.

Felling and transportation procedures in private forests
Based on the annual management plan:

- Forest owner submits the application.
- Title deed and a copy of the plan must be attached to the application form.
- Application is revised if necessary prior to approval.
- Trees for felling are selected and marked.
- Marked trees are registered.
- Felling permit is issued.
- Marked trees are felled and wood assortments processed on the spot.
- Felling is approved and wood assortments stamped for transportation.
- Freight permit is issued on request.

Felling procedures in public forests
Based on the long-term (management) plan and annual plan:

- Trees for felling are selected and marked.
- Marked trees are recorded.
- Structure of wood volume is revised.
- Annual operational plan is drafted.
- Tender is issued.
- Successful bidder is selected.
- Contracting and licensing procedures are carried out.
- Logging activities are monitored according to the legal provisions of the contract.
- Marked trees are felled and wood assortments processed on the spot.
- Felling is approved and wood assortments stamped for transportation.
- Freight document is issued on request by the contractor.

Case Study 23: **Licensing in the former Yugoslav Republic of Macedonia**

The former Yugoslav Republic of Macedonia does not yet have a system of felling licenses. However, a "forestry certificate" system, in which licensed loggers provide certified logging of different classes of timber is planned for 2010. The advantages of a licensing scheme include re-

duced timber prices, improved wood quality and better timeframe for wood preparation, which will stimulate competition between wood traders, loggers and the companies that manage the forests.

The licensing scheme will help to make the former Yugoslav Republic of Macedonia a competitive country on the wood market with neighbouring countries and the EU. By meeting EU standards for timber trading on the EU market, the volume of timber traded is expected to increase. The licensing scheme would establish an open market, and the price of wood would be determined through the auction of trees. At present, the government determines the price of the timber, taking into consideration the economic conditions.

There are normative requirements concerning the quality and quantity of logged wood. The permitted quantity of wood that can be logged by one worker in an eight-hour day is 4.5 m3 (based on the collective agreement for workers in the public enterprise Macedonian Forests, signed between the syndicate of workers in the forestry and wood industry and the public enterprise).

A private forest owner submits a request to the branch of the public enterprise Macedonian Forests and must then comply with the specific approval procedure. The services provided by the professional workers of the public enterprise Macedonian Forests follow the approval procedures set out in the Law on General Administrative Procedure, the Law on Forests and other legal and sub-legal acts and secondary and general regulations of the public enterprise Macedonian Forests. Private forest owners submit an approval for logging using a form provided by the public company. The requirements for logging in private forests are communicated to the general public. The Ministry of Agriculture, Forestry and Water Economy issued a manual for owners of private forests, describing the steps to be taken in order to carry out logging in their forest in compliance with the local forest management plan.

Case Study 24: **Wood tracking practice in the former Yugoslav Republic of Macedonia**

A survey of the logged wooden mass is carried out on the site of the logging in order to verify whether the logging has been carried out in accordance with the prior marking (type of logging, quantity of logged timber, surface). In the event of significant deviations, infringement procedures are initiated and the marking procedure and the issuing of documentation for transportation are suspended. Logging and timber exports must be carried out within the deadline prescribed in the logging approval.

Different procedures and documentation are required for forest use and wood trade in state and private forests. The main difference is that private forest owners are subject to logging approval procedures. They are not able to perform professional tasks by themselves but are obliged to use the appropriate services established by the state in the designated public enterprises that have the legal right to carry out the professional services regarding applicable procedures and documentation requests. Similar procedures are required for other companies that own and manage forests, regardless of whether or not they are privately owned.

Contracts for wood purchase should specify the quantity, type, assortment, origin and marking of the wood that is for sale. The warehouses that sell wood should have an invoice for the purchase of the wood that verifies its origin. If the wood is purchased from imports, it must be accompanied by documents verifying its origin (i.e. customs declaration).

Control mechanisms in implementation procedures for forest use

Institutional set-up

Case Study 25: **Task Force Commission for Forest Resource Protection in Albania**

In 2000, the Albanian Government created a Task Force Commission for Forest Resource Protection in order to address the problem of illegal logging in accordance with the Action Plan on Illegal Logging. The task force involves 11 ministries and governmental institutions but has no representatives of the private sector and civil society.

The commission had a mandate to strive for:

- the better coordination and involvement of government institutions in protecting forest resources;
- a review of other related legislation in order to enable harmonisation with forest legislation;
- improvements to the monitoring system in the forest sector; and
- improvements to the forest infrastructure and the strengthening of the Forest Police Service.

However, the Task Force Commission for Forest Resource Protection existed for only a few years before being dismantled in 2005.

Monitoring and control mechanisms

In some countries, including Montenegro and Serbia, there are control mechanisms in place that ensure compliance with legal procedures in forest use and wood shipping. They comprise the internal control measures of the forest management companies as well as controls by the state inspectorate. However, not all the countries have such defined control mechanisms and their implementation may not be adequate.

Case Study 26: **Control and monitoring systems in Montenegro**

The control and monitoring system involves many entities whose responsibilities overlap with forest protection functions. The OSCE project "Protect Montenegrin Forests" aims to increase institutional cooperation, to improve the monitoring and forest management systems (including the legal and policy framework) and to strengthen the commitments of various state institutions. Within this project Montenegro has signed a memorandum of cooperation, with annexes describing the role of each institution and the need for joint action to combat illegal logging. The Ministry of Agriculture, Forestry and Water Management, in cooperation with the OSCE Mission, supervises and coordinates the implementation of the memorandum.

Case Study 27: **Control and monitoring systems in Serbia**

Regarding the development of planning documents for wood production and logging permits, the control system comprises the following key steps:

1. Random control by the forest management enterprise covering implementation procedures and the quality of the executed works prior to logging. Logging may only start after an inspection and approval by the forestry inspector.
2. Control at the time of logging, mainly carried out by local forest holdings and the services responsible for forest use. In addition, the state forestry inspectorate can inspect the execution of the work on its own initiative. The inspectorate verifies the assortments produced and compliance with plans, and reports any damage caused in the forest during the work.
3. Control of transportation, carried out by several governmental authorities including the traffic police and forestry and market inspectorates. Where the illegal transportation of wood is identified, the forestry inspectorate must record the incident immediately and submit the case to a competent court. The number of traffic controls has been intensified in recent years due to increased efforts on the part of all relevant forest actors.

In private forests, controls on logging procedures are related mostly to controls on wood trade. The control of logging in private forests must be carried out by professionals, but these controls are generally inadequate due to lack of human resources. In the event that illegal logging is detected, a report must be submitted to the forestry inspectorate who makes a field visit and submits the case to the competent court.

On the basis of the Law on Forests, in the event that illegal activities are detected the forestry inspectorate is authorised to:

1. temporarily suspend the planned logging;
2. order the suspension of works that could cause harmful consequences;
3. temporarily confiscate illegally logged wood and wood illegally placed on the market; and
4. order measures to prevent damage in emergency cases.

After logging, inspectors verify legality according to the following criteria:

1. Markings on all trees, including assortments. The type of marking used is set out in the legislation: black for state forests and green for private forests.
2. Shipping documents containing data on wood origin (exact location), quantity (m^3), the buyer, the transporter, the place of unloading or final destination. The document must be correctly stamped and bear the signature of the person in charge of transportation. There are four types of stamp used in Serbian forestry: accompanying; remittances; forestry offence; and control.

In all cases, except perhaps for traffic control in some countries, the police presence is insufficient. Police assistance is given mainly at the request of the forestry inspectorate and forest management companies. In the event of a serious crime, the police operate independently and, if necessary, seek the assistance of the forestry authorities.

There are weaknesses regarding the control of illegal forestry activities at all levels, generally identified as a lack of human resources and technical capacity. Shortages of equipment, especially vehicles and fuel, are a frequent cause of inadequate control.

Institutional capacity

In general, there are insufficient institutional capacities for preventing illegal forestry activities. There are

clear shortcomings in terms of both human resources and equipment. Staff lack motivation and need improved professional skills in the combating of illegal logging.

Case Study 28: **Institutional capacities in the Serbian forestry sector**

There are about 70 forestry inspectors in Serbia, compared to approximately 650 forest guards in forest management companies and 300 forestry technicians in the private forest sector. More than 1,500 people working in the forestry sector have some duties related to preventing illegal activities. The forest management companies employ (legal) experts who are responsible for court and other administrative procedures.

The forestry services suffer from inadequate equipment. In general they use old vehicles (Yugo) and a small number of field vehicles, and do not have sufficient fuel to carry out daily controls. The situation for the forest guards in the public enterprises is even more critical, since they have to travel either by motorcycle or bus. Forest measurement equipment is in short supply and/or outdated, and there is a general lack of cameras, computers etc. Only mobile phone availability is satisfactory.

Within the Ministry of Internal Affairs, the police authorities have the main responsibility for the suppression of illegal activities in Serbia. There are no specific services responsible for the prevention of illegal forestry activities. The initiative to establish a "green police" has not yet been successful. The chances of initiating an investigation where the perpetrator of the criminal act has not been identified are very slim due to lack of resources.

Professional competences are insufficient across all institutions and forestry actors. Even the staff of the forestry inspectorate are not sufficiently informed about important forestry issues and even less informed regarding judicial and administrative procedures. An unknown number of illegal forestry offences therefore go undetected and a large number of court applications are rejected due to procedural failures or lack of hard evidence.

There is an inadequate level of training and education. Even where forestry inspection trainings are organised once or twice a year, their content, preparation and follow-up need improvement. The trainings do not sufficiently target the problems, drivers and solutions relating to illegal forest activities. The police and judicial authorities, as well as the forest guards, need competence building and training. There is a clear need for joint trainings involving all the main forest actors who have clear roles in combating or preventing illegal forest activities. The experience of the Serbian Fisheries Inspectorate has demonstrated that intensive trainings for judges produce tangible positive results that trickle down the institutional hierarchy. There is an educational gap in the countries, since the institutes of higher education (e.g. the Faculty of Forestry) do not deal specifically with illegal logging. Implementation measures are therefore often based on personal experience rather than more objective grounds.

Insufficient institutional capacities can often be exposed by empowered and active NGOs and other civil society organisations, which can help with the agenda setting process. However, in the case of illegal activities it appears that there are very few NGOs that can help to fill the institutional, educational and information gaps. In Serbia, the largest forestry NGOs are Pokret gorana Srbije, focusing on afforestation, the introduction of planting material and the training of young people in the forest and nature protection; and Inicijativa za odrzivo sumarstvo, which was established to promote forest certification and forest protection. The southern Serbian NGO Vukovi sa Vlasine is the only one active in preventing illegal activities. It is putting pressure on the competent state authorities, especially on the Ministry of Agriculture, Forestry and Water Management, and on the public enterprise Srbija, through the media, demanding greater involvement in preventing illegal activities. Very few NGOs are sufficiently equipped and trained to gather adequate evidence of illegal activities that can be used in court proceedings.

Forest wood certification scheme

Forest certification is being developed alongside the growing trend for ecological labelling. The certification system tries to connect green consumers with manufacturers who are attempting to improve their forest management practices and achieve better market access and higher annual income. Certificates are granted based on an independent assessment of forest management operations according to specific social, environmental and economic criteria. Certification is mainly implemented by the NGO sector and private companies. In Europe, the main certificates in use are the Pan European Forest Certification (PEFC) or certification by the Forest Stewardship Council (FSC). Certificates issued by the FSC are internationally recognised and approved by most organisations dealing with environmental protection. The FSC is the most experienced organisation in the field and its certificates are based on a rigorous accreditation, assessment and inspection regime.

Voluntary systems for the control of wood origin are not common in the region. For instance, forest certification exists in Serbia only in the context of the international FSC standards and has been introduced by the public enterprises Srbijasume and Vojvodina sume, mainly to meet new market demand and implement more sustainable business practices.

There is very little information regarding the uptake of international or nationally tailored forest wood certification schemes in SEE countries. Most available information is related to Serbia, where the FSC certification scheme has been accepted. Forest certification was first introduced four years ago. To date, the total certified area is 387,000 ha, of which 256,000 are under the control of the public enterprise Srbijasume and 131,000 under the public enterprise Vojvodinasume. Currently only state-owned forests have been certified. The plan is to complete certification in the coming years in all state-owned forests. In the case of forest management companies, their "impartial" control will have a significant impact on the improvement of forest management quality, which includes the protection of forests from illegal logging and other illegal activities. A follow-up step would be the certification of wood products chain control (COC, or chain of custody), which also involves wood processing companies. The COC certification helps customers choose products that contribute to global conservation: candidates include wood processing companies, secondary manufacturers, distributors, retailers and paper merchants.

This means that all wood entering the production process must have full documentation guaranteeing its origin. Ten companies involved in primary wood processing have received COC certification to date, and a number of wood processing companies are currently subject to the voluntary procedure. In practice, every wood assortment is strictly controlled, preventing the possibility of the processing of illegally logged wood. There is no other voluntary licensing scheme at present in Serbia. Forest certification is strongly supported by the state and other institutions. This type of voluntary certificate is expected to contribute to the better control of logging and wood trade and will significantly increase the confidence of the public and supervisory bodies in the quality of work of all participants in the chain. The threat of losing a certificate, and thus market share, will also minimise the use of illegally logged wood. According to the plan of the competent ministry, in the coming years all public forest enterprises should be certified according to the FSC scheme. The PEFC scheme is planned for private forests, because it is more adjustable to group certification. Based on market demand, it is also expected that most wood processing companies will establish COC certification. The NGO "Initiative for Sustainable Forest Management" sets the national standard for sustainable forest management according to the PEFC certificate scheme, which should additionally strengthen the penetration and market uptake of voluntary certification and licensing. One obstacle to the further development of forest certification is cost. The state has subsidised the costs for forest management companies; however, in wood processing all costs are absorbed by the company. Companies that have introduced the FSC standards have not modified their prices in order to integrate the additional expenses, and it can be expected that the certification process will not further affect wood assortment prices.

Chapter 3: **Illegal logging**

Introduction

Illegal forest activities, in the form of illegal logging and trade in illegally logged timber, are problems recognised by all the countries in the region and were already common in the years before the social and economic reform. In Albania, illegal logging peaked in 1997 but is an ongoing problem. In countries that were particularly affected by war, illegal logging was a significant problem during the years when control and governance systems were generally weak. The rapid changes that took place at the end of the last century have had a negative influence on forest management and forest protection, which has led to increased levels of illegal logging.

Forests are an obvious target for illegal activities, since they are spread over a large area and it is practically impossible to ensure their full protection. Increasing the degree of protection usually involves a significant rise in the costs of forest management, which is often unacceptable for state-owned companies and forest owners.

Illegal forestry affects not only the forest sector. It has its roots in other sectors of the economy, and solving the problem requires a broad range of policy, legal and administrative measures including inter-sectoral cooperation in the public administration, as well as the support of the public and NGOs.

There is a clear pattern throughout the region for illegal activities to be more common in socially and economically disadvantaged areas. High unemployment figures and low salaries encourage illegal logging, both for firewood and commercial use. It is not uncommon for the forest guards responsible for protecting the forests also to be involved in these activities.

Although all the countries have forest management laws and forest management and protection plans, increased attention needs to be given to the enforcement of these laws, to control and monitoring procedures and to ensuring a functioning system of sanctions.

According to a Savcor/World Bank study (Savcor Indufor Oy 2005), the various violations associated with illegal logging can be divided into the following groups:

- theft;
- unauthorised harvesting;
- non-compliance with regulations related to timber harvesting;
- non-compliance with procedures for timber sales/concession awards;
- the manipulation of timber data;
- evasion of taxes and fees;
- non-compliance with regulations concerning the transportation or exports of timber; and
- non-compliance with labour laws.

Legal framework

Definition of illegal logging

There is no common definition of illegal logging: different stakeholders use different definitions, with environmental NGOs, for example, tending to use a broader definition. However, all actors agree that illegal logging is a punishable offence.

The term illegal logging most frequently describes forestry practices connected with wood harvesting, processing and trade that do not conform to the laws in force. Illegalities can be present throughout the process, from source to consumer. Illegal processing and exporting; harvesting, forest access and logging without permission; and logging quantities in excess of given quotas are some of the many examples of illegalities.

In the following sections a number of definitions of illegal logging are presented and fundamental differences in the way the term is used are pointed out.

According to the EU definition, "illegal logging and related trade occurs when timber is harvested, transported, processed, bought or sold in violation of national or sub-national laws."[17]

An extensive definition of individual acts constituting illegal logging is provided by the WWF/World Bank

Alliance (WWF/World Bank Alliance 2003):

- "Illegal logging is logging:
- outside a concession area;
- in excess of quota;
- in a protected area;
- without appropriate permits;
- without complying with bidding regulations;
- without submission of required management plans;
- in prohibited areas such as steep slopes, river banks, and water catchments;
- of protected species (as defined by CITES or other international law);
- with duplicate felling licences;
- using girdling or ring-barking to kill trees so they can be logged legally;
- through contracts with local entrepreneurs to buy logs from protected areas;
- that removes under- or oversized trees from public forests;
- that reports high volumes extracted from forest concessions to mask that part of the volume that is from non-authorized areas outside the concession boundaries;
- using bribes to obtain logging concessions;
- using deceptive transfer pricing and other illegal accounting practices to distort prices, volumes, cash flows and debt service levels (e.g. some companies will inflate the price of imported inputs, such as machinery, and deflate the prices and volumes of their exports to reduce nominal profits and their tax liability with the host country and to illegally transfer funds abroad);
- that leads to the illegal transport and trade of timber or the smuggling of timber;
- that is processed without the required licenses; and
- that is not in compliance with environmental, social and labour laws.

According to the FAO's definition: "There are many types of illegal forest practices... Public servants may approve illegal contracts with private enterprises. Private commercial corporations may harvest trees of species that are protected by law from timber exploitation. Individuals and communities may enter public forests and illegally take products that are public property. Illegal activities do not stop at the forest. They travel down the line to operations in transportation, processing and trade of forest products. Individuals or corporations may smuggle forest products across international borders or process forest raw materials without a license. Corporations with strong international links may artificially inflate the price of imported inputs or deflate the volume and prices of their exports to reduce their tax liability and to facilitate the illegal transfer of capital abroad." (Rosenbaum 2005)

It is worth noting that the two definitions above both include fraudulent corporate activities aimed at price distortion.

There are also relatively recent definitions established by scientific authors such as Marijnissen et al. (2004), Brack et al. (2002) and Smith (2002). Brack et al. define illegal logging as logging that "takes places when timber is harvested, transported, bought or sold in violation of national laws. The harvesting procedure itself may be illegal, including using corrupt means to gain access to forests, extraction without permission or from a protected area, the cutting of protected species or the extraction of timber in excess of agreed limits. Illegalities may also occur during transport, such as illegal processing and export, mis-declaration to customs, or the avoidance of taxes and other charges." (Brack et al. 2002)

Smith provides a wide definition of illegal logging: the term is used to refer to activities related to timber harvesting that are inconsistent with national (or sub-national) laws. Illegal and corrupt activities in the forest sector can span the entire industry from wood harvesting and transportation, to industrial processing and trade. Illegal cutting includes logging inside protected areas or outside concession areas. Logging within allocated concessions can be illegal if it does not conform to the law. For example, cutting restricted species, quantities above the allowable limit, or before the concession or license is active constitutes an illegal act. Other types of illegal activities include under-reporting the amount cut, false reporting of the species harvested to avoid higher taxes, the illegal transportation of timber, and the poaching of wildlife in areas opened up by timber cutting. Corruption can occur at many levels, from the issuing of licences and concessions to local law enforcement. (Smith 2002)

While most available definitions describe illegal logging as the process of extracting forest resources contrary to national legislation, they differ as regards the fields of legislation that are to be considered. Thus while there is a consensus that logging in the absence of or in violation of logging licences or permits is illegal, there is considerable debate as to whether, and to what extent, violations against taxation regulations (e.g. property, income and value

added taxes) should be taken into consideration, and how such requirements could be implemented. In addition, overlapping areas of jurisdiction, resulting for example from the decentralisation of forest sector legislation, may obscure the definition of illegality. (Brack et al. 2002)

Several authors[18] regard illegal logging as part of the broader term "illegal practices" or "illegal activities", including:

- the logging of protected species;
- the duplication of felling licences;
- girdling or ring-barking in order to kill trees so that they can be legally logged;
- making contracts with local entrepreneurs to buy logs from protected areas;
- logging in protected areas;
- logging outside concession boundaries;
- logging in prohibited areas such as steep slopes, riverbanks and water catchments;
- removing under- or oversized trees from public forests;
- extracting more timber than authorised;
- reporting high volumes extracted in forest concessions to mask the fact that part of the volume declared is extracted from non-authorised areas outside the concession boundaries;
- logging without authorisation;
- obtaining logging concessions through bribes;
- buying logs from local entrepreneurs that have been harvested outside the concession;
- making contracts with local forest owners to harvest from their land but then cutting trees from neighbouring public lands instead; and
- logging when in breach of contractual obligations (e.g. logging before the environmental impact assessment report).

As seen above, the harvesting procedure itself may be illegal, including using corrupt means to gain access to forests; extraction without permission or from a protected area; the cutting of protected species; or the extraction of timber in excess of agreed limits. Illegalities may also occur during transportation, such as illegal processing and exporting; fraudulent customs declarations; and the avoidance of taxes and other charges. It should be noted, however, that much destructive logging is legal and that destructive legal and illegal logging are often linked. Addressing illegally sourced timber alone is therefore not sufficient.

At national level

National definitions vary: some countries follow a rather narrow approach and have no definition that is sufficiently clear for use in court proceedings. Most current national definitions are not in line with international definitions, which tend to be broader and more functional.

In Serbia and the former Yugoslav Republic of Macedonia, the current legislation does not contain explicit, precise definitions. Illegal logging is mentioned throughout the legal articles, but without a precise definition. The Macedonian Forest Law defines forest devastation as any illegal act that negatively affects land fertility and endangers forest production or silviculture or the survival of the forests and their multiple benefits (wide-ranging cutting approximating to forest grubbing; intensive selective cutting; and any act causing weed growth or the erosion of land by water or wind). The term "forest devastation" is also used in Montenegro in its Law on Forests. It is defined as any action, contrary to the law, that weakens the productivity (yield) of the forestland and consequently endangers forest productivity or the growth of forest on that land, or that endangers the survival of the forest. The Criminal Code (Articles 323 and 324) prescribes certain measures against forest devastation and forest theft. Montenegro is now drafting a new Law on Forests with the assistance of international donors, and is considering whether to define illegal logging in line with the World Bank definition. One consequence of an inadequate and imprecise definition is lack of legal clarity. In Serbia, for instance, activities that are globally accepted as illegal are sanctioned sometimes, but not always, in the Forest Act as illegal logging activities. More often they are brought under the legal categories of forest thefts, illegal cutting and deforestation as defined by the Law on Forests[19] and the Criminal Law of the Republic of Serbia.

In Bosnia and Herzegovina, illegal activities are defined as the illegal possession of forest land, illegal harvesting, the illegal transportation and storage of timber (not according to prescribed procedures and without a permit) and its processing, as well as illegal building and construction. The Law on Forests in Republika Srpska defines illegal activities as harvesting without a permit, harvesting on land that is not in the individual's legal possession, the harvesting of protected species, the illegal transportation of harvested resources etc. This relates directly to international definitions and related sub-activities.

One of the most precise definitions in national legislation is provided in the Albanian Law on Forests and Forestry Service and the Penal Code. This legal framework defines illegal logging as:

- harvesting in excess of the quota (within the forest area contracted for harvesting, this means the cutting of unmarked trees);
- harvesting outside the forest area contracted for harvesting (outside the forest parcel or forest management unit);
- harvesting without appropriate permits;
- harvesting in a protected area;
- the cutting and/or illicit acquisition of forest trees and shrubs;
- the cutting and/or illicit acquisition of high-value trees and shrubs and protected species;
- the cutting of trees in protected areas for erosion control and in the upper part of the vegetation area;
- the removal of under- or oversized trees from public forests;
- the illicit acquisition and/or selling of timber and firewood; and
- the illegal transportation and trade in timber or the smuggling of timber that is processed without the required licences.

Policy and administrative framework on illegal logging

Policy framework

The forestry sector is very significant in terms of the national economy but continues to suffer from transition-related problems. These include declining investments, the practical breakdown of forest management and maintenance, and the lack of public supervision and law enforcement. As a consequence, the resource base has declined, not only in terms of deforestation but also in terms of widespread forest degradation.

With the shrinking of forest cover and with growing stock/increment per hectare seriously affected, substantial amounts of mature timber are nowadays only to be found in the most inaccessible parts of the country. At the same time, economic restructuring has caused a drop in logging and wood processing efficiency rates, and rampant illegal logging has distorted market prices and offset the intended effect of the newly introduced timber sales procedures (i.e. auctioning by decentralised forest authorities).

Most of the countries have specific action plans or programmes setting out objectives and measures for combating illegal forest activities. For instance, the Macedonian Forest Strategy has been supplemented by an action plan for 2007 to 2009, which includes specific actions that are directly or indirectly related to the suppression of illegal activities in the forestry sector. These activities comprise institutional changes (e.g. the restructuring of the State Inspectorate on Forestry and Hunting with 25 inspectors); modifications to the legislative framework; and capacity strengthening, with enhanced technical and material equipment for the Forestry Police. A similar situation can be seen in Serbia, where the draft Strategy for the Development of the Forestry Sector in Serbia is planned as the basic document defining sector policy, to be implemented through a supplementary National Forestry Action Programme. The same trend towards forest sector reform can be seen in Montenegro, with the creation of major policy documents on illegal logging, including the National Action Plan for Combating Illegal Activities in Forestry in Montenegro; and the joint government and OSCE project Protect Montenegrin Forests, which also targets institution strengthening and capacity building.

The development of the political framework in the region is characterised by a few strong dynamics and individual processes.

- In the context of reorientation towards a market economy, the privatisation or restitution of land/forest property, the noticeable commercialisation of production, and the significant downsizing/fragmentation of individual holdings/management units.
- The redefinition of the role of state agencies in the sector. This process is marked by the devolution of management and control rights to non-state actors, effectively limiting the state's previous dominance and command and control role in the sector. On the other hand, this process is likely to result not in the withdrawal of the competent state agencies but in their accepting new functions as service providers and partners of non-state actors. Directly related to this process are initiatives aimed at a thorough restructuring of the public forest service and a gradual division of executive and managerial functions and responsibilities.
- The redefinition of the role of non-state actors in the sector. This process has political as well as economic implications, since it includes civil society representatives (e.g. environmental and socio-political/socio-cultural NGOs etc.) and the private sector (encompassing private forest owners, forest management/logging companies, traders in forest products, and downstream processing facilities).

It is common for countries to have strategies and action programmes developed at the central level, which also include specific action plans/programmes devoted to combating illegal forestry activities. These action plans, especially those recently developed, have resulted in a significant reduction in illegal activities in some countries, including Bosnia and Herzegovina.

To varying extents, the countries are building national strategies and action programmes to implement Forest Law Enforcement, Governance and Trade (FLEGT), which is a multilateral and multinational strategy for improving governance and legal compliance at the national and international level. The FLEGT initiative aims to involve the governments of interested countries, as well as donors, in preventing illegal activities that directly affect forest resources. In the initial phase, the FLEGT initiative focuses on illegal logging, wood trade and wood processing. The process is currently implemented in Eastern Europe and Northern Asia. Under the FLEGT initiative, national action plans for illegal logging are one of the highest priorities. They are implemented within a certain timeframe and progress is monitored in cooperation with all relevant stakeholders.

Albania

The main policy framework in the forest sector comprises:

- the Government Strategy for Agricultural Development in Albania (the "Green Strategy", 1999);
- the Strategy for the Development of the Forestry and Pasture Sector in Albania (i.e. the forest policy in a narrower sense), approved by the Government of Albania Decision No. 247 of April 23, 2004, which builds upon the framework provided in the Green Strategy. Specific policy goals/strategies are:
  - maintaining the territorial and ecological integrity of forests and pasture and their biodiversity;
  - encouraging and maintaining the sustainable management of forest and pasture resources;
  - improving and strengthening developments within the forest and pasture sector related to the market economy;
  - involving local stakeholders and users in the development and maintenance of forestry; and
  - institutional and legal reform in the forestry service at national and local level;
- the Action Plan on Illegal Logging, which was developed by the Albanian forest administration in 2004 with the support of a technical assistance project supported by the FAO and adopted by the Ministry of Agriculture and Food. The main actions are:
  - the establishment of a high-level inter-ministerial task force;
  - the improvement of the legal authority responsible for illegal logging;
  - the improvement of institutional support and capacity at district level;
  - the definition of pilot regions; and
  - an independent assessment of illegal logging by a third party.

Case Study 29: **Forestry reform in Albania**

One of the main objectives of the forest policy that was developed in the first years of the transition was the decentralisation of the management of state-owned forests and their sustainable management by local communities. Between 1996 and 2003, in the framework of the Albanian Forestry Project and the Albanian Private Forestry Development Programme, forest management has been decentralised in 138 local government units (communes) with 1,290 villages and 160,100 households. In this period, 356,000 ha of forest and 93,000 ha of pasture were transferred for use by rural communities. The transferred forestland will be managed by local communities mainly to cover their basic needs for firewood and fodder. The preliminary results of forest transfer to local communities are extremely encouraging, both for their positive environmental impacts and for the social redistributive effects. At the same time, annual growth in the improved coppice forests managed by the communities is around 3 m^3/hectare.

After the elections in 2005, the forest administration was transferred to the Ministry of Environment, Forest and Water Administration (MoEFWA). Because of the attention being given to the new reform process in the forestry sector, the focus was shifted away from the above action plan for the reduction of illegal logging. The MoEFWA began to implement the reform of the forest administration, splitting control functions from management functions. The reform has been completed at the level of the MoEFWA but not yet at district level, where both functions remain with the Forest Service Directorate.

One of the main objectives of the Strategy for the Development of the Forestry and Pasture Sector in Albania is to follow up the process, transferring the use or ownership of state-owned forests and pastures to local government units with the aim of increasing the number of rural families that profit from forest products. In 2008, the MoEFWA, in collaboration with the Ministry of the Interior and local government units officially completed the transfer of state

forests and pastures in 316 local government units. More than 900,000 ha of forest and pastures were transferred to communes and municipalities. Now over 50 percent of forestlands in Albania are under the tenure of local governments. The Natural Resource Development Project supports the decentralisation reform and the development of communal forest and pasture management plans in 218 communes. The transfer of forests and pastures into the use or ownership of local government units has not been accompanied by the provision of the human and financial resources for their sustainable management. The sharing of responsibilities and cooperation between the District Forest Service, local government units and communities is still one of the key problems in the process.

Montenegro

In the last few years, the Montenegrin forestry sector has focused on initiatives targeting the reduction of illegal logging. Two initiatives have been particularly important:

- The adoption of the National Action Plan for Combating Illegal Activities in Forestry in Montenegro (the most important government initiative targeted at reducing illegal logging).
- The joint project "Protect Montenegrin Forests", launched in 2007 through the signing of a memorandum of cooperation by the Government of Montenegro and the OSCE. The project aims at more effective cooperation, the introduction of an illegal logging monitoring system and institutional commitments. Individual annexes describe the role of each institution and the necessity for joint action to combat illegal logging.

The reports on illegal harvesting are based on data from regional units, which, within their regular daily tasks, keep records of illegal activities and operations and report them to the chief engineer for silviculture and forest protection. In addition, the regional units' engineers for silviculture and forest protection, 200 forest guards and 17 technicians have an important role and are an integral part of the forest protection system. The task of the forest protection staff is to protect the forests and forestland that together make up around 54 percent of the entire territory of Montenegro. They thus have an important role in combating illegal logging. The Forest Administration submits official data on illegal forestry activities to all relevant actors, the competent ministry and other stakeholders.

As of 2009, statistical data per regional unit are given to the chief engineer for silviculture and forest protection at the level of management unit, compartment and forest guard. This means that each forest guard prepares a report on illegal logging regardless of whether it is carried out in state or private forests; and on the criminal or offence charges including both identified and unidentified offenders.

The data on illegal harvesting should be assessed taking into account the fact that 60 percent of the Montenegrin population lives in rural areas and areas rich in forests.

The former Yugoslav Republic of Macedonia

The former Yugoslav Republic of Macedonia has yet to adopt a specific strategy for illegal logging reduction at state level. The high fines to be paid for committing the illegal activities defined in the Law on Forests and other relevant laws are regarded as one of the measures for bringing about a reduction in illegal activities.

Serbia

The current legislative and policy framework recognises the need to take action in order to prevent illegal activities in forestry and the wood industry. With the adoption of the Forestry Development Strategy, activities have been initiated towards the adoption of new legislation and action plans that should have a significant impact in reducing illegal activities. One of the goals of the Forestry Development Strategy is to increase the contribution of the forestry sector to the economic and social development of the Republic of Serbia. In this context, preventive measures will include a system of protection and the monitoring of the health and vitality of the forests, including harmful biotic and abiotic factors, illegal logging, illegal seizure, illegal construction and other illegal activities.

Following the adoption of the new Law on Forests and the National Forestry Programme, penalties will be tightened significantly and the responsibilities of the institutions designated to fight illegal activities clearly defined. The political framework for forestry (which is still in preparation) is in accordance with EU policy and the recommendations of the Ministerial Conference on the Protection of Forests in Europe (MCPFE) and the FAO. Directions defined within the political framework, if consistently implemented, will lead to a reduction in illegal activities. The enforcement and governance policies underlying the Law on Forests represent the political "space", at national and regional level, for addressing the complex and politically sensitive issues related to illegal logging, in partnership with major stakeholders from civil society and the private sector.

In line with international commitments to prevent illegal activities in forestry and the wood industry (especially the FLEGT initiative), and with the National

Forestry Strategy and Action Plans, Serbia began to develop the Action Plan for Combating Illegal Activities in Forestry and the Wood Industry in 2008, within the Directorate for Forestry and with the support of the World Bank and the participation of all institutions in the forestry sector. The goal of the draft action plan is to combat illegal activities in forestry, including theft and corruption, with a focus on illegal logging. Other illegal forestry activities require separate, parallel processes that will be coordinated by this action plan. The draft plan is being developed at national level, in cooperation with stakeholders affected by illegal activities, with significant international assistance. It will define the strategic direction and approach, the causes of illegal activities, planned actions to prevent illegal logging, monitoring and evaluation measures, as well as the tentative budget necessary for its implementation. The action plan will be implemented using an inter-sectoral approach, involving large-scale stakeholder consultation.

Projects and actions to combat illegal logging

Case Study 30: **Improved bilateral relations on combating illegal logging in Montenegro**

In response to overall forestry sector improvement, several government initiatives have been adopted, including the National Forest Policy (2008) and the National Action Plan for Combating Illegal Activities in Forestry (2009). The new Forest Law is in an advanced stage of preparation and Montenegro has signed important documents of the Ministerial Conference on the Protection of Forests in Europe (Vienna Declaration in 2003 and Warsaw Declaration in 2007).

The volume of illegally harvested wood compared to the permitted cut clearly indicates the presence of illegal logging in border areas, and in particular near the Kosovan border (Plav, Berane). The Forest Administration has intensified cross-border cooperation with the Kosovan Forest Agency. Several meetings were held in 2008 and 2009 (at both "high official" and operational level). The results are encouraging, particularly for the reduction of illegal logging in the municipality of Plav. In 2007, more than half the conifers illegally logged in Montenegro were from this municipality (2,308 m^3 out of 4,572 m^3) and a significant reduction was recorded in 2008 (301 m^3) and 2009 (275 m^3). It is clear that cross-border cooperation represents a good model that should be scaled up in other border areas (e.g. Berane).

Case Study 31: **Two internationally funded cooperation projects on the protection of Montenegrin forests**

"Protect Montenegrin Forests", jointly implemented by the Government of Montenegro and the OSCE

The goals of the project are improved cooperation, the establishment of an illegal logging monitoring system, and institutional commitments. The project was launched in 2007 with the signing of a memorandum of cooperation and individual annexes describing the role of each institution and the need for joint action to combat illegal logging. The memorandum aims to:

- establish the basic principles for cooperation among signatories;
- identify areas for cooperation among signatories;
- foster efficiency among signatories in protecting Montenegrin forests from illegal logging and trade in forest products and protected and unprotected species of plants;
- solve contemporary problems and challenges by improving the regulations, planning system, management instruments, monitoring and supervisory system; and
- promote multiple forest functions and ensure a fair division of the benefits that forest ecosystems provide.

The OSCE Mission to Montenegro organised follow-up activities in 2008, including meetings with representatives of the UNMIK-Kosovo Border Police and Forestry Administrations to address the issue of illegal logging on the border. The mission also facilitated a training roundtable for representatives of the Montenegrin Police and Forestry Administration, at which guidance on more effective evidence gathering techniques was shared.

Improved Forest Management Planning Methodology

Work on the National Forest Inventory (NFI) and on improved forest management planning methodology is being carried out under phase II of the "Forestry Development in Montenegro" project, which is jointly financed by the governments of Montenegro and the Grand Duchy of Luxembourg.

The NFI was launched in 2009 and the major fieldwork will take place in 2010. The NFI aims at better assessing the current status of Montenegrin forests with the goal of gathering relevant information about the condition and spatial distribution of forests and their structural characteristics by measuring a representative sample of the country's forests. Analysis of the results provides a statistical estimate of the state of forest resources, rate of growth, and potential usage. These data will facilitate the forward

planning of the harvestable volumes of timber, wood industry investments and environmental protection.

This exercise will result in more data regarding illegal logging activities that can be shared with interested parties and serve as important input to all forestry stakeholders about the scope and spatial distribution of logging. The previous model of forest management planning did not guarantee that planned interventions would be carried out in the field, did not include sufficient cooperation between planners and implementing staff, and did not define responsibilities for preparing, approving and carrying out those plans. It therefore created the conditions for illegal activities.

Case Study 32: **National Action Plan for Combating Illegal Activities in Forestry in Montenegro**

The national action plan (NAP) (for the period 2009 to 2013) was developed in a participatory manner in cooperation with state institutions, civil society and other stakeholders. It covers a wide range of activities aimed either at stopping or minimising the negative impacts of illegal logging, which are currently threatening the reform of the forestry sector. The measures required to combat illegal logging depend on the inclusion of civil society and are channelled through the institutions responsible for monitoring NAP implementation.

The NAP relies on the definition of illegal logging in forestry adopted by the World Bank (see Annex 2), according to which illegal logging includes a wide range of activities that precede logging (e.g. obtaining false licences), illegal logging itself, and the illegal transportation and processing of illegally logged wood.

The objective of the NAP is to combat illegal activities in forestry, including forest theft, the illegal confiscation of forestland, arson, preventing the provision of evidence of destruction on the borders between state and private forests, and corruption in forestry with special emphasis on illegal logging and the circulation of illegally harvested wood.

The key element of the NAP is the definition of a set of activities and measures directed to preventing illegal activities in forestry. While the actions proposed by the NAP define the key areas in which progress is essential for achieving the set goals, these actions also take into consideration existing organisational, personnel and budgetary restrictions and are coordinated with other activities currently being implemented as part of the forestry sector reform in order to avoid duplication.

The NAP divides activities into three groups: prevention, detection and suppression. Each activity is categorised as either a priority activity (that is absolutely necessary to undertake in order to fulfil the objectives of the NAP and for which it is necessary to obtain political and budgetary commitments); or as a non-priority activity (that is important in the long run but the implementation of which is currently hampered by contextual constraints). A tentative budget, indicating the financial contribution of state institutions and donors per activity, is also an integral part of the NAP.

Case Study 33: **Action Plan on Illegal Logging Activities in Bosnia and Herzegovina**

The Action Plan to Combat Illegal Activities in the Forest and Wood Processing Sectors was adopted in 2006 and is applicable in both entities. The action plan was the result of the commitment of Bosnia and Herzegovina to the St. Petersburg Declaration, adopted at the Ministerial Conference on Forest Law Enforcement and Governance in the Russian Federation in 2005, at which Bosnia and Herzegovina undertook to develop an action plan to combat illegal activities in the forestry and wood processing sectors. The action plan encourages the carrying out of independent assessments of the types and volume of illegal logging, exports of illegally harvested timber, and the government's financial losses. The action plan aims to cover all types of illegal activities in the forest sector, including theft and corruption-related crime. Another key strategy is to increase the cost of illegal activities through improved control and to provide incentives for legal wood processors and suppliers (mainly through certification schemes). Even though the entity action plans were developed in 2006 and significant reductions have been achieved since the war, they need further promotion in the areas of reinforcement and control mechanisms, including the judiciary system. The implementation of the existing legislation, fines and sanctions needs to be reinforced and new regulatory and informational instruments need to be included (raising awareness, ensuring the transparency of the timber market etc.).

Case Study 34: **Forestry policy framework in Serbia**

The political framework relevant to the forestry sector is created through various documents adopted by the government, primarily the Sustainable Development Strategy and the draft Strategy for the Sustainable Use of Natural Resources. The government is also implementing a public sector reform in accordance with the Public Administration Reform Strategy adopted in 2004, in which public enterprises are being restructured with the aim of improving

and rationalising their operations. Activities related to the development of rural areas have also intensified since the adoption of the Agriculture Development Strategy of Serbia (2005), which includes elements of forestry policy as an inseparable aspect of rural development. Forestry is also partly covered by the National Programme for Environmental Protection in Serbia, as well as by numerous local environmental action plans (LEAPs).

Institutional framework

Following the democratic changes in 2000, SEE countries embarked on the extensive reform of institutions. However, some of the former problems related to illegal logging and other illegal forestry activities are still present. This is reflected, in particular, in lengthy court proceedings, a weak system of sanctions, and the often complete absence of adequate penalties for offenders. Countries in which the forestry sector has been subject to review and the extensive revision of the legal and policy frameworks have normally undertaken targeted action against illegal forestry activities.

Case Study 35: **Forest management against illegal logging in Serbia**

Public enterprises have a long tradition in forest management, as well as significant personnel and technical potential that provide a high degree of protection against illegal logging and other illegal activities. In terms of territory, companies are organised on five levels (company, management, forest administration, compound and area). The lowest level is in practice covered by forest technicians who, besides growth and protection, are responsible for forest security. There are 624 forest security guards currently employed in Serbia, ensuring good control and the security of state forests. Through engineers and managers, forest security guards are in communication with the local police and, when necessary, with the prosecutor's office.

Capacity-building activities

Case Study 36: **Capacity-building project in Montenegro**

The Ministry of Agriculture, Forestry and Water Management and the Forest Administration submitted a proposal to the Delegation of the European Commission to Montenegro for the project "Support for Capacity Building in the Forestry Sector", for funding through IPA 2010. The overall objective of the project is to establish sustainable forest management and effective governance that will contribute to the implementation of key EU environmental protection standards, socioeconomic development policies and forest product trade regulations. The project will strengthen the capacity of the Montenegrin forestry sector through the establishment of, and training in, sustainable forest management systems in line with EU standards, specifically the forthcoming EU Regulations on Placing Forest Produce on the EU Market, and the EU Regulation on Rural Development. In addition, the Forest Administration will establish a human resources unit that is responsible for the long-term identification of training needs and the provision of training to its own employees as well as to forest owners and forestry professionals in the private sector. The training of Forest Administration staff is expected to include:

- fire prevention and fire fighting;
- forest management planning;
- forest inventory and monitoring;
- supervision of concessions for exploitation;
- the use of GIS and information technology;
- biodiversity conservation and the management of Natura 2000 sites;
- visitor and recreation management in forests;
- biomass and fuel wood as renewable energy sources;
- cooperation with the local population;
- detailed implementation plans;
- contracting out state forests for exploitation (fuel wood, concessions); and
- work safety.

The training will be supplemented by a general training programme for ministry and Forest Administration staff, addressing communication, time management, team building, management training, conflict resolution, dealing with the media etc.

The main drivers of illegal logging

Introduction

Illegal logging is a complex issue linked to several economic sectors. Illegal logging can only be effectively prevented and combated if the main drivers are identified. These drivers often depend on the political and socioeconomic context and can be characteristic for certain regions. Two types of illegal logging can be clearly

distinguished in SEE countries: (i) poverty driven; and (ii) commercial. These types of illegal logging generally take place in different forest areas, are carried out by different offenders, and have different impacts. For example, poverty-driven illegal logging is typically carried out in remote locations, out of sight of the state forest management and law enforcement bodies.

In SEE countries, the most tangible drivers of illegal logging include:

- unfavourable socioeconomic conditions with low income and high unemployment rates, particularly in rural, mountainous areas;
- a gap between wood supply and demand on the part of the wood processing industry;
- the predominance of public forestland with insufficient forest areas in private ownership through which people could meet their needs for wood;
- insufficient supply of, and lack of support for the development of, alternative non-wood-based energy sources;
- institutional weaknesses on the part of the competent authorities, insufficient infrastructure, lack of knowledge, corruption etc.;
- inefficient judicial authorities;
- insufficient interest on the part of police authorities in this type of illegal activity;
- poor inter-institutional cooperation regarding preventive activities, and lack of coordination, cooperation, information exchange and dialogue between stakeholders involved in the prevention and detection of illegal actions;
- non-transparent procedures for the procurement and sale of wood; and
- lack of public awareness and lack of engagement of NGOs and civil society.

Poor socioeconomic conditions

Throughout the region, poor socioeconomic conditions constitute the main driver for illegal logging, with households logging for firewood or for small-scale trading on the local market. Illegal logging takes place to varying extents in all categories of forest ownership, although most often in privately owned forests where owner live at a distance from their property.

Based on the findings of the Illegal Logging Independent Study carried out by the Albanian Center for Economic Research (ACER, 2001) and the Qualitative Assessment of Poverty in 10 Areas in Albania (World Bank, 2002), illegal logging driven by poverty is the most significant phenomenon.[20]

In SEE countries, perpetrators of illegal logging can be divided into four groups:

- people on the edge of poverty who steal wood because they do not have the means to purchase it;
- poor people, mostly in rural locations, who steal wood to sell in order to survive;
- rural populations traditionally supplied by illegal wood from state forests. There are instances of entire villages being considered as wood thieves, leading to conflicts between forest guards and the population; and
- organised groups and individuals who engage in illegal activities in order to make a profit. This category includes various illegal activities, such as forest theft, fraud, corruption etc.

For the first two groups, the main motive for wood theft is the social and economic situation. The third grouping represents tradition and habit, with the local population taking the view that it is better to harvest wood in state forests than in their own private forests. The main motive for the fourth group is profit, with wood being sold more cheaply than legally procured wood.

In several countries, poverty-driven illegal logging is mainly due to lack of affordable energy sources for rural households. In fact, the only available heating resource in many rural areas is wood.

Illegal logging, and in particular illegal cutting for firewood production, is also carried out on a commercial basis. Private contractors harvest firewood and transport it to markets located in urban centres. The distinction between commercial and poverty-driven illegal logging is not clear cut. Poverty-driven illegal logging is typically carried out in remote locations, out of sight of the state forest management and law enforcement bodies. Illegal loggers operating on a commercial basis usually hire local villagers to carry out the harvesting work. While the biggest profits are taken by the contractors, the wages they pay may still be an important source of income for people in rural areas, where employment opportunities are limited.

Case Study 37: **Effects of poor socioeconomic conditions in the Kosovan wood sector**

The demand for wood peaked during the reconstruction of housing after 1999, financed mainly through interna-

tional support. The negative impact of the war on the financial stability of the Kosovan population was severe, with an estimated unemployment rate of around 40 percent. Some 45 percent of the Kosovan population are poor, with 15 percent living in extreme poverty. Although there has been some progress in economic development, there is still a high level of dependence on the international community and diaspora. The estimated GDP, in 2007, was USD 5 billion (USD 2,300 per capita).

Anomalies in the wood processing sector

In several countries there is a significant imbalance between the production capacity of wood processing companies and wood production capacities or market offer. This opens a significant gap for the supply of wood outside legal channels. The large number of small plants for primary wood processing (sawmills) that are not registered companies or that are located in woods and/or on rough terrain is a significant problem, as they are outside the control of the inspection authorities. Insufficient institutional capacity and inadequate sanctions also contribute to the existence of illegal activities.

High demand for firewood

Another important driver in the region is the big demand for firewood in combination with the inadequate enforcement of regulations. Most of the national strategies in place do not sufficiently define clear political objectives for dealing with the firewood deficit. In Albania, for example, there is a big deficit in the balance between the national demand for timber and firewood and the annual allowable forest cut. This deficit is estimated to be at least 1,594,000 m^3 per year, but is probably far greater. The use of alternative energy sources to relieve the pressure on firewood resources is not expected to expand rapidly, despite the country's energy strategy.

Illegally logged wood is most frequently used for firewood that is sold to private households, normally without documentation and invoices. This is the way that firewood is traditionally sold in most of the countries, and due to the low price of the wood customers generally do not inquire about its origin or request a proper receipt. However, migration from rural areas to cities and changes in household heating fuels (central heating, gas, electricity) has contributed to falling demand for this kind of assortment. Users are also gradually tending to purchase firewood from legal wood warehouses.

It is important to bear in mind that although the frequency and number of cases of illegal logging for firewood are highest for the SEE region, this does not necessarily imply the largest amounts. Illegal logging carried out to meet the needs of the local low-income population is negligible compared to illegal logging overall.

Case Study 38: **Firewood logging in Albania**

A study carried out by the UNDP's Energy and Environment for Sustainable Development Cluster (EESDC 2008) assessed that the degree of uncertainty in fuel wood consumption was almost 80 percent, which is very high compared to the average uncertainty of overall energy consumption data (assessed as only 17 percent).

The Illegal Logging Independent Study (Albanian Center for Economic Research 2001); the harvesting moratorium imposed by the Council of Ministers through Decision No. 648 of December 13, 2002 on the Temporary Prohibition of Timber Harvesting with the Exception of Firewood; and the Assessment of Poverty in 10 Areas in Albania (World Bank 2002) all highlight the significance of poverty-driven illegal logging. Poverty is most common in the north of Albania. Migration to urban areas has reduced pressure in mountainous areas but the demand for firewood has shifted, at least partly, to urban areas where people continue to depend on firewood for their energy supply. Alternative energy sources are either unavailable or unaffordable for a large portion of the urban population.

Firewood is also illegally harvested for commercial purposes. Private contractors transport it to markets located in urban centres, with distances of up to 70km being economically justifiable. The distinction between commercial and poverty-driven illegal logging is not necessarily very clear, since commercial illegal loggers often hire members of the local population to carry out the harvesting work. In Albania, law enforcement is a bigger problem in state-owned forests than in forestland allocated to local communities and private forests. Wood theft is limited in private and communal forests, which are generally better managed and controlled. (UNECE/FAO 2004)

Cheap wood

Wood obtained illegally is cheaper than legally sourced wood, and in some countries the difference in price is significant. The cost of 2 m^3 of legally purchased firewood may be almost equal to the cost of 3 m^3 of illegally harvested wood. Cheaper wood does not necessarily mean poorer quality: the cheaper, illegally obtained wood is usually of equivalent or better quality than legally sourced wood. This means that there are virtually no disincentives to purchasing illegally harvested wood. The

price of 1 m^3 of wood, depending on the species (beech/oak), can be between EUR 50 and 57. The same wood could be obtained on the black market for between EUR 42 and 45.

Institutional, administrative and regulatory gaps

In general, the tendency is towards the revamping and modernisation of the legislative and policy framework in the forestry sector. Until this process has been finalised, conditions for illegal activities will continue to be favourable. In addition, the more complex and non-transparent the legislation and administrative frameworks, the higher the risk of grey zones that can be exploited by natural and legal persons.

Case Study 39: **Controlling shortcomings in Serbia's private forests**

A state-financed service operates in private forests in Serbia, the main activity of which is to mark trees for logging (at the request of forest owners), to issue logging and transportation documentation, and to provide other professional services for forest owners. This service annually marks about 800,000 m^3 of trees for logging, which is the officially registered quantity of wood harvested from private forests. However, the true extent of logging in private forests is likely to be far greater, at close to 2 million m^3 of wood. Legally logged wood from private forests is mainly sold on to people living in urban areas. Illegally logged wood, meaning wood that has not been harvested according to the relevant administrative and legal procedures, licences or other requirements, is mainly used by the rural population for firewood. This wood is transported by tractor over short distances from forest to village, and the traffic is not controlled. This type of logging is unsustainable and there are also cases of clear cutting, which damages the overall status of the private forests.

Case Study 40: **Complex management structures in Bosnia and Herzegovina**

Forests are managed by the two entities, the Federation of Bosnia and Herzegovina and Republika Srpska. The Federation of Bosnia and Herzegovina has decentralised its forest management responsibilities, transferring them to each of its 10 cantons, which makes forestry regulation rather complex. This situation is exploited by illegal loggers, especially in border areas where it is difficult to ascertain which authorities are responsible. Low levels of accountability, few discretionary powers and weak sanctions are all drivers of illegal logging, bribery, and other illegal or unethical behaviour.

Industrial wood

There is a high demand for illegal wood on the part of wood processing and other wood-related industries. Firstly, illegally harvested wood tends to be cheaper than legally sourced wood, although of equivalent quality. Secondly, the industrial wood sector has experienced a gap in the supply of high-quality legally produced wood. Thirdly, there are few disincentives to using illegally harvested wood, since the risk of detection is low and the system of sanctions is weak. Illegal practices occur mainly in smaller and medium-sized enterprises, and to a lesser degree also in larger wood processing companies. Larger companies are more able to put pressure on suppliers to provide only legally harvested wood that is accompanied by the necessary certificates and documentation. They are also subject to scrutiny by the supervising authorities and tend to be more concerned about their public image. On the other hand, small rural plants tend to use a certain amount of illegally harvested wood, primarily due to its more favourable price. In Serbia, most of the illegally harvested wood used by processing companies originates from private forests.

Case Study 41: **Import tariffs on industrial wood in Albania**

On the basis of stakeholder consultations (part of the national diagnostic audits), the illegal logging of industrial roundwood in Albania is expected to be further reduced in the near future due to the removal of import tariffs, which has lowered timber prices and made logging less profitable. In addition, the supply of industrial roundwood may soon be exhausted in accessible forest areas. The main consumers of industrial roundwood are the wood material processing industries, which purchase logs from silvicultural entities and the construction industry. The current production of industrial roundwood is estimated at 200,000 m^3 per year.

Political and security context

Political and security conditions have a major bearing on the extent of illegal logging. This is particularly true for countries in transition that were severely affected by the war between 1992 and 1996. In Bosnia and Herzegovina, for example, the illegal exploitation of wood was a particularly significant problem during and immediately

after the war. In spite of the identification of several instruments to reduce the occurrence of illegalities, a lack of institutional capacity combined with unfavourable socioeconomic conditions (e.g. high levels of unemployment and low income) jeopardises their effectiveness.

Types of illegal forestry activities

Illegal logging is exacerbated by numerous factors, including unfavourable social and economic conditions, insufficient forestry police and inefficient judicial and sanction systems.

The main types of illegal logging in the SEE region are:

- logging without permission or concession from public forests;
- wood theft or illegal logging from private forests;
- false declarations of volumes, species, values or origins of harvested wood;
- logging in non-marked or prohibited areas;
- obtaining logging authorisation through bribes;
- killing or burning trees so that they can be logged; and
- logging in prohibited or protected areas, such as national parks

Wood theft in public and private forests

In state-owned forests, the most common illegal activity is wood theft. The perpetrators are mainly the local population, sometimes organised in smaller groups. Thefts are often committed in forests located near villages and towns, or on smaller estates surrounded by private forests. One explanation is that it is harder to protect smaller and isolated estates than larger ones, which might be continuously monitored and supervised by forest guards and the forest police. Forest theft is generally less pronounced at high altitudes with limited accessibility. Such theft can be divided into firewood for individual use and technical wood for further sale.

Theft from privately owned forests constitutes a more complex problem. Private owners are not an organised group, the average area of forest plots is very small and owners tend to live at a distance from their property, thus there is no security service for private forests. On the other hand, the owners themselves often harvest illegally in order to obtain a subsistence income. The extent and severity of illegal logging in private forests largely depends on the availability of public services that provide some regulatory and control activities (such as marking trees to be logged and issuing the necessary documentation); the degree of organisation among private owners (e.g. the existence and efficiency of associations of private owners); the degree of awareness of forestry issues; and the introduction of disincentives to illegal activities in private forests.

Case Study 42: **Wood thefts in private forests in Serbia**

The second most common threat to private forests in Serbia is wood theft, exacerbated by the fact that there is no security service for private forests. Owners are obliged to secure their forests, and in the case of theft the police are the competent authority. Thefts are mainly committed by the local population or by organised groups. They tend to be committed in forests owned by people who have moved to urban areas and are therefore living at a distance from their property. These forest owners are not always aware of the illegal activities on their property.

Institutional constraints are apparent in the case of wood theft. Firstly, the police do not intervene adequately, forest inspectors lack competency, and there is no security service for private forests. There are no precise figures for the quantity of illegal logging in private forests, since the majority of owners do not report or do not know about cases of theft. However, an increase in the number of thefts can be presumed.

Contravention of legal provisions

Logging has to be planned and carried out in accordance with environmental, social and labour legislation. Many smaller contractors, especially in the wood processing industry, are tempted to ignore the applicable social and labour laws in order to increase profits. A common practice is to engage workers who are not on the payroll to avoid paying additional social charges and taxes to the state. Another practice is only to report minimum salaries and to pay additional amounts unofficially. Serbia has observed a reduction in such practices following the introduction of stricter penalties and more regular inspections.

Logging protected species and/or in protected areas

Harvesting protected species or trees in protected areas (special protected areas, Natura 2000 sites, nature reserves or other areas subject to specific legal protection) in contravention of national legislation constitutes illegal log-

ging. This type of illegal activity is likely to be less common than other forms, since these species and protected areas normally benefit from more efficient supervision and monitoring, and offences are likely to be subject to stricter sanctions if detected. The conclusion could therefore be drawn that countries with a higher number of protected areas and listed protected species are better protected against illegal activities (at least in these areas).

Case Study 43: **Management of protected areas and species in Serbia**

Protected forest areas in Serbia are mostly located in state forests and are managed by state companies that respect the legal obligations of the protection regime. Cases of logging in protected areas have been observed in connection with the construction of ski resorts (for example Stara planina and Golija), but the competent services have reacted appropriately and submitted a complaint against the perpetrators to a competent court.

There is a complete ban on the cutting of certain tree species, namely the Turkish hazel *(Corylus colurna)* and Serbian spruce *(Picea omorica)*. Only a few cases of the illegal harvesting of Turkish hazel have been recorded, and only of individual trees, as the wood is highly valued in the wood industry. Serbian spruce is not generally illegally harvested as it tends to grow in more inaccessible areas.

Licensing irregularities

Logging is not considered legal unless it is carried out in accordance with a valid licence. Logging activities carried out without obtaining a licence and without the applicable preparatory procedures are cases of non-compliance. Other cases of irregularity are discussed below.

Logging without authorisation

Logging without authorisation is only illegal if a licence is obligatory under national law. In some countries there is no system for issuing licences for cutting contractors. The risk of abuse is partly mitigated by the fact that logging is exclusively carried out by the forest management enterprises that are legally registered to carry out these activities. This system can therefore provide some protection in public forestland. However, in private forests logging is more frequently carried out by contractors that do not have either a mandate or the necessary competencies. In many countries it is common practice for private forest owners to have the privilege of deciding who will carry out their harvesting work.

Logging outside marked borders or concession boundaries

Companies or natural persons harvesting in forests that neighbour other forest areas may intentionally or through neglect fail to inform themselves about the forest borders. Such cases of illegal logging tend to occur in public forests. If detected, perpetrators may claim that they were unaware of the precise boundaries. There are cases of forest management services in private forests being involved in such illegal activities and providing false documentation regarding the origin of the wood. Where logging in neighouring forestland is carried out by public companies, the court would normally require payment of compensation for the damage caused.

In countries with an established system of concessionary rights, loggers may harvest outside their concession boundaries and conceal the fact by falsely reporting the harvesting of higher volumes from within the forest concessions.

Using illegally obtained wood in industrial processing

This is particularly frequent among small or medium-sized companies that might not have the market position or power to accept only legally harvested wood. In order to compete with larger companies they buy cheaper, illegal wood. Larger companies with a significant market presence pay greater attention to their reputation and public image and are therefore more inclined to insist on legally harvested wood.

Exceeding authorised volumes

This occurs in both private and public forests, although it tends to be more common in private forests where logging is not normally followed up by the monitoring and control of the harvested area and the logged timber.

Unethical activities

Although not necessarily defined as illegal on the basis of national provisions, certain activities are carried out with a view to the later harvesting of trees that would otherwise not be logged. Such activities might include girdling or ring-barking to kill trees so that they can be legally logged; cutting down undersized or oversized trees in public forests; obtaining logging concessions through bribes (especially in state-owned forests); and fraudulent behaviour towards private forest owners on the part of enterprises commissioned to carry out cutting in their forests.

Case Study 44: **Fraud in private forests in Serbia**

A large number of forest owners live at a distance from their property and are not therefore able to organise forest cutting work themselves. They therefore look for a company or individuals to carry out the work for them, and this very often leaves room for fraud. Owners do not have sufficient information about the quality and quantity of wood in their forests, and they are often defrauded in the calculation of the quantity and value of the cut wood. In cases when more wood is cut in reality than was agreed with the owner, the owner is responsible according to the law. If cutting exceeds the allowed amount approved by the professional services, or if clear cutting is carried out, the Law on Forests recognises the forest owner alone as being responsible for the execution of unauthorised forest cutting. In such cases, even when theft is detected, the police rarely intervene. Forestry inspectors are not obliged to provide support to private forest owners but only to control the implementation of activities in the forest.

Deliberate forest fires

Deliberately causing forest fires in order to ensure the right to logging is not always officially registered in the countries but can be assumed to take place in private forests. Where forests have been damaged by fire, clear cutting is normally required as a sanitation and rehabilitation measure. On several occasions, fires have occurred in areas where clear logging would not otherwise be permitted, and requests for clear cutting have been submitted afterwards. Although there are strong grounds for suspecting that fires have been started deliberately in these areas, it is a difficult task to gather the necessary evidence. Another reason for setting fire to forests is to expand the area of agricultural land. This happened in the past in Serbia, for example. The common practice of burning agricultural land after the harvest can also result in uncontrolled forest fires.

According to official records in Kosovo (as defined under UNSCR 1244), few fires are caused intentionally, while most are the result of weather conditions or neglect. Some 13 cases of fire were registered in 2009 with virtually no forestland damaged, which was an improvement compared to 2008 when 40 forest fires affected 200 ha of forest. In Serbia, 400 forest fires were registered in 2007, damaging some 10,600 ha of forestland. The number of fires fell to 35 in 2008, affecting an area of 400 ha. The reason for this significant difference has not been established.

Damage resulting from forest fires can be classified according to two main categories.

1 Damage to forests (i.e. direct economic damage):
   - complete destruction of wood mass or the value of the wood mass;
   - loss or reduction of forest growth;
   - destruction of biodiversity or its value;
   - destruction of other forest products;
   - complete or partial destruction of houses, cottages and infrastructure;
   - high costs of resources, equipment and people deployed to extinguish the fires;
   - loss of regular income from production; and
   - loss of human lives.

2 Damage to the ecologically useful functions of the forests (indirect economic damage):
   - reduced production of oxygen and increased air pollution;
   - accelerated local and global climate change;
   - accelerated process of global warming;
   - extension of desert or semi-desert areas;
   - deteriorated or disturbed regime of erosive sediments;
   - the rapid filling with erosive material of natural and artificial reservoirs and open and closed water distribution systems;
   - increased mechanical water pollution;
   - loss of agricultural land; and
   - totally or partially degraded soil.

Case Study 45: **Forest fires in the former Yugoslav Republic of Macedonia**

There were 2,434 forest fires between 1998 and 2007 in the territory covered by the 30 branches of the public enterprise Macedonian Forests. In that period, the total burnt forest area was 96,204 ha and the damaged wood mass amounted to 1,141,892 m^3. The total cost of the damage was EUR 30,812,366. This does not include the potential damage from decreased production capability, damage caused to animal life, the distortion of the land structure, damage caused by secondary effects (harmful insects, plant diseases), as well as the damage from numerous compromised and disturbed useful functions. This means that the total and potential harmful consequences may be many times higher than previously determined.

The years 2000 and 2007 were subject to several natural disasters and were extreme in terms of the quantity and extent (volume of damage caused) of forest fires. From the data analysis, most fires occurred in July and August, with 37.4 percent of the total fires in that period and with 84.5 percent of the total damaged wood mass over the 10-year period.

March and April saw 37 percent of the fires but with 7.8 percent of the total burned wood mass. Special analysis is required in order to determine the real reasons and factors behind such extreme and catastrophic events.

Case Study 46: **Forest fires in Montenegro**

Rural populations often start forest fires in order to stimulate the growth of fire mushrooms. They can earn significant amounts of money by picking mushrooms and selling them to local wholesalers. Mushrooms such as boletus and morels *(Morchella)* are in high demand on the European market, especially in Italy.

From late April to mid-May 2008, families in the municipality of Mojkovac earned more than EUR 5,000 by picking morels. The price offered by local wholesalers was between EUR 9 and 14 per kg. One family can pick 20 kg a day from a good site (usually conifer stands affected by forest fire). Intentional forest fires are a huge problem. Medicinal herbs and forest fruits are also over-harvested (e.g. blueberries are collected unsustainably using berry-picking combs).

According to Article 16 of the Montenegrin Law on Forests (Official Journal of the Republic of Montenegro, No. 55/00), in addition to the production of wood and its transportation, the term "use of forests" covers the harvesting and collection of non-protected plant species: fungi, forest seeds and fruits, and medicinal and other herbs. Article 35 states that "non-protected plant species may be collected and used by forest companies and owners of forests, in compliance with the General Forest Management Plans, projects and programmes of forest management in the way and under the terms laid down by the ministry competent for forestry, with the previously obtained opinion of the ministry competent for environmental protection."

Illegal transport, trade and timber smuggling

Illegal wood is marketed both domestically and abroad. According to the Montenegrin Forest Administration, the export of illegally harvested roundwood and sawn wood takes place mainly in border areas, especially in the municipality of Plav where the harvested timber can be transported rapidly out of the country. Exports of both illegal and legal wood are less common in countries where the demand for wood is many times greater than supply. This is the case in Kosovo (as defined under UNSCR 1244), which is a major importer of illegal wood. Most of the illegal wood enters across the borders with Serbia and Albania, where border controls are weak. Scarce and unreliable data exist regarding the exact magnitude and frequency of this trade. As described below, both legal and illegal wood can be subject to certain illegal or irregular actions that are contrary to national regulations.

Transporting logs without authorisation.

It is common for logs to be transported and traded without the necessary accompanying documentation prescribed by national law. This happens especially often in the case of transportation over short distances in rural areas, which is generally not subject to controls. Recipients are either rural populations, in the case of firewood; or small rural sawmills in the case of industrial wood. Shipments over longer distances, using public roads, are more likely to be accompanied by documentation that confirms the origin of the wood. Serbia, for example, has seen a reduction in illegal transportation in recent years since controls of timber traffic and forest inspections are carried out by market inspectors and the traffic police, although there are also cases of falsified documents stating the origin of the wood.

Smuggling timber.

The extent of smuggling varies among the countries. Smuggling implies an attempt to conceal the whole shipment, as if it never took place. The falsification of documents is more common then smuggling.

Trade in protected species.

This covers exports and imports of tree species, trade in which is banned under international law (e.g. by CITES). Information is scarce as to whether this occurs in the region. Trade in wood species that are included on the list of protected species has not been recorded in Serbia.

Case Study 47: **Control of illegal wood trade in Serbia**

The competent authorities have estimated that the most efficient way to prevent illegal logging is to tackle the transportation and sale of illegally harvested wood. Based on the Law on Forests, wood should not be moved from the site of harvesting until it is accompanied by the relevant documentation and appropriately marked. This applies to all forests, regardless of ownership. The costs of wood marking and the issuing of documents in state forests are borne by the state companies that manage the forests. In private forests, the costs are borne by the state budget and the job is performed by the service for private forest management. Where wood is transported without proper documentation, it is treated as illegal and is subject to legal sanctions, including confiscation. Controls are carried out

regularly by the forest security service, forest inspectors, trade inspectors and the police, and are more intensive in the autumn when levels of firewood trafficking are at their highest. The system is based on the premise that if illegally harvested wood is impossible to sell, there is no motive for illegal logging. These controls mainly prevent the transportation of illegally harvested wood over longer distances and to markets with a lower degree of forestation where demand is greater and the price of wood higher. Transportation by rural roads is not forbidden and therefore represents an easier option for moving illegally logged wood. Forged documents may also be used, or documentation obtained through bribery of forest officials.

Illegal accounting practices

Declaring lower values and volumes of exports

This is most common in countries with significant import and export tariffs. However, the current tendency in SEE countries is towards reducing these tariffs as part of the process of adjusting the tax rate to the EU and World Trade Organization (WTO). In Serbia, there are no quotas and restrictions on wood transport (with some minor exceptions). This eliminates the motivation for falsely declaring goods with a view to avoid paying taxes and charges.

Under-grading, under-valuing, under-measuring and wrongly classifying tree species exported or destined for the local market.

In Serbia, this phenomenon is particularly noticeable in relation to registering lower-quality wood in cooperation with corrupt officials responsible for declarations of timber produced in state forests. There are no data or estimates on the extent of this practice. False declaration of wood types occurs especially in connection with highly valuable timber species, such as fruit trees or protected species.

Other illegal or unethical accounting practices that may take place in the region include manipulation of debt cash flows to transfer money to a subsidiary or parent company to avoid taxes on profits. This phenomenon is not common where the state owns all the forest management companies, since state-run companies have very limited interest in profits. It does exist in the wood processing industry, although there are no precise figures on the extent.

Occupation of public forested lands by rural families, communities or private corporations

Although there are still some cases of the occupation of public forestlands, mainly for agricultural purposes, this was more frequent 50 to 60 years ago when there was more available land and the regulatory controls were generally weaker.

Case Study 48: **Illegal occupation of forestland in Serbia**

The illegal occupation of forests and forestland among the rural population peaked during the 1950s and 1960s. Such instances of occupation have been addressed by the courts, which have found in favour of the state. However, in the absence of mechanisms for forced removal the land has still not been returned. Some cases are still awaiting a decision by the court. The current extent of occupation is relatively small and relates mainly to the illegal construction of residential or agricultural buildings. When the process of privatisation/denationalisation starts, claims can be expected regarding the privatisation of state forests on the basis of false or invalid documents. According to the records of the public enterprise Srbijasume, around 2,500 ha of forests and forestlands have been registered as "occupied", meaning that ownership has not been fully clarified.

Case Study 49: **Illegal occupation of state forests in Montenegro**

According to the Forest Administration, the most common type of illegal activity in Montenegrin forests, after illegal logging, is the occupation of state forests. Illegal appropriation (especially for construction) is a significant problem in the south of the country. An efficient mechanism is needed in order to prevent future appropriations and to deal with existing illegal uses (e.g. selling the land or swapping it for other equivalent land).

Volume of illegal logging

Volume of illegal logging in state-owned and privately owned forests

One problem common to SEE countries, and to most forest-producing countries, is the difficultly in obtaining accurate figures for illegal logging. Firstly, there is no commonly used method for estimating the volume of illegal logging. In Montenegro, the Forest Administration bases

its estimate on tenders for harvesting concessions. However, information from private forest associations suggests that the volume of illegal logging in Montenegro is significantly higher than the authorised harvesting, for a number of reasons. Some loggers or contractors simply do not follow the applicable administrative procedures and log without the necessary prior approval. This is true in the case of private forest owners in particular, who log relatively small quantities.

Secondly, the range of estimated figures for illegal logging is wide. In Montenegro the official estimated figure is only 1 percent; in Albania it is 7 percent; while the figure is significantly higher in the former Yugoslav Republic of Macedonia (between 25 and 30 percent) and Kosovo (as defined under UNSCR 1244) (35 percent). In Bosnia and Herzegovina, a 2005 study by Savcor Indufor Oy estimated volumes between 0.3 and 2.2 percent of the timber supply with an estimated value of between USD 10 and 20 million.

According to the World Bank study for Serbia (Savcor Indufor Oy 2009), the estimated amount of illegally cut wood in Serbian public forests is between 10,000 and 32,000 m^3 per year. There are no confirmed estimates of the amount of illegally cut wood in private forests, but the total amount of cut wood in private forests is estimated at around 1 million m^3. According to the World Bank study, the minimal assessment of illegally logged wood in private forests in Serbia amounts to some 500,000m^3. This would mean that the lost income to the state (3 percent for forest improvement) equals the volume of illegally logged wood multiplied by 0.03 percent of the average reference price of the wood.

The following characteristics are common to all the countries.

- Volumes of illegal logging are increasing or at best stagnating in most of the countries. Illegal logging and other illegal forest activities peaked between the end of the 1990s and 2002. In the former Yugoslav Republic of Macedonia, a steady increase could be perceived between 2002 and 2003[21], mainly due to deteriorating socioeconomic conditions. One partial explanation behind this trend is improved access to more reliable forestry data originating from forest administrations, NGOs and civil society. Another important reason is the emergence of more organised logging activities affecting a greater forest area. However, Albania shows a decreasing trend according to official statistics.
- Although firewood is one of the main target usage areas behind illegal logging, it does not normally represent the biggest volume. For instance, in the former Yugoslav Republic of Macedonia firewood is estimated to represent 40 percent or slightly more of the total illegally logged wood.
- There is a lack of reliable figures for both legally and illegally logged wood.
- The main driver behind illegal logging is the socioeconomic conditions, especially in rural, forested regions.
- Official figures are grossly underestimated.
- There is a clear incentive to purchase illegally logged wood since it is significantly cheaper and the quality is the same or better. For instance, in the former Yugoslav Republic of Macedonia, the price of 2 m3 of legally logged firewood is almost the same as that of 3 m3 of illegally harvested wood.

TABLE 5: **Illegal occupation of state forests in Montenegro**

YEAR	ha
2002	8.85
2003	14.3
2004	7.0
2005	3.83
2006	3.5
2007	8.97

Albania

Illegal logging reached a peak in 1997 when more than 500,000 m^3 of illegally logged wood were recorded. In 2002, the recorded volume was down to 28,400 m^3, of which 8,400 m^3 (30 percent) were confiscated by the authorities. In 2007, the officially recorded volume of illegal logging was about 10,064 m^3, which represents 7 percent of the total official wood volume (2008 data from INSTAT). The actual volume of illegal logging is likely to be at least 10 times higher than the official figures, due to the discrepancy between the official data on roundwood supply and actual consumption. According to official data, the total harvested was 223,800 m^3 in 2005 and 148,974 m^3 in 2006.[22]

Kosovo (as defined under UNSCR 1244)

An inventory carried out by the Norwegian Forestry Group estimated that uncontrolled, illegal cutting occurs in 35 percent of the forest area, comprising 40 percent

public forestland and 29 percent private forestland. Informal estimates suggest that approximately 100,000 m^3 per year are cut illegally, which is a relatively high figure. The main driver behind illegal logging is the socioeconomic situation in poor, forested areas.

In some affected areas, the Kosovo Forest Agency has established permanent checkpoints with the Kosovo Police (e.g. in Gryken e Decanit). Forest guards issued 2,183 tickets for offences in the period January to May 2009. The Forest Agency implements an action plan in cooperation with the police, which has resulted in 500 checks during the same period and the confiscation of 1,000 m^3 of illegally cut timber.

Montenegro

Official figures for the volume of illegal logging are based on data from the Forest Administration. The Forest Administration organises tenders for concessions for a volume slightly over 400,000m^3 per year, on the basis of which it can be assumed that the percentage of officially recorded illegal logging in state forest is less than 1 percent. However, according to information from private forest associations, the volume of illegal logging in Montenegro is far higher than the authorised harvesting. It should be stressed that it is almost impossible to estimate the precise volume of illegal logging. In Montenegro, especially in the north of the country, salaries are low and unemployment high, which contributes to perpetuating illegal logging activities.

The numerous recent policy documents adopted to promote sustainable forest management (in particular the National Forest Policy and the National Action Plan for Combating Illegal Activities) and their implementation by the Forest Administration has resulted in a decrease in illegal activities. This applies primarily to the illegal logging of high-quality conifer stands in state forests (4,572 m^3 in 2007; 2,275 m^3 in 2008; and 2,465 m^3 in 2009). However, illegal logging is increasing in private forests and the level was particularly high in 2008 (355 m^3 in 2007; 2,093 m^3 in 2008; and 1,067 m^3 in 2009).

Serbia

Illegal logging in Serbia is most intense in forest areas bordering the territory of Kosovo (as defined under UNSCR 1244), where access is difficult (Vranje, Kursumlija, Leskovac, Raska and Leposavic). The total registered quantity of illegal logging in this part of Serbia is more then 200,000 m^3 for the period 2002 to 2008.

The highest volumes of logged wood are those logged in private forests by the forest owner without the prior approval of the competent professional services. This kind of logging is considered illegal, although it cannot be qualified as forest theft or other criminal activity. Although contrary to the provisions of the Law on Forests, it does not qualify as a crime pursuant to criminal laws. As a consequence, sanctions for such illegal activities are controversial and unusual. A further negative aspect is that such logging is often executed in an unsustainable manner, causing damage to the forest and decreasing forest quality.

TABLE 6: **Officially recorded illegal logging in Montenegrin state forests**

YEAR	VOLUME (m^3)
2002	5,623
2003	3,863
2004	2,768
2005	2,380
2006	3,735
2007	5,620
2008	4,178
2009	4,857
Total 2002 to 2009	**33,024**
Average 2002 to 2009	**4,128**

Source: Montenegro Forest Administration

In state forests, illegal logging is less extensive and logging is normally undertaken in a less destructive manner. In relation to primary wood processing, the presence of illegal wood in the forests as a consequence of theft in sawmills is almost negligible. The situation is similar in relation to exports and imports of wood and wooden products. The existence of larger organised groups, illegal organisations etc. dealing with such activities is relatively uncommon.

Between 2002 and 2008, the extent of illegal logging in state forests showed less oscillation and the annual average was about 10,000m^3. The figure for 2008 was exceptionally high at close to 14,000 m^3. The real cause for concern is that only about 20 percent of complaints are resolved via implemented sanctions, largely due to insufficient evidence, incomplete applications and leniency on the part of the courts.

It is important to bear in mind the following background to the figures given in the table above.

- The table only covers illegal logging that is the result of forest theft, rather than logging carried out with-

TABLE 7: **Overview of illegal logging in Serbia**

YEAR	ILLEGALLY LOGGED VOLUME OF WOOD (m^3)	NUMBER OF SUBMITTED APPLICATIONS	NUMBER OF SOLVED APPLICATIONS
2002	10,037	1,614	411
2003	10,349	162	243
2004	9,136	1,151	310
2005	8,213	1,489	322
2006	7,362	1,272	231
2007	10,671	1,089	198
2008	13,713	1,345	177
I-VII 2009	3,182	572	167
Total	**72,663**	**8,694**	**2,059**
Average per year	**9,926**	**1,160**	**270**

Source: Reports of forest holdings by national forestry inspectors

TABLE 8: **Estimated data on illegal logging**

COUNTRY	YEAR	ESTIMATED VOLUME OF ILLEGAL LOGGING (m^3)	LEGAL LOGGING (m^3)	ILLEGAL LOGGING AS % OF LEGAL LOGGING
Albania	2002	28,400	304,800	9.3
Bosnia and Herzegovina	2003	41,159	1,850,938	2.2
Serbia and Montenegro	2004	9,136	3,250,000	0.3
Serbia and Montenegro	2004	9,136	3,250,000	0.3

Source: SAVCOR Reports, Europe and Northern Asia Forest Law Enforcement and Governance Fact Sheet, 2005

out appropriate documentation. Such logging is recorded as "extraordinary yield" and there are few data as to its precise volume.

- The figures do not include illegal logging in state forests on the boundary with Kosovo (as defined under UNSCR 1244), which is under the jurisdiction of military and police authorities. Based on estimates by the public enterprise regarding the extent of illegal logging, the total volume in this area amounts to over 200,000 m3 for the period 2002 to 2008. The Belgrade public enterprise Srbijasume has regularly informed the competent authorities within the state administration about this issue, and the Ministry of Interior Affairs, the army and local authorities have asked representatives of KFOR and UNMIK for assistance in solving the problem. Most of the logged wood in this area is probably used for firewood.

Exports and imports

Most trade in illegally harvested wood takes place on the domestic market. It concerns smaller quantities of firewood and technical wood (sawn wood logs) in particular. Bosnia and Herzegovina is among the largest exporters in the region, exporting significant amounts to neighbouring countries, especially Serbia.

In several countries the balance of trade is negative (more wood imports than exports). In Albania, roundwood imports are nearly double exports, and in the case of sawn timber imports are more than 10 times higher. The trade balance is stabilised largely through high levels of exports of non-wood products, mainly plants and charcoal. The negative export-import balance in roundwood and sawn timber is one of the factors stimulating illegal logging.

The recent abolition of import tariffs in Albania may have contributed to stimulating imports, which may in turn have had a positive impact on reducing illegal log-

ging by lowering timber prices and making illegal logging less profitable. On the other hand, while the volume of illegal logging may have been reduced, lower timber prices limit interest in forest management and may lead to the expansion of other land use at the expense of forestry.

The presence of illegally harvested wood on the export market is insignificant (with the possible exception of Bosnia and Herzegovina), partly because export volumes are limited (especially of firewood, which is the most common purpose of illegal logging) and partly due to the control and inspection mechanisms in importing countries and the increasing demand for certified wood (e.g. FSC approved).

Case Study 50: **Serbian imports of illegally harvested wood from Bosnia and Herzegovina**

Due to the general trend towards a reduction in good-quality hard (oak) and soft wood, several countries, including Serbia, import significant quantities of logs and sawn wood. Bosnia and Herzegovina is the main source of illegally imported timber, facilitated by gaps in the legislative and customs regulatory framework in Bosnia and Herzegovina but also as a result of shortcomings in border crossing controls.

The main type of illegal trade is through false declarations: imported volumes are substantially higher than the volumes declared in the documentation accompanying the wood/goods. The main driver for continued imports of illegal wood is the unrealistically low unit price and the underestimated total value of these imports.

Case Study 51: **Detection of illegally logged wood in the former Yugoslav Republic of Macedonia**

The volume of illegally logged wood mass detected by forest guards up to 1995 was around 7,000 m^3 annually. Most of this wood was to satisfy the needs of the domestic population, and a relatively small proportion was wood for commercial purposes. Up to 1995, the most endangered regions were Skopje, Kumanovo, Prilep, Radovish and Strumica. Since 1995 there has been a significant increase in illegal logging throughout the country, leading to extensive damage to the forest fund, especially in the surroundings of the cities of Prilep, Radovish, Kumanovo, Strumica, Veles, Tetovo, Gostivar and Makedonski Brod. The biggest damage is caused by illegal loggers who make money selling firewood. Since 2000, illegal logging has been most common in parts of the country affected by the war, which were not adequately controlled by the forestry police. Illegal logging has spread on a large scale to other parts of the country. Offenders have also become more aggressive, forcing the forestry police to take joint action with the Ministry of Internal Affairs.

The most common reason for illegal logging, according to the forest units of the public entity Macedonian Forests, is for low-income families to obtain firewood. However, larger-scale illegal logging (in terms of volume) is carried out by organised wood thieves, often with the assistance of employees of the public enterprise Macedonian Forests. There are cases of forest destruction in many areas, but typically in Breza, Buzalkovo, Dobrino, Dejkovec, Crnilishte, Golak, Smrdeshnik and Ograzhden, and in all areas affected by the war, especially Lipkovo and Tetovo. The illegal logging of technical wood endangers new plantations of white and black pines in the regions of Prilep, Delchevo, Shtip, Berovo and others. Loggers tend to cut the highest-quality, tallest trees, damaging others in the process. Illegally logged wood is sold on the domestic market at a lower price (excluding state taxes). This activity is facilitated through the opening of numerous private lands for wood sale.

There was a steady increase in illegal logging and timber theft in 2002 and 2003 as a result of unfavourable social and economic conditions, the total number of cases reaching 14,586.

Corruption and transparency

Corruption and non-transparency

The classic definition of corruption used by the World Bank and Transparency International is "the use of public position for illegitimate private gains". The abuse of power and personal gain may take place in both the public and private domains and often in collusion with individuals from both sectors. Corruption includes conflict of interest, bribery, fraud, political corruption, nepotism and extortion. Forests are high-value natural resources, often under government control or regulation, that offer an important potential source of political power and a correspondingly high risk of abuse.

All the countries covered in this report have high levels of corruption, according to the annual corruption perceptions index (CPI) of Transparency International (TI)[23]:

1 **Montenegro**
(69th place in 2009)

2 **The former Yugoslav Republic of Macedonia**
(72st place in 2008)

3 **Serbia**
(85th place in 2008)

4 **Albania**
(95th place in 2007)

5 **Bosnia and Herzegovina**
(99th place in 2009)

6 **Kosovo** (as defined under UNSCR 1244)
has not been indexed through the CPI

The latest information from TI shows that most SEE countries have not improved their position in the global anti-corruption index. In the extended SEE region, Croatia is considered as the least corrupt country (66th place), followed by Montenegro, Romania, Bulgaria and the former Yugoslav Republic of Macedonia, Serbia, Albania and Bosnia and Herzegovina. On the basis of the CPI, it is clear that the problem is a persistent one and the situation is not improving significantly. However, there are exceptions to the trend. In Albania and Montenegro, progress has been achieved in recent years (Montenegro climbed from 106th to 69th place between 2003 and 2009).

Besides the CPI, another measurable indicator of corruption is the number of anti-corruption penal prosecutions. The growing number of such cases is an indication that corruption is being tackled.

The conclusion can be drawn that all of the countries must take further steps to combat corruption. It is important to monitor the forestry sector, to identify instances of corruption, and to bring the perpetrators to justice.

Case Study 52: **The Macedonian Commission for the Prevention of Corruption**

The Assembly of the former Yugoslav Republic of Macedonia formed a State Commission for the Prevention of Corruption in November 2002, appointing its members in accordance with the Law on the Prevention of Corruption. It is constituted as an independent organ with the authority to implement established measures and activities to prevent corruption in the public administration. The commission is autonomous and independent: it leads investigative procedures and initiates criminal proceedings against all officials and employees in the state and public administration if they abuse their powers. To date, the commission has introduced two programmes for the prevention and repression of corruption, one for the period 2003 to 2006; and the second for the period 2007 to 2010.

Monitoring and control system

Introduction

A robust monitoring and control framework, clearly set out in the legislative and policy frameworks, is essential for sustainable forestry management and for controlling corruption. The extent of illegal logging is often directly related to the efficiency of the state monitoring and control system. This system must have clear objectives and measurable indicators, and results must be carefully evaluated. It must clearly define the levels of responsibility, procedures and coordination mechanisms for all the relevant institutions.

Some countries already have a monitoring system in place. However, there is no common definition and understanding of monitoring systems in terms of their scope, functioning, objectives and format, and definitions may vary between countries.

According to the findings of representatives of state forestry institutions and other forest stakeholders, there are a strong links between quality monitoring and forest management planning. One vital step in forestry sector reform is therefore to improve operational planning and to monitor the implementation of forest management plans to ensure that they are put into practice.

Case Study 53: **Definition of monitoring in the former Yugoslav Republic of Macedonia**

In the former Yugoslav Republic of Macedonia, the following definition of monitoring is given in the recent Law on Forests (Article 12[15]): "Monitoring is a system for the constant following and analysis of the complete condition of forest ecosystems, especially their vitality, health and biodiversity, in order to take preventive measures and provide protection." Macedonian legislation defines in detail the monitoring of forest ecosystems and forest fires, but does not define the monitoring of illegal forest activities. The monitoring system covers damage caused by atmospheric impacts and other natural disasters that affect the condition of forests and forestland. Based on the monitoring of forest ecosystems, the government will establish a two-year programme of measures and activities for data collection on damage to forests and will establish a register of forest damage. The ministry will delegate powers for the preparation and implementation of the plan to the Forestry Faculty of the University of St. Cyril and Methodius in Skopje. The government will prescribe secondary regulations setting out the method for data collection on forest damage and the form, content and manner of compiling the register of forest damage.

Case Study 54: **Monitoring system in Albania**

The monitoring system for illegal logging established by the Sector of Coordination and Police Control of the MoE-FWA comprises three main monitoring forms that are completed at district level. The data are later extrapolated and compared at national level.

The illegal logging monitoring system includes the identification and registration of:

- infringements (penal, administrative) as well as the estimation of damage and the respective fines;
- illegally cut wood; and
- the wood materials confiscated during controls.

The same monitoring system is applied by the Environment and Forestry Agency as part of forest status monitoring in general. The main public institution and stakeholders involved in forest legislation enforcement are shown in the organigram below.

Case Study 55: **Monitoring of forest fires in the former Yugoslav Republic of Macedonia**

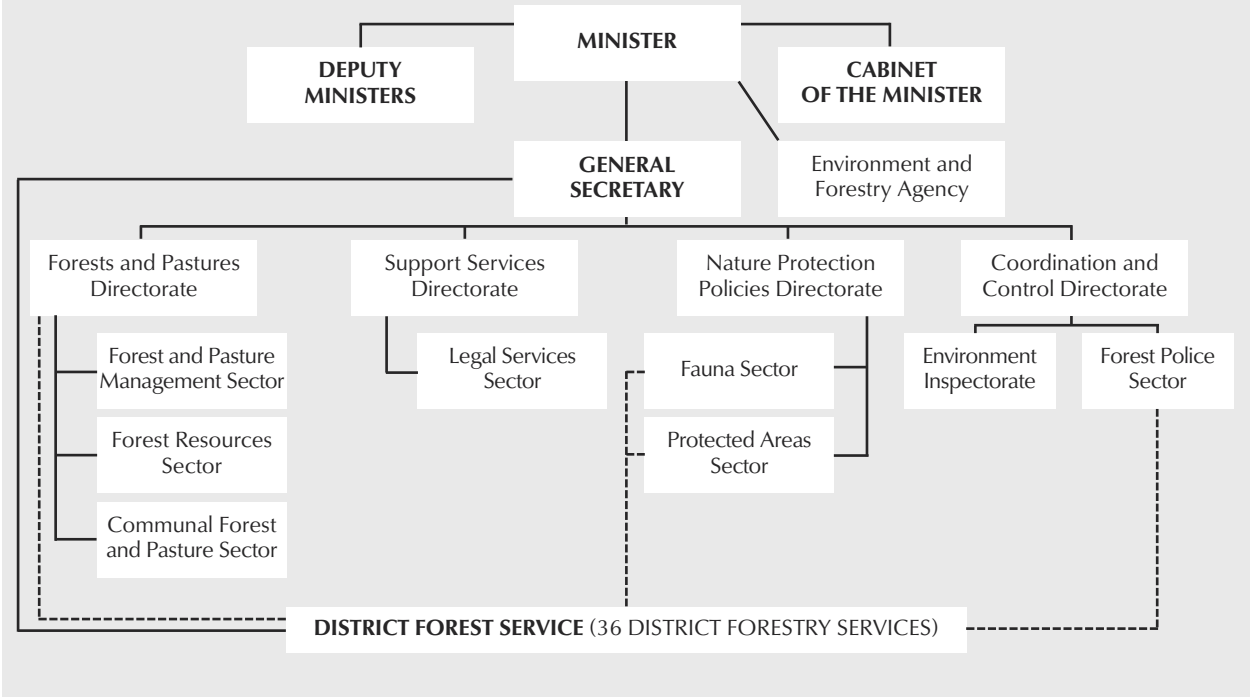
The recent Law on Forests sets out an improved monitoring system for forest fires. The main objective is to establish a single system for information on and registration of forest fires. The law sets out the obligations on forest management companies in terms of data collection in relation to forest fires and reporting to the relevant forest authorities. The information will be accessible for national and international bodies and institutions. A uniform methodology for data collection and for administering the register on forest fires will be set out in detailed secondary regulations.

There are various measures in place for reducing the number of forest fires, mainly through awareness raising and education. A rulebook of special measures for the protection of forests against fires has been adopted and forest management entities are obliged to develop special operative plans and to update them annually.

Every branch of the public enterprise Macedonian Forests has staff that are trained and equipped to alert the fire fighters in special departments of the enterprise. In the case of bigger fires these special departments also notify the regional fire departments. If the fire cannot be contained, notification is sent to the responsible authorities, including the Directorate for Protection and Rescue, the Centre for Crisis Management and the general headquarters of the army, which can supply aircraft to assist in extinguishing the fire.

In general, the early warning systems do not have sufficient resources. Satellite detection of forest fires has been carried out by the Hydro-meteorological Service since May 2009. In the Department of Meteorology, the Division of Agro-meteorology carries out activities related to (i)

FIGURE 1: **Monitoring system in Albania**



phonological forecasts and forest fire forecasts; (ii) agro-meteorological forecasts on the occurrence of natural disasters, as well as advice and recommendations for their mitigation; and (iii) agro-meteorological forecasts and information on diseases caused by pests attacking cultivated plants and yield forecasts.

Forest management entities lack appropriate equipment for the satellite tracking of forest fires, such as sophisticated binoculars, radio connections for reporting fires, and up-to-date software for creating more user-friendly databases. The government plans to purchase planes for wide-scale monitoring and for use in extinguishing larger fires.

The country has developed a local and regional forestry notification system based on warnings issued by the Ministry of Foreign Affairs to the entities responsible for fire fighting. There is a good level of cooperation with other countries in the region, especially with Greece (which has contributed aeroplanes for extinguishing fires), Albania, Bulgaria, Serbia, Croatia, and Slovenia.

Case Study 56: **State border controls in the former Yugoslav Republic of Macedonia**

According to the Law for Control of the State's Borders, the Ministry of Internal Affairs has responsibility for control in cooperation with the police. A national coordination centre for border management was established to facilitate data collection, information exchange and increased integration. The Ministry of Agriculture, Forestry and Water Economy participates in the work of the centre to control imports, exports and transportation of animal and vegetable shipments.

The Ministry of Agriculture, Forestry and Water Economy has three core functions within border management: phytosanitary control; veterinary control and monitoring; and logging. A representative of the Customs Administration of the Ministry of Finance also participates in the centre. The national customs law has been aligned with EU directives concerning the trade in wood and wood products, and the customs nomenclature is harmonised with the EU nomenclature.

Cross-border cooperation with neighbouring countries in the forestry sector with the aim of combating illegal trade in wood and timber has not yet been established in the form of an official bilateral process. Cross-border trade is controlled by customs officers and inspectors.

Case Study 57: **New monitoring system in Serbia**

In Serbia, the state entity with primary responsibility for implementing forest legislation is the Forestry Inspection Service, and monitoring is carried out mainly by the Directorate for Forests. The tasks and responsibilities of the Forestry Inspection Service are mainly related to the activities of forest management companies and private forest owners.

The analysis and interpretation of data requires the participation of other interested parties. Equal participation in the process will be ensured through a participative process that will be defined after detailed analysis of similar experiences in monitoring in other countries in the region. This will be supplemented by capacity-building workshops.

A uniform information system will be established in the future, but currently information on illegal activities is gathered through various internal data collection systems. The effectiveness of the new monitoring system will depend mainly on the improved use of technology in the detection of offences related to logging, transportation, processing and trade; and on the capacity and expertise of those involved in the monitoring.

There are currently several monitoring systems applicable for the various institutions, rather than one uniform system. One of them is operated by the forest management companies, which carry out internal control services as well as field checks. They record data on illegally logged trees, the number of submitted applications, the number of solved applications etc. Another system has been established for inspection bodies, recording the number of submitted applications and their outcomes in practice. A combined, uniform system, in which all data on illegal forest activities can be monitored, has not yet been established. The most frequent barriers to the efficient functioning of control services are shortages of equipment, vehicles and fuel, and lack of jurisdiction.

Case Study 58: **Control procedures in Bosnia and Herzegovina**

Official procedures prior and during harvesting are set out in the 2002 Law on Forests and include marking, measurement and the issuing of harvest permits. These activities come under the jurisdiction of the forest guards, forest protection experts on behalf of canton forest management companies, and police representatives and authorised forestry inspectors. These officials have the right to identify and record all persons in the areas of their jurisdiction. Marking and measurement in state-owned forests is carried out by canton forestry enterprises, and private forest harvesting is monitored by cantonal offices.

In the post-war period, control systems and mechanisms to protect forests against theft have been improved. However, the action plan developed for both entities has a pessimistic outlook on the socioeocnomic conditions and

emphasises that the weakness of legal structures is giving rise to other forms of illegality, including corruption among public officials. In the forest sector, corruption is mainly associated with timber sales from public forest enterprises.

These issues and illegal activities have partly been addressed through:

External control
Aimed at improving the institutional control structure; increasing human resources in the inspection services and providing better training; strengthening and reforming the prosecution system; providing an independent assessment of the type and extent of illegal logging and exports of illegal timber; and assessing the extent of the government's financial losses.

Internal development of state forest enterprises
The implementation of a reform strategy, including proposals to reduce the number of forest management units; the recruitment and restructuring of human resources; and the application of centralised competitive bidding and other market-based pricing mechanisms for timber sales to all private enterprises.

Special bodies/forces

Forestry police

The most common form of special body involved in combating and detecting illegal forest activities is the forestry police, who often work in close cooperation with forest management companies, the state police and other public ministerial bodies. The institution of the forest police has existed in the region since democratisation and the change of political regime. In Kosovo (as defined under UNSCR 1244), for example, the forestry police was established in 1999. In general, the forestry police control all entities that manage forests, other relevant forest companies and directly affected citizens. In most SEE countries, members of the forestry police carry firearms for the purposes of self-defence when apprehending offenders caught in the act of causing damage to forests.

The mandate and competencies of the forestry police are laid down in the law. Some laws, such as the recent Forest Law in the former Yugoslav Republic of Macedonia, directly empower the forestry police in the fight against illegal logging. The forestry police have almost identical powers as the state police under the Ministry of Internal Affairs. In other countries, their powers are more restricted. The forestry police work most efficiently where there is effective cooperation in the fight against illegal logging at a high level, that is, between the forestry police and the state police. The regular police authorities normally have wider powers and a mandate that also allows them to take joint action against perpetrators, together with the forestry police. The greatest challenges facing the forestry police are the lack of human resources and equipment, and the low levels of professional experience and capacity.

All potential EU candidates have to establish national programmes for approximation to EU legislation, which also comprises actions in the field of environment and forestry legislation.

Case Study 59: **Enhancing the capacities of the forestry police in the former Yugoslav Republic of Macedonia**

Until the adoption of the Law on Forests, forest management was under the jurisdiction of the forest guard services in the framework of the forest commercial enterprises. This forest guard service comprised 438 persons in a period when illegal logging was relatively restricted. The forestry police was established in 1998 with 150 forestry police officers, although on the basis of the relevant law the number foreseen was 300. In 2001, the 150 officers were reduced to 87 and then increased to 111, mainly due to legal complaints. This number is not considered sufficient to meet the challenge of illegal logging, when the groups carrying out the illegal logging are carefully organised and well equipped.

In order to be able to implement the policies, reforms and measures needed for harmonising national legislation with the EU acquis communitaire, as set out in the National Programme for Approximation to EU Legislation, the former Yugoslav Republic of Macedonia is taking steps to strengthen human resources and capacities in the forestry police. Between 2008 and 2009, some 45 new employees were hired in the forestry police. In terms of harmonisation and implementation, the complexity and extent of EU legislation requires strong administrative capacity on the part of the relevant institutions. The current situation in the former Yugoslav Republic of Macedonia is still characterised by an inadequate number of employees at both central and local level.

The most important activity in the field of forest protection in Serbia is the preparation of a national action plan to combat illegal activities in forestry, which is implemented by the Directorate for Forests of the Ministry of Agriculture, Forestry and Water Management. The national action plan was prepared in cooperation with major institutions related to the forestry sector and illegal logging. The drafting of the action plan should be used to

establish permanent cooperation, which, where possible, should continue in the form of joint implementation. There are no other joint activities to combat illegal logging, with the exception of local activities carried out periodically to control wood traffic.

Case Study 60: **Monitoring and control bodies in Montenegro**

The monitoring and control system involves many entities and institutions, with overlapping responsibilities.

The Ministry of Agriculture, Forestry and Water Management permanently monitors the implementation of the Forest Law. In order to giver greater emphasis to sound monitoring, the ministry established the Central Management and Monitoring Unit (CMMU), which has a mandate to cooperate with the Forest Inspectorate. To date, the CMMU has primarily been in charge of establishing connections between donor projects, the ministry and other stakeholders in the forest sector. It can therefore be seen as an entity in charge of developing and disseminating new approaches and methodologies. The Forest Inspectorate carries out some 1,500 inspections a year and has a reasonable overview of the situation in the sector. However, its effectiveness is hampered by limited means of transportation and lack of basic computer equipment.

The National Action Plan (NAP) for Combating Illegal Activities in Forestry is the most important government initiative for the prevention of illegal logging. One of the activities under this NAP is the self-monitoring of implementation, which will be the pivotal task of the NAP Monitoring Coordination Committee. This committee was set up by the ministry in May 2009 and comprises 12 members from eight institutions (the Ministry of Agriculture, Forestry and Water Management; the Ministry of Economy; the Ministry of Spatial Planning and Environmental Protection; the Ministry of Justice; the Police Directorate; the Forest Administration; the Customs Administration; and the state company National Parks of Montenegro) and one NGO (National Forest Owners Association). The committee is to establish a technical unit with the task of collecting, analysing and submitting data on the implementation of NAP activities. Monitoring will be carried out pursuant to certain defined indicators. One of the weaknesses of the committee is that it has not been efficient and proactive in obtaining funds from donors for the implementation of NAP activities.

Monitoring of NAP activities must be reported annually to the future National Forestry Council. These reports will be regularly published and made available to all stakeholders, including civil society and the media, and will be presented on the official website of the ministry. The establishment of the National Forestry Council is one of the priority actions for the forthcoming period.

Case Study 61: **Use of firearms by the forestry police in the former Yugoslav Republic of Macedonia**

In the line of duty, members of the forestry police may use firearms in self-defence when preventing the escape of an offender caught in the act of causing damage to the forest, where there is reason to believe that the perpetrator will use firearms or other type of weapon. Forestry police officers may fire weapons only if the use of physical force or other means of coercion are not sufficient. For more efficient combat against illegal logging, there is a special mobile unit within the forestry police known as the "Bears". Members of this unit are trained in physical defence and in the use of firearms. They wear protective clothing and are armed with automatic firearms.

Case Study 62: **Task force on illegal logging in Albania**

The institutional reform for the forestry sector has only been completed in the framework of the Ministry of Environment, Forestry and Water Administration. There are three main directorates:

- Directorate of Forest and Pasture Policies (DFPP), responsible for the management of forest resources;
- Directorate of Coordination and Control (DCC), responsible for control and monitoring functions; and
- Directorate of Nature Protection Policies (DNPP), responsible for the management of protected areas and fauna.

With respect to illegal logging, the key body within the Ministry of Environment, Forestry and Water Administration is the Directorate of Coordination and Control, Sector of Coordination and Police Control, which is responsible for planning and coordinating activities related to forest protection. In November 2000, the government created a Task Force Commission for Forest Resource Protection as a supplement to its action plan on illegal logging. The task force involved 11 ministries and governmental institutions, but no representatives of the private sector or civil society. This task force existed for only a short period and ceased to be active at the beginning of the election year 2005.

Case Study 63: **Monitoring forest management plans in Bosnia and Herzegovina**

The supervision and monitoring of forest management plans is controlled by the Forest Inspection Services (FIS). The FIS, reporting directly to the ministerial forest departments, are charged with regularly monitoring and inspecting forest-related activities to ensure compliance with the Forest Law and relevant regulations. Project implementation units have been established in both entities, tasked with implementing and coordinating activities and monitoring forestry projects.

Recourse to court and administrative procedures

A common point among all countries is that only an insignificant proportion of all illegal logging cases are resolved in court. Firstly, most illegal logging is not detected or cannot be linked to the perpetrator. Secondly, even when illegal logging is detected and an official complaint made, cases are not always brought before a court for final judgment and the imposing of sanctions.

The legal framework is not sufficiently clear regarding illegal forestry activities. In some countries, for example, while the Forest Law defines illegal forestry activities they are not always linked to efficient sanctions or penal provisions.

Case Study 64: **Court procedures in the former Yugoslav Republic of Macedonia**

The State Inspectorate for Forestry monitors the implementation of the Law on Forests; and the State Market Inspectorate monitors the marketing and trade of wood/timber and other wood products. The Macedonian system allows for a fast-track court procedure on the government's recommendation. In this case, the inspector or the forestry police are obliged to submit to the court the request for initiating a misdemeanour procedure within 15 days of the date of detection, along with the evidence. After receiving the request, the court may give an order for the temporary withdrawal/seizing of the evidence, which is taken to the agency for the management and storage of seized property. The case must include an evaluation of the damage caused, taking into consideration the current real market conditions relating to the price of wood. The court should always take into consideration the real value of the damage caused. Fines are issued according to the Law on Forests or the Law on Misdemeanours and at the same time the court takes into consideration the family circumstances and economic situation of the offender, the motivation for the misdemeanour, and whether it is a first offence.

Case Study 65: **Criminal charges brought in Montenegro**

In 2009, some 232 criminal charges were filed for 1,098 m3 of illegally harvested conifers and 1,688 m3 of illegally harvested broadleaved species, 419 m3 of which were seized. These were cases in which the offenders were identified. The volume of wood illegally harvested by unidentified offenders was 1,364 m3 of conifers and 698 m3 of broadleaved species, 603 m3 of which were seized.

Three offence reports were submitted by the Forestry Inspectorate, along with 62 reports of cases in private forests. These reports are submitted by the forest guards of the Forest Administration to the regional units of the Forest Protection Service, where they are processed pursuant to the Regulations on Indemnification of Natural Persons for Damage Caused within State Property. The reports are then forwarded to the competent state prosecutor, who proposes the investigation. On completion of the investigation, the prosecutor decides whether to drop the charges due to lack of evidence, or to proceed and submit the case to the local court of first instance. After the verdict of this court, an appeal can be made to the superior court, which gives the final and executive verdict.

The Forest Administration also initiated 50 disciplinary procedures against forest guards in 2009, with the aim of ensuring their active engagement in forest protection work. In state forests, three criminal charges (for under 1 m3 of illegally logged wood) were filed in 2009, with identified offenders.

Reports of charges against unidentified offenders are submitted to the Forest Inspectorate, the Police Administration and the state prosecution so that action can be taken under their respective competencies to identify the offenders and prevent possible future illegal activities.

Relevant data on the percentage of cases brought to trial that have resulted in conviction and sanctions have not been obtained from the Forest Administration or Forest Inspectorate. However, interviews with representatives of both authorities indicate that the total number of rulings make up a small percentage and that court proceedings are lengthy and inefficient.

Case Study 66: **Institutional weaknesses in the judicial system of Bosnia and Herzegovina**

A special department has been established in the State Investigation and Protection Agency to deal with state crimes. Although forestry is normally regulated at state level in European countries, this is not the case in Bosnia and Herzegovina, due to inefficient institutions, legislative gaps and

inter-sectoral problems. In the Federation of Bosnia and Herzegovina, the competent control and supervisory institutions, including the police and the judicial system, are inefficient and lack the necessary powers. Cantonal forestry administrations have responsibilities for forest protection. They submit reports of illegal logging offences to the competent bodies, but since these reports are not processed there are no disincentives for repeating the offences.

The situation in the forestry sector in Republika Srpska is similar to that in the Federation of Bosnia and Herzegovina. An additional drawback is that the Republika Srpska Forestry Company is not a public authority, meaning that the courts do not process reports submitted by the staff of the company. Reports can only be submitted by forest inspectors who detect offences, but since there are only 14 inspectors, the whole system is inefficient. Logging in private forests is normally carried out without first acquiring an appropriate licence, since the administrative costs for issuing a licence represent about 20 percent of the cost of exploitation of a private forest. Another problem is that forest keepers have connections with the police in some locations and such activities are hard to prove. Discussion is ongoing as to how to address these problems: the most likely solution will include the amendment of the Law on Forests and the Law on Jurisdictions.

The unusual characteristics of the central-level systems in Bosnia and Herzegovina are coupled with administrative shortcomings, reflected in the government's policy-making, public finance management and human resource management functions. While there is some clarity as to the accountability and roles of the state and entity-level government systems, accountability at entity-municipal level in Republika Srpska and at entity-canton-municipal level in the Federation of Bosnia and Herzegovina, is often convoluted. This has a negative effect on the functioning of services in which roles are often overlapping or accountabilities shared without sufficient distinction between the financial, legislative and executive powers and responsibilities.

Sanction systems

The sanction system is an essential component in combating and preventing illegal forestry activities. A sanction system that is effective, dissuasive and proportionate, with sentences that are enforced, acts as an efficient deterrent. In all of the countries, fines imposed on commercial companies are substantially higher than those imposed on natural persons. In countries in which enforcement is considered relatively adequate, effectiveness is hampered by lack of resources and human capacities, especially in the identification of the perpetrators. The range of fines is significant across the SEE countries. It is at the higher end for both natural and legal persons in Kosovo (as defined under UNSCR 1244) (at between EUR 2,000 and 25,000) and the former Yugoslav Republic of Macedonia, where fines range between EUR 1,500 and 8,000 for natural persons up to EUR 20,000 for legal persons.

However, in Bosnia and Herzegovina the fines are low, even though it is one of the major exporters of wood from the region to the EU. Fines for natural persons carrying out illegal logging and committing other related offences range between EUR 250 and 1,500, and between EUR 2,500 and 12,500 for legal persons.

Albania

The Law on Forests and Forestry Service Police stipulates administrative, civil and penal responsibility according to cases defined by the law. Most violations do not lead to penal action but are punished as administrative violations with an obligation to compensate the value of the damage caused and to pay a fine of between ALL 10,000 and 500,000 (USD 100 to 5,000). When the violation is considered to lead to penal action according to the Penal Code, the maximum sentence is up to one year's imprisonment. The Penal Code gives the judicial police the right to arrest only in cases that are punishable by a minimum of five years' imprisonment, which is not the case for forest-related crimes (Sections 30 and 32).

The systems for prosecution and the collection of fines are inefficient. Out of 370 penal violations, 208 were prosecuted (56 percent) and 40 were judged (11 percent) and none of the court rulings were implemented. Concerning administrative transgressions, only 2.6 percent of the value of the damage was collected and 2.3 percent of the total fines imposed were collected. In 1999 and 2001, the rate of fine collection was even lower at about 1 percent, and in 2000 and 2007 it was lower than 1 percent.

Bosnia and Herzegovina

Sanctions are under the jurisdiction of the forest guards; authorised forest protection experts on behalf of the cantonal forests; management companies; as well as police representatives and authorised forestry inspectors. These officials also have the right to identify and record all persons in the areas of their jurisdiction. According to Article 54 of the Law on Forests, the cantonal offices of the forest guard service are responsible for preventing illegal logging activities and identifying potential perpetrators. According to Article 72 of the Federation of Bosnia and Herzegovina law (similar to the Law on Forests of Republika Srpska), natural persons carrying out illegal logging or committing other relevant offences are subject to a fine of between EUR 250 and 1,500. Fines on commer-

cial subjects are significantly higher, at between EUR 2,500 and 12,500, according to Article 69 of the same law. National legal instruments for tackling the problem of illegal logging are adequate. Enforcement is deemed satisfactory, although lack of human resources in detecting perpetrators and the risk of resistance and violence when tackling organised criminals have been identified as concerns. Fines on individuals engaging in illegal forestry activities are not effective as a deterrent: since the fines are lower than the potential profits that can be generated, there is no disincentive for carrying out illegal activities.

Kosovo (as defined under UNSCR 1244)

Illegal logging can be described as forestry activities connected with wood harvesting, processing, transporting and trading in violation of the Law No. 2003/3 on Forests. Article 36 of this law defines fines and minor offences, with fines from EUR 2,000 to 25,000 for natural and legal persons for illegal activities in protected forests. Article 20 defines tree cutting, and Article 25 defines timber transportation. The Forest Law regulates and addresses measures against illegal logging, but the current situation with respect to illegal logging is due to lack of law enforcement, resulting mainly from a lack of qualified forest engineers within the Kosovo Forest Agency at central level and regional/municipal level; and the slow processing of lawsuits within the courts. The Forest Law was modified in December 2009, and one of the proposed changes is that the management of national parks will no longer be the responsibility of the Kosovo Forest Agency. During a period of four years, only 46 of the 25,745 requests for charges submitted to the court were investigated. This is a relatively low figure, demonstrating the ineffectiveness of the judicial system.

The former Yugoslav Republic of Macedonia

According to the Law on Forests, natural and legal persons not complying with the provisions of the law are liable to fines ranging between EUR 1,500 and 20,000. If a natural person is caught in the act of illegal logging, the penalty imposed is at the higher end of the scale, at between EUR 3,500 and 4,000. If the logging causes more extensive damage, the fine can be up to EUR 8,000. Penalties on legal persons can be up to EUR 20,000. Illegal logging has close links with organised crime, sometimes through the assistance of employees of the authorities responsible for forest management.

In the recent Law on Forests, penalties for this type of misdemeanour are high, resulting in a reduction in the number of misdemeanours. The new Law on Forests will introduce sanctions three to five times higher. In Macedonian criminal law, there are only two kinds of criminal action: forest devastation and causing forest fires. Sanctions include imprisonment of between three and 10 years. To date the courts have not handed out such a sentence but have only imposed fines.

Adverse impacts of illegal logging

Threats to the environment

The environmental impact of illegal harvesting is significant. Illegal logging operations are normally carried out in the absence of preventive measures, including measures for slope and soil protection on rugged terrain, adherence to annual allowable cuts, and the avoidance of sensitive habitats such as riparian stands and stream courses. Illegal logging has also been observed within protected areas. The impacts of increased erosion, the sedimentation of onsite and downstream watercourses, and localised but intensive disturbances to protected areas are significant.

Most of the SEE countries are rich in biodiversity, with a large number of plant and animal species. The concept of sustainable forest management must therefore fully apply the principles of nature and environmental protection. The potential for tourism in forested areas is also enormous.

Illegal forestry activities may have significant consequences for biodiversity and the environment in general. Uncontrolled harvesting, particularly clear harvesting over larger areas, leads to the destruction of the habitats of many plant and animal species, land degradation, and erosion processes. The consequences of forest cutting and deforestation have been noticeable in the region throughout history, and especially during the eighteenth century. Environmental threats may be defined as:

- Reduction in quality of life among the population due to the disturbance of the generally useful forest functions.
- Disturbance of plant and animal habitats.
- Biodiversity degradation in forests and surrounding ecosystems.
- Land degradation and erosion and, as a consequence, the drying up of springs, floods, landslides etc.
- Other threats to the positive impact of forests on the environment.

The demand for wood for heating is one of main reasons for illegal logging and is putting pressure on forests and ecosystems, especially where there is still limited access to other energy sources, such as in Kosovo (as defined under UNSCR 1244), Bosnia and Herzegovina and Albania. Deforestation and degradation can have particularly dire consequences in areas that are surrounded by high mountains such as Kosovo (as defined under UNSCR 1244). The territory of ecologically healthy forest area is shrinking: such forest areas represent only about a third of the total Kosovan forests.

Case Study 67:**Adverse effects of illegal logging in Albania**

Illegal logging has been identified in national parks in the north of Albania, especially in Lura and Valbona National Parks. Some watershed areas upstream from hydropower stations and other protected areas have also suffered from illegal logging (UNECE/FAO 2004). There are two main factors causing loss or deterioration of biodiversity.

- Loss or fragmentation of habitats as a result of unplanned exploitation, illegal logging, the establishment of dwellings, land-use changes and overuse. Many natural ecosystems have been fragmented into small pieces resulting in a loss of biological diversity, particularly in plain and coastal areas.
- Over-exploitation. The rapid growth in population has led to the overexploitation and misuse of plant and animal species, sometimes to the point of extinction.

The actual production of timber and firewood exceeds the annual allowable cut (AAC) of forests by a wide margin. Total roundwood production is estimated at 2.75 million m^3 per year, while the AAC is 1.15 million m^3, a difference of 1.59 million m^3 (Development Researchers Network et al. 2003). In addition, only a fraction of the AAC is actually harvested. According to estimates from DGFP, only 24 percent of the AAC is located in accessible areas. (DGFP 2005)

Case Study 68: **Environmental threats from forestry activities in Montenegro**

The threat to ecosystems due to intense exploitation has been monitored in Montenegro for eight years and varies from region to region. The monitoring period is too short for making an extensive analysis of trends. The potential environmental impacts of illegal logging are primarily the risk of erosion where timber is harvested on steep slopes; damage to ecological integrity and conservation values, for example long-term changes in stand structure due to the over-harvesting of valuable mature trees for industrial wood; the gradual opening of forest margins leading to permanent loss of forest; and a reduction in environmental functions leading to soil erosion and river pollution. However, there are no estimates for the reduction in conservation and environmental service values of forests as a result of illegal logging.

The Republic's Nature Institute passed the Decision on Protection of Some Wildlife Species (Official Gazette of Montenegro, No. 76/06), which protects specific rare or endangered wildlife species. The list of endangered tree species includes:

- Acer intermedium Pancic (Pancicev prelazni makljen)
- Acer marsicum Gussone (Klenic, suklen)
- Acer heldreichii (Grcki javor)
- Ilex aquifolium L. (Bozikovina)
- Buxus sempervirens L. (Simsir, buksa)
- Lonicera formanekiana Halacsy
- Lonicera formanekiana subsp. hectoderma Blecic & Mayer (Formanekova kozokrvina)
- Lonicera glutinosa Vis. (Ljepljiva kozokrvina)
- Viburnum maculatum Pant. (Orjenska hudika)
- Euphorbia dendroides L. (Drvenasta mljecika)
- Quercus robur L. subsp. scutariensis Cernj. (Skadarski dub)
- Pinus heldreichii Christ (Munika)
- Pinus peuce Gris. (Molika)
- Prunus cocomila Ten. (Dzanja, divlja sljiva)
- Prunus padus L. (Sremza)
- Taxus baccata L. (Tisa)

These species may not be destroyed, damaged or removed from their habitats, unless for scientific, research or development purposes.

Commercially driven illegal logging is generally carried out in more remote locations, making environmental damage less visible, although the damage to stand structure and biodiversity can be significant. One of the biggest threats to the environment is the inappropriate harvesting of wild mushrooms, medicinal herbs and forest fruits by the rural population. Illegal hunting also reduces the number of game and damages habitats.

Pressure on the state budget

Illegal cutting has both a direct and an indirect adverse impact on the state budget. As a direct impact, funds are not

received by the state (in the form of sales tax, VAT and other administrative charges). Indirectly, increased costs are incurred by the state for supervision, control and monitoring.

These activities result primarily in a loss of revenues for the government and affect the allocation of funds towards sustainable forest management. Public enterprises face losses of wood, financial losses, and illegal competition. Losses of wood through illegal logging activity can be observed as losses in annual cutting volume, growing stock volume and annual increment. Since logs and fuel wood have a market value, illegal logging activities directly reduce the revenues of public enterprises. The price of logs and fuel wood produced as a result of illegal logging is lower and constitutes unfair competition. Citizens and taxpayers are also at a disadvantage as they indirectly benefit from taxes and from the social functions of the forests.

Some countries have better estimates of the funds lost. In Albania, the total impact on government finances of the annual illegal production of industrial roundwood and firewood for the year 2002 was estimated at USD 11.4 million. In Bosnia and Herzegovina, a 2006 USAID study estimates that "the illegal volume of removals is between 0.3 and 2.2 percent of the legal timber supply, with an estimated value of USD 10 to 20 million (EUR 8.3 to 16.6. million).

Illegal logging contributes to poverty in the sense that it deprives the state and local authorities of financial means to implement forest monitoring and management plans that can be tailored to benefit and increase the economic wellbeing of local populations. It also fosters a vicious cycle of bad governance; contributes to deforestation and loss of biodiversity; and increases the risk of forest fires.

Case Study 69: **State revenues from forestry in Kosovo (as defined under UNSCR 1244)**

The impact of forestry on annual government revenue takes the form of:

- annual income estimated at EUR 1.5 million through controlled sales of wood harvested from public forests;
- issuing of licenses for harvesting from private forests generating on average EUR 0.21 million; and
- contribution to GDP estimated at between 1.8 and 2.6 percent. Based on data from the Agriculture Master Plan 2007-2003, it is estimated that the contribution of forestry to GDP can be increased up to 3 or 4 percent.

According to the Law on Forests (2003/03), 40 percent of income is returned to the Kosovo Forest Agency for forest improvements, such as road infrastructure, afforestation and other forest maintenance.

Chapter 4: **Key findings and conclusions**

Key findings

Forest ownership structure

Some general patterns can be discerned in the SEE region in terms of forests and forest ownership structure.

- Sizeable state-owned forest areas, with areas (especially near borders) particularly vulnerable to illegal harvesting.
- A mix of young and old forests.
- A decrease in high-quality forests.
- A gap in aggregate or condensed data on forest structures, which makes it difficult to assess the real situation and design appropriate measures.

The forest ownership structure in SEE countries is generally divided into two categories: private ownership and public ownership. Despite serious efforts towards the privatisation of important economic sectors in the region, there is still a clear dominance of public ownership. The proportion of state forests ranges between 99 percent in Albania and 60 percent in Kosovo (as defined under UNSCR 1244).

Overall, the current state of forests in SEE countries is in general unsatisfactory, although positive trends are discernable, especially in Montenegro, the former Yugoslav Republic of Macedonia and Serbia, where the forestry sector has recently been subject to reform. Growth in forest areas has increased by 3 to 5 percent in the last 20 to 30 years, mainly due to intensive afforestation and the natural afforestation of abandoned agricultural land in mountainous areas.

The most notable negative trends in the region are:

- the recent loss of substantial forest areas through clear cutting, forest fires etc., bringing to light the insufficiency of the existing legal, policy and management mechanisms; and
- the decreasing quality of forests (linked with historical coppicing).

Countries are taking steps to overcome some of these problems through forest management plans and other strategic documents aimed at improving forest quality.

The forestry economic sector

Forestry makes a significant contribution to the national economy. Contribution to GDP typically ranges from 0.5 to 2.6 percent, although these figures are underestimated. In terms of products and services, the forestry sector has significant untapped potential that could contribute to the social and economic development of a large proportion of the population in this region.

The available statistics, estimates and projections do not reflect all the values and benefits of forests in terms of their contribution to overall economic development. The value of various intangible and non-marketable forest services are poorly understood and not normally considered in national statistics.

The impact of the democratic changes that took place in the late 1990s and early 2000s differs according to country. In some countries the changes had an overall positive impact on the wood industry, with less corruption and less recourse to declaring false figures for the quantity and quality of wood. New laws were introduced establishing public procurement procedures for forest management public enterprises and for the improved regulation of private forest companies. Stricter financial regulations have also been introduced in several countries, with the imposing of value added tax on wood and rigorous control by the financial authorities. The gradual acceptance and introduction of forest certification in wood processing companies is expected to further reduce corruption and help prevent the declaration of false information. However, in other countries the forest sector suffers from various transition-related problems, including declining investments, poor forest management and maintenance, and inadequate public supervision and law enforcement. As a result, the resource base is declining in several countries, not only in terms of the quantity of wood but also in terms of widespread forest degradation. Growing stock increment is seriously affected, and most of the mature timber can now be found only in physically inaccessible areas. Another negative side effect of economic restructuring has been reduced efficiency in logging and wood processing. Rampant illegal logging has

distorted market prices and has offset the intended effect of newly introduced timber sales procedures.

Regarding trade in primary wood and secondary wood products, the overall picture shows that the trade deficit is shrinking and the potential for increasing supply and exports is improving due to favourable conditions such as access to good-quality hardwood and softwood, a low-cost labour force, and low prices for local wood. However, obstacles to progress include the increasing lack of skilled wood processors (engineers), outdated technology and an inadequately organised wood processing market. The low prices may also reflect high levels of illegal logging.

Legal and policy framework

All the countries have established the legal foundation for regulating forestry activities, mainly in the form of a forestry act. This central piece of legislation has recently been subject to changes in the context of an overall reshaping of the forestry legislation and policy framework in some countries, including Montenegro and the former Yugoslav Republic of Macedonia. The new legislation is more inclusive in scope and better adapted to the international definitions and concepts of forestry management, including the definition of illegal logging, as well as policy formulations at EU level. However, the forestry acts typically do not cover all of the relevant aspects of forestry regulation and protection. The regulation of forestry is typically set out in different sectoral legislation, for example environmental protection laws, the penal code, spatial planning, forestry legislation, hunting legislation, tourism legislation, and local administrative regulations. There is currently an overall lack of coordination, and even inconsistencies, between these laws and also between the various institutional and administrative frameworks. Peer reviews and the streamlining and updating of legislation in the broad sense are necessary in order to ensure a solid and efficient legislative framework backed by adequate institutional structures and capacities. Legislation that dates back to the late 1990s or early 2000s reflects the situation that existed at the end of socialism and in the early phases of the market economy. It therefore needs to be reviewed and revised in order to fit the new global context, and especially to conform to EU policy, since all the countries are potential candidates for accession. Better streamlining is necessary, along with an exchange of experience with a clear regional approach to policy and legislation, resulting in a more harmonised definition of illegal forestry activities and sanctions.

All the countries have adopted some kind of forestry policy, generally in the form of a forestry strategy. Montenegro and the former Yugoslav Republic of Macedonia have both a forestry policy and an overall sustainable development policy that also extends to the forestry sector. This approach, if carefully built and coordinated, will ensure a holistic forestry policy that tackles issues from different perspectives. Most of the countries have adopted an action plan with concrete measures to implement the overall forestry policy and strategy. However, this action plan is not sufficiently based on a concise assessment of the needs, potential bottlenecks and available resources. Also, the countries are not in general adequately monitoring and evaluating the results with a view to updating and improving the action plan.

One issue that deserves particular attention is the insufficient representation of and discussion with stakeholders (civil society, forestry organisations, local and central forestry bodies) in the planning, policy development and law-making processes. This means that the laws, administrative procedures etc. may not be sufficiently rooted in the de facto situation and popular concerns. Sidestepping forestry actors can lead to the alienation of forest stakeholders, the creation of mistrust between them and the authorities, and a lack of motivation to work towards the laws' objectives.

One of the main challenges in the region is the lack of earmarked and sufficient financial resources for the efficient implementation of forestry strategies and action plans, which are often developed without any assessment of their cost and without ensuring the necessary financial means. Greater efforts need to be devoted to raising the necessary funds, including contribution from the state budget; forestry self-financing, in particular from the wood processing sector through taxes on sales, revenues raised from certification schemes and other market-based instruments; as well as contributions from multilateral and bilateral donors, which includes maximising the absorption of available EU funds.

Finally, additional measures are needed in order to reinforce the control mechanisms, boost capacities and improve the sanctioning system and judiciary branch. Implementation gaps need to be addressed and new regulatory, informational and possibly also market-based instruments need to be included.

Institutional and administrative framework

In several countries, including Serbia and Montenegro, the overall institutional framework does not differ significantly from other European countries, although capacities and coordination need further strengthening. It is important to emphasise that the socioeconomic context may vary significantly from European standards, which contributes

to the larger scale of illegal forestry activities. Economic conditions are far below Western Europe and poverty is the main driver of illegal logging. More favourable economic conditions will have a positive affect on forestry administration, with more available human and financial resources to boost capacities and address institutional weaknesses. Competitive salaries for state administrators would also have a positive effect on corruption, which is currently a major factor in illegal forestry activities, especially considering the relatively high number of participants in the organisational chain (forest guards, forestry and other inspectors, police authorities, investigating authorities, prosecution, judicial authorities etc.).

Some of the weaknesses in the current forest administration include lack of permanent coordination, mutual trust and jointly established goals between the participants in the organisational chain. The current lack of forest guards in private forests is also a major problem to be overcome, especially in the light of migration trends and urbanisation, which are resulting in private forest owners living at a distance from their properties. In most countries, the police authorities, together with the forest police, have a key role in the control and detection of illegal forest activities and in taking action against offenders. However, the inadequate number of police officers, lack of equipment and insufficient professional capacities are challenges that need to be addressed.

Another common feature is that the legal obligation of guardianship and protection in private forests lies with the owners, who do not necessarily have the means or the will to effectively protect their property. Private forest owners often carry out forest management and exploitation activities taking into consideration only their current, short-term needs and disregarding the long-term and overall needs of the forests. Private forest management can therefore be described as lacking organisation and creating opportunities for illegal forestry activities.

The establishment of a service for private forest guards would require substantial financial resources, which currently do not exist in state budgets. One partial solution would be joint forest guardianship through associations. Internal controls are not sufficiently frequent and rigorous to put pressure on forest guards to provide good services and to create disincentives for involvement in illegal activities.

Another common problem is that not all forest areas are subject to valid management plans: in some areas old plans have expired, while other areas have yet to be covered. This makes it difficult to develop an entire set of plans for a country, even within a 10-year period. The hierarchy of plans is not streamlined (i.e. the integration of afforestation plans into district management plans; and fire management and private forest programmes into unit management plans).

Inter-institutional cooperation, in the form of an official body for the management of forest resources, does not yet exist in all countries. However, some countries do have the legal basis for ensuring adequate coordination among interested parties, such as an inter-ministerial council comprising representatives of the government, the ministry responsible for forestry and other important ministries, representatives from the local government and the private sector, and other interested parties.

Some countries have started a reform by dividing regulatory and managerial functions (e.g. splitting the forest police from forest management).

The international dimension

There is a general lack of well-established bilateral processes with neighbouring countries on combating illegal trade in timber. Joint actions to control cross-border traffic of timber assortments are not sufficiently implemented, mainly due to lack of obligations and mandates.

Significant international financial aid has been mobilised in SEE countries. Governments from Western Europe and international organisations such as UN FAO, the World Bank and OSCE have provided financial assistance since the end of the 1990s. Some countries, including Montenegro, have managed to absorb these funds successfully. However, international aid peaked in around 2005 and international organisations as well as the governments of individual countries are slowly pulling out of the region, partly due to the relatively advanced stage of EU negotiations and the increasing availability of EU funds.

There were relatively few projects that directly addressed the problem of illegal forest activities, with the exception of Montenegro, where three international donor projects directly targeted illegal logging. However, many of the projects indirectly contributed to ameliorating the situation through institutional strengthening and the reform of legislative and policy frameworks. The results of the implemented projects are likely to have a positive impact on preventing illegal forest activities.

Control mechanisms

There is a shortfall in control and monitoring mechanisms in both state-owned and private forests. Additional mechanisms should be introduced and existing mechanisms strengthened to ensure compliance with legal procedures on forest use and wood transportation. This will involve internal control of forest management companies,

as well as state inspections. Control and monitoring mechanisms are vital in detecting illegal activities, and the necessary resources and competencies must be ensured.

Weaknesses exist at all levels in the control of illegal forestry activities, often in the form of lack of human resources and technical capacities. There is a general shortage of vehicles and fuel.

Voluntary systems for the control of wood origin are not common in the region. In Serbia, for example, forest certification exists only in the context of the international Forest Stewardship Council (FSC) standard and has been introduced by the public enterprises Srbijasume and Vojvodina sume, mainly in order to meet new market demands and implement more sustainable business practices.

In general, there are insufficient institutional capacities for the prevention of illegal forestry activities. There are clear shortcomings in both human resources and equipment. Staff lack motivation and need improved professional skills. There is insufficient training and competence building for experts and professionals in state authorities and the problem is exacerbated by the lack of higher-education programmes directly covering illegal forest activities. Opportunities for developing institutional capacities for the prevention of illegal activities in forestry are modest in the current set-up. Institutions generally have their own, limited, financial resources for trainings or equipment. Taking into account the financial crisis and the reduction in state budgets, it can be expected that these resources will continue to shrink. As several bilateral and multilateral donors are pulling out of the SEE region, the problem could deteriorate even further.

Unlike other areas, such as nature protection, there is a general lack of powerful, active NGOs directly tackling the problem of illegal forest activities. Their staff are not likely to have the necessary expertise and experience of illegal forest activities to be able to make a real difference. All forest actors, especially forest guards, the police and judicial authorities, need greater expertise and training to detect and prevent illegal forest activities. Most of the trainings are provided by existing forest institutions and educational institutes, but the curriculum of these institutes is often inadequate as there are few educational programmes focusing on illegal logging.

Policy and administrative framework

In general, countries can be divided into two main groups.

- The first group comprises countries in which the legal and policy framework needs to be revised, penalties strengthened and control mechanisms reinforced.
- The second group comprises countries in which the legal framework and the system of sanctions are adequate but there are gaps in enforcement and implementation.

The first group comprises Kosovo (as defined under UNSCR 1244), Bosnia and Herzegovina and Albania. Although Bosnia and Herzegovina has a relatively recent action plan from 2006, further steps need to be taken to assess and revise the existing legal and policy framework and to ensure consistency and coordination between the sectoral legal and institutional structures.

The second group comprises Montenegro, the former Yugoslav Republic of Macedonia and Serbia, which revised forestry legislation and policy documents very recently and which take an integrated, targeted approach to illegal logging. In these countries, the main obstacles in the fight against illegal logging include implementation gaps, the unacceptable occurrence of corruption and other illegal or unethical behaviour mainly on the part of private entities in the wood processing industry. Bearing in mind the context of corruption and the reporting of false figures in terms of quantity and quality of wood harvested, processed and traded, the low number of complaints and illegal logging cases is a clear indicator that the judicial system does not function properly. Even where cases are brought, the court proceedings tend to be lengthy and complex. In Montenegro, one of the main problems is the inconsistent enforcement of certain forestry-related regulations.

In general, the level of penalties is inadequate, although there are some exceptions such as Montenegro, where fines are apparently at an acceptable level. However, fines are not always a deterrent and the available sanctions need to include imprisonment. It is also important that all sanctions that are imposed are fully carried out in practice.

Main drivers of illegal logging

The main drivers behind the continuing high rates of illegal logging and other related illegal forest activities are the socioeconomic conditions. Forestry land at lower altitudes provides an attractive opportunity for illegal logging due to lower costs and easier access. Other factors with an important role in stimulating illegal forestry activities include the favourable price of illegally logged wood; the deficiency in wood supply for the wood processing industry; and gaps in the legal and policy framework. Although steps have been taken to revamp and modernise the legislative and policy framework in the forestry sector and to strengthen institutional capacities, more concrete measures are needed. In addition, the more complex and non-transparent the legislation and admin-

istrative framework, the higher the risk of grey zones that can be exploited by natural and legal persons.

There are two main objectives for illegal logging: (i) to obtain firewood for personal profits/needs from private and public forests; and (ii) illegal harvesting from public forestlands in relation to organised crime.

The drafting and implementation of carefully created, realistic forest protection plans is an important component in preventing illegal logging and achieving sustainable forest management. However, the implementation of future forest protection plans will largely depend on the efficiency of the relevant forest inspection services. Law enforcement is not satisfactory and needs to be strengthened through training and the modernisation of forest protection services. Cooperation between the state and the rural population also needs to be improved.

Policy and strategic measures against illegal logging must be in line with the EU Forest Law Enforcement and Governance initiative (FLEG), involving the countries of Eastern Europe and North Asia, in order to provide a larger regional perspective. The FLEG is a multilateral and multi-stakeholder strategy for improving governance and legal compliance through corrective actions at both national and international levels, involving the governments of interested countries and multilateral and bilateral donors in combating illegal acts affecting forest resources.

Types of illegal forestry activity

Illegal logging is exacerbated by a number of factors, including unfavourable social and economic conditions, lack of forestry police officers, and inefficient judicial and sanction systems.

The main types of illegal logging in SEE countries are:

- logging without permission or concession from public forests;
- wood theft from private forests;
- false declarations of volume, species, value or origin of harvested wood;
- logging in non-marked or prohibited areas;
- obtaining logging permits through bribery;
- killing or burning trees so that they can be logged; and
- logging in prohibited or protected areas, such as national parks.

In state-owned forests, the most common illegal activity is wood theft. In Serbia, most of the illegal wood used in the processing industry originates from private forests and is used by small wood processors.

Other examples of unethical forestry practices may not at first be categorised as illegal but have negative consequences on the condition of the forests and on government finances (in terms of lost tax income). Such practices include declaring lower values and volumes exported; giving false information regarding grades, value, measurements and classification of the tree species being traded; and manipulating cash flows in order to transfer money to a subsidiary or parent company to avoid taxes on profits. This phenomenon is not common where the state owns all the forest management companies, since state-run companies have very limited interest in profits.

Monitoring and control systems

Inefficiency, lack of capacity and the prevalence of corruption have many roots. They can partly be explained by the unclear status of forest personnel, communications shortcomings, an inadequately controlled licensing system for wood processing enterprises, and the low salaries of forest service field staff. Weak institutional structures create conflicts of interest and opportunities for unlawful activities. In some cases, the same individuals are responsible for controlling harvesting, measuring timber and transporting wood, meaning that there is no independent checking that the documentation corresponds to the actual harvested volume and quality. Control over forestry authorities is generally stronger where financial audits are wider in scope and where there are sufficient detailed field checks to assess correspondence between documentation and actual status.

The transparency of forest administration needs substantial strengthening, although steps are being taken in the right direction in several countries. Information systems need further development. The participation of civil society in the forest sector remains limited. Monitoring systems are not sufficiently robust and equipment is generally limited. However, there are positive trends in the former Yugoslav Republic of Macedonia and Montenegro, where considerable resources and efforts have been invested in capacity building and strengthening the human resources base in key forestry authorities and investments have been made in modern equipment and communications technology. Systems of sanctions are generally weak and illegal forestry activities rarely lead to judgements and enforced sentences. One bottleneck observed in Albania, for example, is that communes and municipalities have the right to collect fines, but capacity to do so has proved limited due to corruption, social pressures etc.

Forest officers should have a more significant mandate and greater responsibility in detecting illegal

forestry activities, including recording vehicles with illegal cargo. Checkpoints are a last resort in control activities, since a checkpoint can only identify a crime after it has been committed.

The institutional framework and legislation are well developed in several countries, including Kosovo (as defined under UNSCR 1244), where there was no legislation pertaining to forest policy prior to the new regime. All countries now have to improve the practical implementation of the legislative and policy frameworks, which demands more resources, training and equipment, improved institutional structures and a functioning monitoring and enforcement system.

Enforcement is particularly weak in private forests. The national forest agencies are limited in the provision of forestry services and consulting in the private forest sector, which is underdeveloped and lacks professionalism. Greater links and synergies between the private and public forest sectors are essential.

The process of decentralisation in the forestry sector may have some serious negative aspects: the forest guard system may be transferred to the municipalities, which will lead to reduced control by the state inspectorate and forestry police over loggers in state-owned forests. Municipalities are also under greater pressure to tackle illegal and unethical behaviour, such as corruption.

Adverse impacts of illegal logging

The weakness of enforcement stems from a lack of resources, shortcomings in supervision mechanisms, the inefficiency of the court system, and insufficient knowledge of forestry crimes on the part of the courts. There are serious shortcomings in the equipment of forest inspectors and the police, including shortages of vehicles, fuels and technical monitoring equipment. There is also insufficient attention given to financial audits: these depend solely on documentation without the accuracy of the data being verified against actual activities in the forest. Court procedures are normally slow and inefficient: only a small percentage of cases brought to trial by the forest inspectors result in a conviction. The sanction system is weak and the potential gain from illegal activities far exceeds the level of the fines.

Conclusions

The average forest cover in SEE countries is around 40 percent of the territory as a whole, which is slightly lower than in Western Europe. However, in some countries, including Montenegro and Albania, forest coverage is substantial. In all the countries under discussion, forest products and services are of fundamental importance for the national economy and for the wellbeing of the population, especially the rural population living under difficult socio-economic conditions. Local wood provides them with energy for heating and cooking, as well as extra income for forest owners. The value of forest products and services is without doubt grossly underestimated. The current contribution of forestry to GDP and poverty reduction can be greatly increased if forest assets are properly assessed, controlled, managed and exploited. The forestry sector needs to be moved higher up the political and economic agenda at national, regional and international levels. The current market and economic situation in forestry has been, and will continue to be, negatively affected by the global economic crisis. The building sector and other wood material sectors have slowed down and the market for secondary wood products and high-value products is weak. The situation affects concessionaires as well, and the full consequences of the economic downturn are uncertain. It seems likely that the global economic crisis will impact not only the financial sector but also forest values and ecosystems, since cheap, illegally harvested wood will continue to be an attractive option for wood processors, and the state is likely to devote fewer resources to forest management and protection.

Current bottlenecks in the region include the revision and fine tuning of the legislative and policy framework to address challenges and maximise opportunities, as illustrated by the recent reforms carried out in Montenegro and the former Yugoslav Republic of Macedonia. There is also a significant implementation gap, and some regulations are consistently being incorrectly applied. However, actions against illegal logging activities are limited by the extreme poverty of rural areas in the vicinity of the forests. No rapid expansion of the use of alternative energy sources to relieve pressure on firewood resources can be expected. The forest administration is less able to control and enforce the law where people's basic needs are at stake.

Since the late 1990s and early 2000s, the wood industry has faced several challenges in adapting to a market economy and new technology. The new structures and imposed relations between the wood industry and public players created an inefficient system that lacked trust and cooperation. Some of the conflicts between public enterprises for forest management and wood processors continue to exist, mainly due to the gap between the need for raw materials and forest production capacities. In many countries, there is a negative balance between the available wood supply and the demand for wood for processing and heating. One of the main rea-

sons is uncontrolled privatisation, with a relatively large number of private players coming into the market in order to create economies of scale. The shortage of legally harvested wood triggers a demand for illegally harvested, cheaper wood and gives rise to corruption and unethical behaviour.

There is much room for improvement in the forestry sector, especially in terms of forest legislation, policies and wood exploitation methods. Under the FLEGT, it is important to achieve a common understanding of the definition of legality, accepted by all stakeholders. Reform must also include the development of credible legal and administrative structures and technical systems to verify that timber is produced in accordance with national laws. However, this does not address the flaws and gaps in forestry law.

In terms of wood exploitation methods, there is a lack of transparent auctions of standing wood; coordinated bid processes with state institutions (including municipalities); and mechanisms for resolving conflicts between legal users and local communities. Criteria for licensing, processing and trading wood need to be clear and effective, with continuous monitoring of the performance of licensed users through frequent controls and the establishment of closer coordination, cooperation and interaction between the public administration and the consumers of firewood.

Public companies have started to establish public procurement procedures and criteria aimed at facilitating the equal participation of all customers. These criteria and procedures are beginning to produce significant results, subject to assessment by an independent foreign auditor in the process of forest certification. In the ranking of buyers, relevant elements are production capacities, regularity of payments, current cooperation, degree of finalisation and price. Since the level of demand is double that of supply, there are no problems with wood placement (except those resulting from the recent global economic crisis).

Illegal logging is a significant problem in all the countries, although it is difficult to gauge the precise extent of the problem. Not all the countries have effective and reliable monitoring and control systems, with data duly registered in the national forestry inventories. The absence of accurate figures also makes it difficult to plan future harvesting and conservation measures. For Serbia alone, estimations of the extent of illegal logging range between 10,000 m^3 (for illegal logging officially registered in state forests), up to more than 1 million m^3 (including wood cut by owners in their private forests without official logging permits).

In most SEE countries the highest volume of illegal logging takes place in private forests, supplying firewood for the population. Private forest owners often lack knowledge and professionalism with respect to forest use and their logging practices have a negative impact on forest quality. In addition, those purchasing wood do not pay sufficient attention to its origin and legality, since their main interest is in obtaining good-quality wood as cheaply as possible. This has its roots in a centuries-long tradition that has emerged from the permanent need for firewood among the population, as well as insufficient knowledge of the importance and value of forests from a socioeconomic, ecological and recreational perspective. Logging for firewood has profound links with the socioeconomic situation, lack of awareness of the importance of forest protection, a traditionally negative attitude towards forests, as well as institutional deficiencies and weaknesses and poor law enforcement. Better education and awareness raising among stakeholders are crucial, coupled with institution strengthening and drives to improve law enforcement.

An important driver of illegal logging is the gap between supply and demand with respect to both firewood and industrial wood. In several countries, demand is many times higher than supply, which makes illegal, cheap wood an attractive option. In Albania**,** there is a large deficit in the balance between the national demand for timber and firewood and the annual allowable cut. The deficit is estimated at 1,594,000 m^3 per year, but is probably far larger. Not all countries link forestry policies with energy policies to ensure an adequate increase in alternative sources of energy, thus the pressure on firewood resources cannot be expected to drop significantly in the medium term.

The decentralisation of forest management offers a good opportunity to ensure a better balance between demand and supply. Village/communal forests in Albania, for example, can provide a source of legal wood supply and a high level of protection of forest values. However, such reforms are not always supported by an appropriate policy, or by institutional and financial instruments that encourage positive environmental impacts and other socioeconomic benefits.

The volume of illegal logging and the effectiveness of monitoring and control vary greatly between privately and publicly owned forests, with a marked trend towards greater control in state-owned forests, with the exception of certain areas such as the border zone with Kosovo (as defined under UNSCR 1244). The extent of illegal logging in private forests is far higher than in state forests. Private forests are practically without physical protection

from illegal logging, and the owners are alone responsible for protection. One of the biggest problems is logging carried out by the owners themselves, without the consent or professional support of the competent services. This kind of logging often takes the form of clear cutting, resulting in the long-lasting degradation of forest quality.

The extent and complexity of illegal logging often goes beyond the currently inadequate institutional frameworks of the forestry authorities and nature conservation institutions. Illegal logging is not tackled appropriately by all the relevant institutions. The role and input of judicial authorities, forestry officers and the police need to be strengthened, with far more resources, education and training on detecting and punishing offenders and on creating disincentives for illegal forestry activities. The estimated production of illegal firewood and industrial roundwood is significant, with huge losses in state revenue.

Other illegal activities, such as corruption, bribery and fraud, are also related to the harvesting of trees in an unregulated, unsustainable manner. However, the general lack of official information about such illegal activities suggests that the problem is not recognised as significant by the competent authorities, and no appropriate measures have therefore been put in place.

Illegal logging still represents a threat to sustainable forestry in the region. The implementation of future forest management plans will largely depend on the efficiency of forest administration and forest inspection services, which would have to make the key contribution to preventing illegal activities. Only a portion of all forestland (including public) is currently covered by valid management plans. Some land has never been covered by plans and some plans have expired. This makes it difficult to develop an entire set of plans for a country, even for a 10-year period. The hierarchy of plans could be streamlined (integrating afforestation plans into district management plans and fire management and private forest programmes into unit management plans) and a phased approach could be introduced. Consistent law enforcement is needed through training and the modernisation of services working in forest protection. Cooperation between all forestry players, as well as between key state authorities and the rural population, needs to be improved.

It is important to stress that the problem of illegal logging will never be solved exclusively through the acquisition of new equipment and technical instruments, nor through an increased number of regulations and better inter-agency coordination. The problem must also be tackled by building the capacities of the forest administration, training the forest police to give them a more complete knowledge of the law, improving the skills those confronting offenders, and improving human resources management in the forestry sector. This can be achieved by establishing systems that encourage responsible behaviour and discourage corruption (through salaries, code of ethics etc.), by appointing (nominating) forest service inspectors at all levels on the basis of profile, experience and capabilities, and by giving rewards for responsible behaviour/motivation etc. To satisfy the need for forestry education and training, the number and capacity of existing educational and research institutes must be increased. There are currently too few secondary schools, high schools and universities for forest technicians.

Forest management practices are not yet fully sustainable based on a medium- to long-term strategy. It is often difficult to identify, and to ensure the efficient protection of, forests with a high conservation value. Forestry management is typically strongest at central level and weaker at local level. In Kosovo (as defined under UNSCR 1244), for example, the forest law does not lay down the role and responsibilities of the municipalities in forest management, which represents both a legal and institutional gap. Recent forest reforms in Montenegro are targeting municipalities, aimed at strengthening their role and responsibilities in the fight against illegal logging. Institutional structures at district level can create conflicts of interest and opportunities for corruption.

The SEE countries are characterised by insufficient rule of law and forestry governance, including weak judicial and sanction systems. Although the level of fines is adequate in Montenegro, for example, enforcement is weak and few cases of illegal forestry activities, including false declarations and corruption, result in sanctions imposed by the court. The inadequacy of law enforcement can partly be explained by the low profile of forest crimes, and the shortage of police officers and prosecutors specialising in forest crimes. There are also conflicts between various laws, especially sectoral laws, which may also be subject to misinterpretation. The apparent lack of motivation on the part of enforcement authorities could be mitigated by targeted education and training.

There is also a lack of funds and human resources earmarked for forestry management. In some cases forest funds have been established, but they do not function efficiently and are not always in line with legal financing procedures.

Chapter 5: **Regional recommendations**

Most of the recommendations given here in relation to the issues highlighted in this study apply to all the countries covered, although some are more relevant than others. The study has demonstrated that socioeconomic conditions and gaps in the legal and policy frameworks regulating forestry and nature protection are significant factors in the extent of illegal logging.

The following recommendations are based on the diagnostic audits and country reports, as well as on project work and dialogue with government officials.

Sound and clear legal framework

It is vital to have a clear legal framework for forestry, which includes a definition of illegal logging. The principles and provisions of forestry also need to be in harmony with other relevant sectoral legislation (e.g. nature protection, landscape planning, hunting). Such harmonisation will help in preventing overlaps, improving coherence, and strengthening the penalty and sanction systems. Efficient public participation procedures will increase the involvement of civil society in forest and pasture management activities.

The countries of the SEE region should ensure the consistent application of EU standards and policies, especially in relation to nature protection and forestry.

Reforms in the state administration and good governance in the forestry sector should be aimed at establishing the effective rule of law on all forested land.

Clear policy framework

In order to target poverty-driven illegal logging and to improve socioeconomic conditions in rural areas, it is good practice to plan forestry activities from a rural development perspective. Forests and forest products offer one of the strongest potentials for the endogenous development of rural areas and are also valuable from the point of view of tourism.

Development of cooperation mechanisms

Coordination mechanisms should be strengthened between relevant national authorities responsible for forestry/forest management as well as for the enforcement of and compliance with environmental legislation within and between countries. This could be managed within the framework of an informal network, which would allow a common platform for discussions and a coordinated approach for targeted solutions.

Efficient administrative procedures

Administrative procedures, including licensing, control and record keeping (e.g. of illegally logged trees) should be strengthened in terms of their quality, efficiency and accuracy. This will lead to the increased availability of more accurate and credible information on the condition of the forests, as well as the extent to which current harvesting methods and volumes are in line with sustainable forest management.

Promoting education and increasing public awareness

Training of professional services

In several countries, the professional services authorising logging and other forestry activities in private forests are public entities financed fully or substantially from the state budget. Their main responsibility is to ensure that forestry activities are in accordance with the applicable legal rules and administrative procedures. In practice, these services tend to perceive forest owners merely as an element in the administrative procedure, without a human dimension, which does not lead to mutual trust. The advisory and service role of the forestry services needs to be augmented considerably in order to

build up this trust. It is crucial to educate forest owners and to give them the necessary professional support for undertaking and carrying out the necessary forest activities independently. It is also important to provide continuous education and training for the services' own employees. This should include acquiring know-how and skills for effective communication with forest owners. The partial reform of professional services through the creation of an advisory section would require a series of activities aiming at:

- raising the level of knowledge and skills among employees in professional services to support private forest owners, involving not only improved knowledge but also changes in attitude, with the aim of creating trust and partnership between forest owners and experts;
- the participation of forest owners in decision making regarding the management and organisation of private forests, such as development plans and logging etc.; and
- the training of professional staff from private forest owners associations, or the yielding of part of their jurisdiction to the owners associations.[24]

Regarding state forests in particular, awareness needs to be raised in relation to the procedures to be implemented in the process of finding evidence to support charges against offenders. In many cases, courts have rejected the findings and have complained that forest guards and the respective services are prone to information gaps, procedural shortcomings and other, mainly formal, omissions. In cooperation with the inspection and judicial authorities, all those responsible for forest guardianship must be trained to properly understand, implement and comply with the relevant legal provisions.

In the course of their duties, inspectors must ensure compliance with various procedures related to the law closest to their competency (normally the Law on Forests and the Law on Hunting), but also those set out in criminal law and administrative laws. Failure to observe these procedures often leads to the contestation of applications submitted by the forestry inspector, and their subsequent rejection in court. In such cases, the courts are unable to impose adequate sanctions. It is essential to offer inspectors permanent training in the implementation of forestry regulations in order to raise their professional reputation and to reduce the number of applications discarded in the court processes. Constant education and training for the forestry police, inspectors, forest guards, judges, prosecutors and the state market inspectorate are therefore instrumental in increasing their awareness and understanding of forest activities and their role in combating illegal forestry activities.

Training in the judicial sector

The implementation of forestry regulations can only be efficient if the judicial authorities, especially prosecutors and judges, have extensive and up-to-date knowledge of the relevant forestry laws, as well as other related laws such as nature protection, hunting and spatial development. The judicial branch should also have a good knowledge of EU forestry standards and policies and the most important forestry-related conventions or voluntary instruments at international level. Training is particularly important where the legislative framework has changed or in light of important jurisprudence, but also in the case of weak compliance records.

Judicial decisions are often taken without adequate assessment of the damage caused by illegal activities. As a result, sanctions may not be sufficiently dissuasive, proportionate and effective. Also, the administrative procedures adhered to in the process of logging and transportation are often unclear and complicated for judges, and they do not recognise the need for their strict enforcement, regardless of the ownership origin of the wood. However, failure to obtain a permit for harvesting, or carrying out such activities in violation of the permit conditions, also constitutes failure to respect forest legislation and should be properly investigated and, if necessary, subject to a court decision.

Some of the justifications for tolerating illegal activities are that the forest will be renewed; that forest loss is restricted; or that the perpetrators were forced to act illegally for personal economic (survival) reasons. To ensure that all legal regulations aimed at preventing illegal activities in forestry are respected, continuous training on the implementation of these regulations is essential. It is also necessary to provide a professional support mechanism in cases where the technical assistance and expertise of non-legal experts is required. The training of judicial authorities should not be restricted to purely legal aspects but should also provide knowledge on the significance of forests; the impact of illegal logging on forest resources and the environment; the economic significance; and the (potential) contribution of forest services to the state budget. The training should also deal with administrative procedures and rules, especially connected with licensing, wood marking, monitoring and inspections. Finally, the training should cover improved communication and cooperation with forest inspectors.

Increasing public awareness

The protection and conservation of forests is in the interests of society as a whole. All stakeholders in the forestry sector must understand that combating illegal logging is a long-term process that requires a methodical approach and firm commitments on the part of national and local institutions from various sectors, and the public. One indispensable tool is the education of the public, forest owners, wood producers, consumers, and relevant agencies and institutions: educational activities should not be limited to participants in the chain of production and consumption. Raising awareness of the need for forest protection for the good of all also raises the level of personal responsibility among stakeholders, leading to a common understanding of common forest stewardship and governance.

There is a need for formal, long-term education through environmental management courses at universities, as well as for more targeted, short-term shorter courses for public authorities. Non-governmental organisations dealing with environment and nature protection, as well as corruption and crime prevention, should be supported in their activities to educate and inform the population. This requires education and marketing activities to raise public awareness of the importance of forests, forest protection and the proper implementation of technical measures in forest management. By involving the population in the procedures to be implemented for prioritising wood from forests that are managed in a sustainable and professionally justifiable manner, members of the public will be made aware of the environmental benefits of only purchasing wood with the necessary legal documentation issued by authorised entrepreneurs and companies. Experience of forest certification and green marketing can be applied in these activities. It has been demonstrated that the application of forest certification, in combination with raising consumer awareness of the benefits of purchasing legally produced wood, significantly affects the levels of demand and supply of illegal wood (and wood products) on the market.

An awareness-raising campaign or policy may comprise a communication strategy aimed at:

- ensuring that forestry stakeholders receive timely and relevant information about ongoing and future forestry activities and encouraging them to be involved in possible sectoral reforms; and
- informing forestry stakeholders at all levels about the main characteristics of the forestry sector so that they better recognise the need for and benefits of an improved forestry system and support its implementation.

Public participation

The main forestry legislation should include clear provisions on public participation, which are meticulously implemented in practice. Failure to involve the public, and particularly the directly affected stakeholders, results in scepticism on the part of the general public, the media and NGOs towards forestry institutions, including the ministry and forest services. Procedures and methods should be introduced for the involvement of interested members of the public in the planning and management of forests. The information system should be accessible to the public as far as possible and mechanisms such as advisory councils could be established at management unit, municipality, district and national level. All plans should be subject to appropriate environmental assessments and public participation according to the Aarhus Convention and relevant EU legislation (Directive 85/337/EEC on Environmental Impact Assessment and Directive 2003/35/EC on Strategic Environmental Assessment).

Organisational measures

Further work is required on the institutional framework, which should harmonise the functions, responsibilities, structures and activities of the central and/or local government institutions. This framework should clearly distinguish the functions of the relevant ministries, forest management services and forest administration, and should define the key role of civil society in the management and monitoring of forests.

Institution strengthening

The key forestry public authorities, primarily forest-related ministries and the central forest administration, need to be strengthened significantly. The forestry sector within the ministry must be able to fulfil its responsibility in policy formulation and the overall supervision of the sector. Legal mandates should be clear in order to avoid overlapping, but should promote strong coordination. All roles, responsibilities and tasks should be clearly defined in all relevant policy areas. Further efforts need to be made to implement decentralisation reforms in the forestry sector, with a clarification of roles, responsibilities and authority at different government levels and in the private sector and civil society. Communication between the national and local levels needs to be improved in order to prevent, detect and combat forestry-related crimes.

Cooperation between the central forest authorities and the municipalities needs to be strengthened. Municipalities

are the main beneficiaries of forest functions (workplaces, recreation, tourism, water, roads) and should develop their own capacities to reinvest in the forests the forestry-related fees they receive, without duplication of efforts or institutional conflicts with the Forest Administration.

Strengthened bilateral, regional and international cooperation on forestry issues

There is currently a significant gap in international and bilateral relations, especially with neighbouring countries, which leaves room for the transportation and trade of illegally harvested wood and wood products. The establishment and strengthening of official and continuous relationships with neighbouring and other countries are therefore recommended along with bilateral and transboundary agreements on combating trade in illegally harvested timber and other forest products.

Support to the establishment of a sustainable private forestry sector

Adequate support should be given to the establishment of a sustainable private forestry sector. This step is an essential part of overall forestry reform, especially by providing assistance to private forest owners associations. The support should come principally from the state level and comprise:

- professional and financial support (subsidies) to private forest owners and associations;
- support to the development of entrepreneurship;
- increased productivity, quality and profitability for the owners of private forests; and
- the promotion of forestry to enhance its contribution to rural development and to increase the competitiveness of domestic forest products on European markets.

The legislative framework also needs to provide tangible benefits to associations of private forest owners in respect of the utilisation of non-wood forest products. The use of wood biomass from private forests as a renewable energy source must be encouraged and state timber and wood products must conform to the standards required by EU markets. Special attention and support must be given to institutions and private forest sector enterprises, especially professional forestry service providers.

A financially and professionally strong private forestry sector should be the goal of forestry action plans. This goal can be achieved through the appropriate structuring of concessions, capacity building, certification, and the competitive contracting of services ranging from inventories and planning to logging and infrastructure construction. For services other than logging, it is important that the annual budget is transparent and remains reasonably stable over a longer period of time.

An increasing number of private forest owners associations are emerging. Their importance is being recognised within the forestry policy of Serbia, for example. Individual forest owners are not sufficiently well positioned or equipped to ensure sustainable forest management independently. Associations of owners at local, regional and national level can create opportunities for technical and professional capacity building, which can help prevent illegal activities in the forests. Associations of private forest owners can provide support in:

- educating private owners about the implementation and importance of measures in forest cultivation and protection;
- supporting forest owners in the protection of forests from illegal logging and other illegal activities;
- assisting forest owners in the implementation of the required legal procedures for logging and wood trade; and
- representing forest owners before the courts and other state bodies, including assessing the damage caused by illegal activities.

In Serbia, there is an administrative body within the public enterprise for forest management that provides services for private forest owners. Such public services should contribute to building mutual trust between the authorities and forest owners through their formal procedures, functioning and service charges. Owners must perceive this service as added value, rather than as an administrative obstacle imposed by the state. The administrative services must be affordable and in the common interests of the state and the owners, otherwise there is a high risk that owners will try to sidestep the services and administrative procedures, leading to significant amounts of wood being logged without prior authorisation and without registration.

The situation can be improved by raising awareness among forest owners of their obligations and of the important role of public forest services, while at the same time building the capacities of such services. The most cost-efficient scenario is for forest owners to accept full responsibility for sustainable forest management and to complement the professional services. Associations of forest owners can assume an important role here, especially if they have the necessary expertise and are sufficiently

strong and credible to express their interests. If this is the case, they will be able to perform professional activities in their forests independently and can be key stakeholders in overall forest planning and management at central and local levels. By raising the level of mutual trust and by transferring responsibilities to forest owners and their associations, it is realistic to expect that the quantity of wood logged in accordance with legally prescribed procedures will increase as a consequence.

Capacity building

Within most forestry institutions there is a need for the development and further strengthening of capacities. This includes organisational changes, improved technical equipment and better business procedures.

Improvement of control systems and the preservation of state-owned forests

The use of modern control systems, such as field computers, GPS receivers and databases created through GIS, can ensure the constant monitoring of wood flow and so prevent illegal trade. Another effective tool for the control and preservation of state-owned forests is forest certification: establishing chain of custody (COC) traffic control ensures that illegally sourced wood cannot be processed in plants with COC certification. Forest governance and overall forest preservation can be improved through the introduction of certificates for sustainable forest management and COC.

The capacities of the forest services should be enhanced in terms of prevention. Training, technical equipment and other resources should be made available to ensure the regular control of the terrain. Measures should be introduced to create disincentives and to ensure the early detection of corruption. Forest guards must be adequately equipped with an official uniform, identification cards and personal weapons. Modern monitoring methods, such as the use of satellite images and other tele-detection tools, should be introduced.

Technical equipment of the relevant institutions

Parties responsible for the control and prevention of illegal activities often do not have access to effective technical equipment. This problem even extends to vehicles (cars and motorcycles), which are needed to ensure the efficient control and monitoring of vast areas of forest. Forest guards also require protective equipment as well as GPS devices for identifying property boundaries. More basic equipment that is relatively inexpensive, such as cameras and mobile phones, is also essential if forest inspectors and guards are to carry out their work effectively. Sufficient resources for technical equipment must therefore be set aside from the state budget or other sources.

It is also important to build the skills of inspectors and forestry police officers and to improve their working conditions. There should be sufficient inspectors, guards and police officers to cover the entire territory.

Control of the wood market and wood-processing plants

The control of traffic in wood and wood products must be further improved. Experience indicates that market control mechanisms can be successfully in combating illegal forestry activities. Such mechanisms include the expansion of market inspection competencies to ensure the complete control of documentation accompanying shipments of wood, including statements of origin and logging permits.

In addition to strengthened inspection competencies and improved documentation review, better wood traffic control by the police authorities (as part of regular traffic controls) can have significant results, especially locally.

The control of wood-processing plants by inspection authorities should be more effective and should comprise checks on the origin of the wood as well as its quality and quantity. These controls should cover large sawmills, as well as smaller sawmills that often operate illegally and can produce significant quantities of processed wood.

Enhanced forestry education and research

In countries in which the forestry sector is of particular importance (economically, socially and culturally), it is vital to have at least one forest institute and university offering forestry studies at a higher level. University studies at national and regional level, as well as enhanced research capacities, will play an increasingly important role in the prevention and control of illegal activities in SEE countries.

The private sector is in the process of consolidation after the privatisation and bankruptcy of most of the formerly state-owned enterprises. A significant number of forest professionals are currently unemployed but could provide a basis for strengthening the private sector. This would be an opportunity for developing a service market

ranging from inventory, planning, marking, cutting and logging. This process should be managed by the Forest Administration through capacity building, certification and the contracting out of services and concessions.

Research should also systematically analyse illegal logging, the illegal trade of forest products and corruption in the forestry sector; contribute to the development of appropriate monitoring instruments and their application; and help to design policies in the field.

Develop and implement strategies and activities

National action plans

National action plans on illegal activities and an efficient central forestry authority are instrumental in combating illegal logging. All the planned activities should ideally be established within the national action plan or equivalent policy or strategy document. Responsibilities and duties must be carefully divided between the large number of stakeholders, for example forest services, police authorities, judiciary and ministries. Given the large number of sectors, a multi-sectoral approach is required with clearly defined responsibilities and obligations for all participants: this will prevent the positive results achieved by some participants being offset by countermeasures on the part of other participants in the chain, leading to inertia in the system.

The objectives of the national strategy or plan should also be sufficiently long term, which requires a systematic approach. However, the strategy must be sufficiently flexible to respond to new factors, both positive and negative. Its implementation and evaluation should be efficient and should involve all affected stakeholders. Implementation usually benefits from the participation of the state institutions carrying out the key tasks (e.g. the national and local forestry council, forestry management entities and other similar services) as well as of civil society.

The plan should ideally be implemented according to a monitoring plan, developed by the relevant state forestry institutions, which could be part of the National Forest Programme or National Forestry Action Plan. This monitoring plan should define key milestones and indicators of progress in implementing the policy. The monitoring plan will also describe how different stakeholders will participate in the regular review of sector performance.

The evaluation of forest- and trade-related legislation and policies is an important component of effective forest policies. In the interests of ensuring wide acceptance and a high level of compliance, the assessment should be carried out jointly by key governmental institutions, NGOs and local communities involved in forestry and trade-related policies. The assessment should cover laws and other regulatory instruments, as well as the monitoring of their enforcement. It should pay special attention to whether, and to what extent, illegal logging and the illegal timber trade are encouraged or facilitated through direct or indirect legal provisions or policies. NGOs with suitable expertise, independent experts and representatives of local communities committed to sustainable forest management should participate in this assessment and the findings should be used to reform policies and regulatory instruments. The assessment should be transparent and the public's right to know and to participate in public hearings should be respected.

Forest management plans

The law should stipulate the types of forest management plans: general long-term plans; specific medium-term plans for management units; programmes for private forests; annual executive plans; afforestation plans; and annual fire prevention and control plans.

At present, few forests have valid management plans. Some old plans have expired, and in some areas there has never been a management plan. The hierarchy of plans could be streamlined (by integrating afforestation plans into district management plans, and fire management and private forest programmes into unit management plans) and a phased approach could be introduced.

Synergies with energy strategies

The national energy strategy should address in particular the continuous high levels of firewood consumption in private households and in the commercial sector. Policies on firewood consumption need general improvement and targeting in order to be able to alleviate poverty in rural areas (close to forest resources). There should also be a reduction in tariffs on alternative energy sources (e.g. gas) in those areas, or they should be provided at a subsidised price.

The consumption of firewood will remain at the same level during the next 10-year period, as there are no alternatives for heating and cooking in rural areas and small towns. The forest administrations need to accept this situation and establish relations with rural communities to allow them to harvest firewood under the technical guidance and control of the forest services.

Forest management methods

Concessions

Concessions can be effective in forest use management if clearly regulated in a legislative act. They may be long or short term: long-term concessions have many advantages, such as planning for sustainable exploitation.

In the framework of concessions, the main responsibility and costs of forest management fall on the concessionaire. However, one clear disadvantage is the risk that the concessionaire will focus mainly on wood exploitation (for revenue) and will not cover other (protective) functions. A good concession scheme should also pay attention to the way in which forest workers are engaged for logging operations. Concessionaire companies can be either larger firms from outside the region or small local enterprises.

The concession system needs to take into account the need for fuel wood among local households. This is particularly important in rural regions with poor socioeconomic conditions, where firewood may constitute the sole source of fuel for heating and cooking. The use of wood for heating should be maintained, but the efficiency of burning can be improved significantly with new technologies.

Roadside sales of wood

Roadside sale gives more control over forest management and provides revenues for the public forest services. It is labour intensive and requires highly trained forest wardens, but it provides regular employment in the forests and ensures that the forest services are directly involved in marketing forest products. This also helps in controlling the operations of concessionaires.

An appropriate mix of large and small concessions with big and local companies, along with the direct management of logging by the forest service in some forests (scattered plots, forests with special functions or forests that are otherwise not interesting for concessionaires) can be an effective forest management method.

Control measures

Fire prevention and management

Fire prevention and management will be increasingly important, bearing in mind the impacts of climate change. A uniform, integrated approach to fire protection is needed, reflected in all levels of planning and day-to-day management, from overall management objectives and species selection, to the responsibilities of the forest service and concessionaires in forest fire fighting. Fire prevention may involve a general preference for broadleaved species in afforestation and reforestation; the clear evaluation and prioritisation of fire risk according to different areas; the systematic development of forest roads; and the development of water storage and other fire fighting facilities in priority areas. Fire fighting should be well coordinated between agencies involved in advance emergency planning: information systems should be interoperable, and training and regular exercises should be undertaken jointly.

Other restrictive measures

Both incentives and restrictive measures can be effective in the prevention of illegal activities. In less mature forestry policies, especially in unfavourable socioeconomic conditions, restrictive measures will most likely have a greater impact. An adequate policy of restrictive measures is therefore a strong deterrent against illegal forestry activities.

Examples of efficient restrictive measures include the temporary confiscation of illegally logged wood, vehicles and other equipment used for illegal activities. While this measure focuses mainly on dealing with the after effects of illegal activity, if combined with an efficient monitoring and control system the forestry guards or forest inspectors might be able to confiscate vehicles or equipment if they strongly suspect that illegal activities are being planned. Such confiscations may take place only if permitted in the national legislation and if in line with applicable criteria etc.

Restrictive measures must be in line with the legislation in force, effective, timely and proportional to the committed offence or to the damage that could be caused by the illegal activity. If carefully designed and well targeted, these measures can be far more effective than lax and outdated sanction systems.

Negative practices related to the handling of cases of illegal forestry activities can be overcome by establishing a unique record of all cases and submitted applications so that results, compliance with deadlines and other penalties can be monitored. The necessary steps should be taken to tackle procedural anomalies or inefficiencies. Over time, these checks should increase the efficiency of the judiciary and other organs.

Inventories and the forestry cadastre

The effective assessment and combating of illegal logging is not possible without access to reliable information. A wide range of data needs to be entered in local and national inventories (forest cadastres).

Optimally, the actual condition on site should correspond to what appears on the maps, which means that both inventories and maps need to be regularly reviewed and kept up to date.

In the implementation of the national forest inventory, the introduction of improved instruments and procedures for forest management planning and the setting up of forest informational systems will improve planning and monitoring at national and local level.

Effective and continuous monitoring of forests

The monitoring of state forests covers those activities that are carried out in a particular forest area in order to determine changes that occur in the forest in relation to relative quality, wood volume, health etc. There are various possible methodologies, including:

Monitoring by comparing data in inventories

The monitoring of the health and volume of forests should regularly be carried out, preferably in accordance with international standards such as the UN's International Comparison Programme (ICP) methodology. Findings should be diligently entered into the national inventories. The scope of illegal logging can be partially assessed by comparing the differences in wood volumes in the inventories from different dates. This means that the inventories must be reliable and up to date and must contain records of loggings carried out. However, differences in standing volume that are observed via such assessments are often interpreted as errors in measurement and volume estimation. Continuous analysis of the changes in forest volume is therefore important in detecting irregularities in the changes in volume of standing trees. The collection of data for forest inventories should also include the registration of stumps of logged wood.

Satellite monitoring

This method is more modern and can be very reliable. It can include aerial photography or the continuous recording of forest coverage from the air, using satellite shots or orthophotos on which logging of excessive intensity can be observed. By comparing a series of recordings over time, it is possible to clearly identify areas particularly endangered by illegal logging. This is instrumental in targeting activities to high-risk areas. However, this methodology should only be used as a supplementary tool in assessing illegal harvesting since it is mainly useful for pointing out particularly affected areas; and not all countries have the necessary resources.

Promotion of forestry management based on an ecosystem approach

The key forest administration institutions should have responsibilities in relation to forest fauna and should be involved with other entities in policies and activities in this area. Optimally, forests should be managed based on an ecosystem approach, which includes fauna and game. Forest management planning should therefore be linked with hunting management planning, while special species management plans (Natura 2000) should be developed and implemented for priority species. Hunters and hunting associations should be treated as important stakeholders who also have responsibility for the health of the ecosystem.

Providing sufficient funding sources

Basic sources of funding are the state administration (allocated for forest administration) as well as revenue raised through fees for forest concessions, permits, licences etc. The main forestry law should clearly stipulate the obligation of the state to provide financial support for the public functions of forests. It is also important that most of the revenues from the forests are redirected into the forest sector. However, some of the revenue from concession fees is directed towards the municipalities. It is recommended to establish additional budget sources to cover the costs of public forestry services.

Chapter 6:
Overview of national recommendations

General recommendations for each of the countries covered by this report are provided below. These conclusions and recommendations are based almost exclusively on the data and findings of the diagnostic audits and fact-finding reports prepared by the national forest experts.

Albania

Albania has a large deficit in the balance between the national demand for timber and firewood and the annual allowable cut. The system for the monitoring and control of illegal logging is weak: there is a tendency to mask the current situation and to report unrealistic or false data. Illegal logging activities are closely linked to the extreme poverty in rural areas in the vicinity of forests, to shortages of fuel and to the weakness of law enforcement. The Albanian Forest Administration is not able to control and enforce the law because in the context of poverty-driven illegal logging people's basic needs are at stake. Corruption and weak law enforcement create the opportunity for the illegal logging of industrial roundwood and firewood. Enforcement staff have limited rights to enforce the law, they are not properly equipped and salaries are low.

The institutional structure of the MoEFWA at district level creates conflicts of interest and opportunities for corruption. The decentralisation reform of forest management, with the transfer of use rights or ownership to local government units, therefore offers a good opportunity in the future for improving the balance between demand and supply. The protection of forests against illegal logging has also proved more effective than in state-owned areas. This reform must be supported by an appropriate policy and by institutional and financial instruments that encourage both positive environmental impacts and income distribution effects.

The Albanian Forest Administration requires a strong national forest policy, political will and support from the Government of Albania, as well as technical and financial assistance from international donors.

Key recommendations:

- Provide incentives to ministry staff, forest officers, forest managers and forest inspectors by providing adequate salaries, motivating staff, and encouraging ethical behaviour on the part of the Albanian Forest Administration. The current average salary of between USD 220 and 250 per month is not sufficient to guarantee commitment to full-time professional activity among forest inspectors and may prompt them to seek other sources of (legal or illegal) income. Such financial measures will have a positive impact on overall enforcement and will also reduce incentives for corruption.
- Further harmonise and improve legislation to address overlaps, ensure coherence between relevant laws strengthen the system of sanctions, and create legal provisions ensuring the involvement of civil society in forest and pasture management activities, etc.
- Finalise the implementation of the decentralisation reform in the forestry sector; clarify roles, responsibilities and authority among different government levels, the private sector and civil society; and improve communication between national and local levels for preventing and detecting forestry crimes.
- Complete the legal, institutional and financial framework for the transfer of forest ownership and use rights to local government units; clarify roles and responsibilities among different levels of government institutions, private sector and civil society; improve communication and information between national and local levels for the prevention of forest crimes.
- Improve policies related to forest and wood exploitation focusing on transparent procurement processes for standing wood and coordinated bid processes with other state institutions such as local governments. Develop mechanisms for resolving conflicts between legal users and the local community. Improve criteria for licensing entities supporting enterprises that deal with the exploitation, processing and trading of wood. Reduce taxes to stimulate imports of unprocessed and half-processed wood products. Monitor the performance of licensed users through frequent controls. Establish closer coordi-

nation, cooperation and interaction between the public administration and firewood consumers.

- Improve the administrative procedures to improve recordkeeping (illegally logged trees in terms of number and volume). Make available more accurate and credible information on the forest situation in Albania and on the sustainability of harvested material (legal and illegal).
- Allow rural communities to increase their share of legal firewood to meet their subsistence needs. The consumption of firewood will remain at the same level during the next 10-year period because there are no other alternatives in rural areas and in small towns for heating and cooking. This should be combined with improving policies on firewood consumption and implementing measures to gradually phase in other sources of energy.
- Support systematic research to analyse illegal logging, illegal trade in forest products and corruption in the forestry sector. Develop appropriate monitoring instruments and their application.
- Build capacities in the Forest Administration. Train the forest police on legal provisions and administrative procedures. Establish human resource systems that encourage responsible behaviour and discourage criminal and corrupt behaviour (through salaries, code of ethics etc.). Appoint (nominate) forest service inspectors at all levels on the basis of profile, experience and capabilities. Reward responsible behaviour/motivation.
- Improve policies on firewood consumption and the National Strategy for Energy through intervention by the Albanian Government to alleviate poverty in rural areas (particularly close to forest resources and in the north of the country) and by decreasing tariffs on other sources of energy (e.g. gas) in those areas or providing them at subsidised prices.
- Develop transboundary and bilateral agreements for combating trade in illegally harvested timber and other forest products.

Bosnia and Herzegovina

Bosnia and Herzegovina has a relatively new legal, institutional and administrative forestry framework, which is in part the result of technical and financial support from international donors. Future forestry management activities will also be implemented under ongoing projects and programmes, supported by the international community and national, entity and cantonal governments. Policy documents have been formulated, including action plans for illegal logging. Although the legislative and policy framework is in place, enforcement is lagging behind.

The following recommendations are proposed for Bosnia and Herzegovina:

- Actions should not be limited to regulation. Stakeholder commitment is essential, and lasting results can be achieved only if stakeholders, in particular public forest enterprises, demonstrate a will to meet the objectives, and if there is improved coordination among the activities of the control bodies.
- Illegal activities cannot be combated in isolation, but as part of broader forest sector policy work: greater efforts are needed to improve forestry governance and to combat corruption and inefficiencies.
- To fight poverty in rural areas, the increasing demand for firewood in rural communities should be addressed by increasing their allowable cut. Central and local governments should also engage in a policy dialogue on how to phase in alternative energy sources.
- Corruption should be tackled by reducing bureaucracy, ensuring transparency, taking antimonopoly measures and removing administrative hurdles, in the form of both legislative and policy changes.

The former Yugoslav Republic of Macedonia

In the former Yugoslav Republic of Macedonia, the Law on Forests is being implemented satisfactorily by all involved subjects. The forestry institutions have a wide knowledge of the legal requirements.

To improve protection from illegal activities and for more efficient implementation of the laws, the following activities are recommended:

- Develop and adopt the Strategy for Protection from Illegal Activities in the Forestry Sector.
- Improve the working conditions of inspectors and the forestry police. They should be equipped with better vehicles, cameras for producing evidence of illegal logging, mobile phones and other technical equipment that will improve control. More inspectors and police officers should be hired to ensure that the whole of the national territory is properly covered.

- Build capacity through continuous education and training for the forestry police, inspectors, police, forest guards, judges, prosecutors and state market inspectorate. Training is particularly relevant for market inspectorate, which only received its mandate in 2009.
- Establish a special sector within the framework of the Ministry of Agriculture, Forestry and Water Economy with departments responsible for creating annual work plans and programmes and for internal control over the work of the inspectorate and forestry police.
- Revise and update the forest cadastre to provide better, more reliable and updated information on forest resources, logging volumes etc. The actual condition on site, in some cases, does not correspond with the data on the maps.

Kosovo (as defined under UNSCR 1244)

The Kosovan administrative set-up is relatively recent, dating from just 1999. Kosovan institutions, in cooperation with international bodies, have prepared and drafted many of the required legal documents on different issues. Although there have been many developments (particularly of the legal infrastructure, which is approximated to and harmonised with EU legislation) there are still many shortcomings in the existing legislative and policy framework. This also refers to the Strategy for Forest Development 2010 to 2020, produced by the Ministry of Agriculture, Forests and Rural Development (MAFRD) and the Forest Agency, with the financial and technical support of FAO. The shortcomings are mainly related to capacity building, especially the lack of higher-level education on forestry management, the lack of relevant professional staff and forest engineers, and the lack of educational and training programmes at all levels in the forestry sector.

Forest management is hampered by obsolete and incomplete forest inventories, which should be used to determine the sustainable yield. Forest management capacities are weak and unable to identify, set aside and protect forests with a high conservation value. Harvesting techniques and technologies are largely out of date. In addition, there are insufficient funds for developing the sector towards sustainable management. The private forest sector needs considerable development and structuring, as well as the supervision of a strong authority. The responsibilities of the Kosovo Forest Agency in the private sector are limited to the provision of extension services and consultation. Better cooperation, synergies and links between the public and private forest sectors are necessary. Strengthened cooperation is also needed between central and local authorities, including the Kosovo Forest Agency, the police services and municipalities.

Recommendations include:

- Build capacities to ensure sustainable managerial practices. The MAFRD and the Forestry Department should develop programmes for education and training at all levels in the forestry sector. It is suggested to (i) organise proper pre-university vocational education in forestry; (ii) develop a sustainable training system on forestry activities; (iii) create opportunities for running or attending higher-level forestry education; (iv) promote inter-sectoral mobilisation to raise awareness of the importance of forests; and (v) assess the needs for scientific research establishments.
- Develop a modern monitoring system for all activities in the forest sector.
- Support the private sector (forestry, forest industry), including forest management and owners associations, through land consolidation processes, the introduction of joint management systems, the development of small-scale wood processing industries operating in rural areas and sourcing raw materials on local markets, and the creation of financing facilities.
- Improve cooperation between donors and forestry projects to create synergies and achieve cost-effectiveness.
- Increase the current state budget allocations to the MAFRD particularly for the forest sector (Forest Department and Kosovo Forest Agency) in order to successfully implement the approved Strategy for Forest Development 2010-2020).
- Improve access to forests by maintaining existing forest roads in order to ensure better forest management.
- Prepare a strategy or special action plan at government level exclusively to address illegal logging.
- Develop cross-border and regional projects for sustainable forest management.

Montenegro

In the process of the overall reform of the forestry sector in Montenegro, numerous important documents have been adopted by the government, such as the National

Forest Policy and the National Action Plan for Combating Illegal Activities in Forestry (2009), and the new Forest Law is in its final stages. Significant progress has been made in institutional strengthening and capacity building, but additional improvement is needed. The implementation of the National Action Plan is one of the biggest challenges in the future, and further international technical and financial support will be required. All stakeholders in the forestry sector must understand that the process of combating illegal logging is a long-term activity that requires a methodical approach and strong commitment and involvement on the part of national and local institutions from various sectors, as well as the wider public.

The following recommendations are proposed to contribute to the fight against illegal logging and other illegal activities in Montenegro:

- Implement the National Forest Policy and define objectives towards forestry sector development in coordination with stakeholders. State institutions should prioritise the establishment of national and local forestry councils and the extension service in accordance with the new Forest Law.
- Adopt the new Forest Law establishing the legislative framework for the enforcement of the National Forest Policy.
- Increase the human resources involved in the implementation of the National Action Plan through the addition of personnel and the training of inspection authorities. Better management and coordination of (international) funds are also needed.
- Finalise the new institutional framework harmonising the functions, responsibilities, structures and activities of governmental institutions in the forestry sector. This should clearly distinguish the functions of the Ministry of Agriculture, Forestry and Water Management in the regulatory area, forest management and the provision of services. It will also define the role of the Forest Administration and of civil society in the management and monitoring of forests in Montenegro.
- Boost human resources in forestry, building on achievements under various international projects to strengthen the capacities of state institutions. The potential project Support to Capacity Building in the Forestry Sector (financed through IPA 2010) aims to set up systems for sustainable forest management in accordance with EU standards, especially with upcoming EU regulations regarding the marketing of wood products to EU markets and EU regulations on rural development.
- Carry out a wide-ranging assessment of forestry and trade-related legislation and policies and their enforcement, focusing on identifying existing drivers of illegal logging and illegal timber trade. This assessment should be carried out jointly by a larger number of forestry institutions, independent forestry experts and stakeholders. The findings should be used to further shape policies and regulatory instruments.
- Support the establishment of a sustainable private forestry sector, building on the draft Forest Law and the National Forest Policy and involving more extended state engagement with private forest owners and the private forestry sector in general. This should include professional and financial support to private forest owners and associations; and support to the development of entrepreneurship. The aim is to improve the productivity, quality and profitability of private forests; to increase the contribution of forestry to rural development; and to increase the competitiveness of domestic forest products on European markets. The use of wood biomass from private forests as a renewable energy source should also be promoted.
- Improve the collection and use of data, especially through the National Forest Inventory. Introduce instruments and procedures for forest management planning and set up a forest information system.
- Develop a monitoring plan defining key milestones and indicators of progress in implementing the National Forest Policy, outlining the input and coordination of the different stakeholders in the review of the sector's performance.
- Raise awareness of the forestry sector: prepare a communication strategy to keep stakeholders informed about ongoing and future forestry activities, the main characteristics of the forestry sector and the contribution of forestry reform activities to sustainable development in Montenegro.

Serbia

The extent of illegal logging in Serbian forests is difficult to estimate: it ranges from an officially registered 10,000 m^3 in state forests to more than 1 million m^3, including cuttings by private owners. The lack of accurate data and of a clear definition of illegal logging illustrate the need for an increased focus on the forestry sector on the part of the competent state bodies, forest management companies and other relevant stakeholders. The biggest discrepancies and gaps in information are related to areas

on the border with Kosovo (as defined under UNSCR 1244). The extent of illegal logging in private forests is far higher than in state forests. Private forests are practically without any physical protection from illegal logging, and their protection is left to the owners themselves.

The significant extent of illegal activities in Serbia is strongly linked to the difficult economic conditions, underdeveloped awareness of the importance of forest protection, a traditionally negative attitude towards forests, and institutional inefficiencies and weak law enforcement.

The problem of illegal logging in Serbia goes beyond the frameworks and responsibilities of forestry, nature conservation and environmental protection. Illegal logging has not been given priority on the political agenda and has not received adequate attention from the relevant state institutions, including the police and judicial authorities.

Recommendations include:

- Educate the general public and private forest owners, since the biggest volume of illegal logging comes from private forests and the majority of illegally logged wood is destined for consumption as firewood. Improve private forest owners' knowledge of applicable legal requirements; the administrative procedures for obtaining a licence; and sustainable forestry management practices. Educate consumers and commercial wood purchasers about the importance of origin and legality. Experience of forest certification schemes and green marketing should be applied in these activities.
- Raise awareness of forest protection and common responsibility for sustainable forest management. Educational activities should not be restricted to direct or indirect participants in the chain of wood production and consumption. Education and training should originate not only from state forest bodies but also from NGOs and civil society.
- Provide adequate education and training to various forestry authorities and expert services regarding both private and state-owned forests.
  - Private forest services should develop a professional advisory, rather than merely an administrative, role. The advisory role should comprise communication, awareness raising and forest management techniques. This will also mean the greater involvement of private forest owners in decision making concerning the management and organisation of private forests. Some jurisdiction can be transferred to the owners associations.
  - In state forests, awareness should be raised in relation to criminal procedures against offenders. It is also necessary to develop overall understanding of laws and by-laws on the part of the judiciary and inspection bodies.
  - Inspectors should be trained to understand the applicable procedures prescribed in the Law on Forests, the Law on Hunting, the Law on Criminal Proceedings, and the Law on Administration Procedures. This should prevent further procedural shortcomings that interfere in the prosecution and sentencing of offenders.
  - Judicial bodies should be trained in the proper implementation of forestry and other related legislation. This training should focus in particular on the new Law on Forests and the possible linkage to criminal law procedures. The training should also emphasise the need for judicial decisions to take into account the assessment of the damage caused. Judges need to develop a full understanding of the licensing and other administrative procedures related to harvesting, transporting and marketing the wood. Mechanisms should be established to ensure that, in illegal logging cases, judges have access to professional expert support to cover certain aspects of the case.
- Provide intensive training for all parties responsible for the implementation of the new Law on Forests, focusing on the section on the prevention of illegal activities.
- Build organisational capacities in the field of forestry, including institutional structure, technical equipment and improved business procedures. These organisational changes should include:
  - Strengthening the private sector through private forest owners associations at all relevant levels and increasing their technical and professional capacities for the prevention of illegal activities in forests. Public authorities also have to change their attitudes towards private forest organisation and provide more qualified services, creating mutual trust and cooperation between the state and private forest owners.
  - Improving the control system in state-owned forests. There needs to be increased usage of modern solutions in forest management, such as field computers, satellite images, tele-detection technology, GPS receivers, and databases using GIS to provide constant monitoring of wood flow and exclude the possibility of illegal trade. An important tool is forest certification and the establishment of chain of custody (COC) traffic control, ensuring that wood from illegal activities cannot be subject to processing in plants that have COC

certification. Forest officers need to be adequately equipped with an official uniform, identification card and personal weapons.

- Improve control of the wood market and wood processing plants as a means to prevent and control illegal activities. Measures could include the expansion of market inspection competencies regarding wood and wood products, and traffic control comprising control of transport documentation certifying origin and logging approval. Specific focus should be given to the large number of small sawmills that often operate illegally. Illegally logged wood or wood being transported without proof of origin should be confiscated.
- Improve the overview and tracking of all submitted complaints regarding illegal logging. A record should be established of all cases and submitted applications to allow the tracking of enforcement and adherence to procedural aspects.
- Further improve monitoring of the condition of the forests in order to register changes in quality, wood volume and health, using recognised methods such as the international ICP methodology.
- Strengthen existing efforts on compiling the national inventory and stands inventory. Monitoring could also include aerial photos or the continuous recording of forests from the air, using satellite shorts or ortho-images on which logging of excessive intensity can be observed. This facilitates the identification of areas that are particularly endangered by illegal logging.

Annex: **Outline of national reports**

Fact-finding study

1. Introduction
1.1. Overview of the country's forests
1.2. Forestry organisation for combating illegal logging
1.3. Nature and environmental protection
1.4. Changes in the forest fund as a result of forest cutting
1.5. Level of forest use
1.6. Forestry and economic development
1.7. Forest Development Strategy
1.8. International commitments affecting the forestry sector
1.9. International support to the forestry sector
1.10. Corruption perception index (CPI) of Transparency International (TI)
1.11. Main driver of illegal logging
2. Legal proceedings and procedures in the area of forest use
2.1. Procedures in state forests
2.2. Procedures in private forests
2.3. Mechanisms of control in forest use procedures
2.4. Institutional capacity
2.5. Forest certification process
3. Definitions of illegal logging
3.1. International definitions
3.2. The concept of illegal cutting in national legislation
4. Illegal logging
4.1. Volume of illegal logging
4.2. Most relevant types of illegal logging
4.3. Forest illegal activities by FAO and UNECE classification
4.4. Internal wood trade
4.5. Exports and imports of illegal timber
4.6. Intentional starting of forest fires
4.7. Unlicensed harvesting of mushrooms, medicinal herbs and forest fruits
4.8. Impact on government finances
4.9. Threats to the environment

Diagnostic audit

1. Governance
1.1. Policy framework
1.2. Legal framework
1.3. Institutional framework
1.4. Monitoring and control system
2. Recommendations
2.1. Recommended measures to be implemented in order to decrease illegal activities in forestry
2.2. Education of expert services
2.3. Implementation of the Law on Forests
2.4. Organisation
2.5. Restrictive measures
2.6. Monitoring changes in the state of forests

Notes

1 GDP PPP is of great help while analysing the living standards of different countries.

2 The studies include:

"Real needs for firewood for the period 1988-1989", which, based on the number of families in towns and households in rural areas, estimates that family needs for firewood were 2.3 million m^3.

"On firewood consumption" (1990) by the Forest and Ether-Oil Research Station, which estimates that agricultural cooperatives harvest 2.2 million m^3 of firewood in rural areas, or three times more than the planned figures. The total quantity of (legally and illegally) harvested firewood is estimated at 3 million m^3.

"Analysis of Markets and Marketing of Forest-Based Products", 2003, carried out by the Development Researchers' Network (Italy) and ECO-Consult (Germany) under the Albania Forestry Project (ref. ALB-FP-C1/01), which estimates that the annual consumption of firewood at national level is 2.3 million m^3.

"Market Analysis for the Fuel Wood Consumption on the Households, Commercial-Service, Agriculture and Industrial (SME) Sectors" (2008), which shows that biomass is the second most important energy commodity after oil among products that are used to meet energy demand in the agricultural sector in Albania. Firewood needs, based on energy demand for 2007, are 1.5 million m^3, with a 79 percent degree of uncertainty.

3 Data obtained from the Agency for SMEs

4 http://www.fipa.gov.ba/FipaFiles/File/Investment%20Opportunities/FIPA_Final_%20Report.pdf

5 In 2007, the company "Vojvodinasume" reported income of EUR 36.7 million, whereas expenditures amounted to EUR 34.8 million.

6 The Serbian wood processing sector can be characterised by a large number of relatively small private companies. About 95 percent of the companies are SMEs with between one and nine employees, and only three companies have more than 250 employees.

7 As one example, the trade deficit for the former Yugoslav Republic of Macedonia has been estimated at approximately EUR 12,335,961.

8 Official Gazette of the Republic of Macedonia, No 53/04.

9 Official Gazette of Republic of Macedonia" No 88/2008

10 Decision No.163, dated April 21, 1989

11 Approved by DCM No 247, April 23, 2004.

12 UNMIK Regulation No. 2000/27. UNMIK Regulation No. 2001/19 of 13 September 2001 on the Executive Branch of the Provisional Institutions of Self-Government in Kosovo, Annex 10, provides for MAFRD's powers and responsibilities.

13 The Srbijasume and Vojvodinasume public enterprises, five national park public enterprises and the public enterprise Beli izvor

14 Law on Forests, Law on the Transfer of Competences to AP Vojvodina, and Law on National Parks

15 Fruska gora National Park public enterprise: 25,393 ha, established 1960

Tara National Park public enterprise: 19,715 ha, established 1981

Kopaonik National Park public enterprise: 11,809 ha, established 1981

Djerdap National Park public enterprise: 63,608 ha, established 1988

Sar Planina National Park public enterprise: 39,000 ha, established 1993

16 In 2003 Montenegro signed the Vienna Declaration "European Forests – Common Benefits, Shared Responsibilities" and the five Vienna Resolutions, which include Resolution 1 "Strengthen Synergies for Sustainable Forest Management in Europe through Cross-sectoral Cooperation and National Forest Programmes." It also signed the 2007 Warsaw Declaration and the two Warsaw Resolutions "Forests, Wood and Energy", and "Forests and Water" in 2007. These documents define the direction for the ongoing reform of the forestry sector in Montenegro.

17 Proposal for a regulation of the European Parliament and of the Council laying down the obligations of operators who place timber and timber products on the market (COM[2008] 644/3)

18 (Contreras-Hermosilla 1997, V.95); (Calliester 1999); (Contreras-Hermosilla and Ríos, Social, Environmental and Economic Dimensions of Forest Policy Reforms in Bolivia 2002); (Guertin 2003)

19 Official Gazette of Serbia, No. 46/91. The most relevant provisions on illegal logging include Articles 40 and 47.

20 Studies carried out by public and private institutions, NGOs and agencies have concluded that poverty in Albania remains at relatively high levels, reflected in limited job opportunities and low incomes especially in the agricultural sector. Albania does not yet have an accurate definition of absolute poverty. The number of people living on less than USD 1 a day and the number of people living on less than USD 2 a day have been used as indicators for absolute poverty and

poverty. According to Albania's Strategy of Economic Growth and Poverty Reduction, 29.6 percent of Albanians are poor while half live in very miserable conditions.

21 The total volume of illegally logged wood in the former Yugoslav Republic of Macedonia in the period 2002 to 2008 was 35,021.95 m^3.

22 Based on information obtained from INSTAT in 2008.

23 The annual corruption perceptions index (CPI), first released in 1995, is the best known of TI's tools. The CPI ranks 180 countries by their perceived levels of corruption, as determined by expert assessments and opinion surveys. Higher CPI values indicate a lower level of corruption. The highest value is 10.

24 The Directorate for Forests expressed the intention to transfer part of the responsibilities related to professional jobs in private forests to the forest owners association, if appropriate expert capacities are provided.

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THE REGIONAL ENVIRONMENTAL CENTER FOR CENTRAL AND EASTERN EUROPE (REC) is an international organisation with a mission to assist in solving environmental problems. The REC fulfils this mission by promoting cooperation among governments, non-governmental organisations, businesses and other environmental stakeholders, and by supporting the free exchange of information and public participation in environmental decision making.

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