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Forest Strategy for the Southern Caucasus

Armenia, Azerbaijan, Georgia and North Eastern Turkey

WWF Forest Strategy for the Southern Caucasus : Armenia, Azerbaijan, Georgia and North Eastern Turkey

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Tbilisi, Georgia

Merab Aleksidze Str.11, 0193 Tbilsi

Tel.: + (995 32) 330 154 / 330 155 Fax: + (995 32) 330 190

Compiled by : Mike Garforth

Edited by : Frank Mörschel and Malkhaz Dzneladze

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Preface

WWF–World Wide Fund For Nature is the world's largest and most experienced independent conservation organization, with five million supporters and a global network of more than 50 offices.

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by:

- conserving the world's biological diversity
- ensuring that the use of renewable natural resources is sustainable, and
- promoting the reduction of pollution and wasteful consumption.

The Caucasus is one of the Global 200 Eco-regions of critical importance for the conservation of the world's biodiversity. WWF started its mission in the Caucasus in the early nineties when it established a representation in Georgia in 1992. The first initiatives of the WWF Georgia Country Office covered the establishment of a new protected areas network for Georgia, promotion of sustainable use of biological resources, conservation of large species, and more. The WWF Georgia Country Office also carried out projects to strengthen the management of existing protected areas and to revitalize local environmental NGO's. The WWF Georgia Country Office has been engaged in developing new conservation laws and improving existing legislation in the country in close cooperation with Georgian authorities. From 1993-2000 WWF Georgia acted as key force in the creation and implementation of a program for the development of environmental education in Georgia. In 2002 WWF Georgia extended its area of activities to the entire Caucasus Region and became the WWF Caucasus PO. The main priorities of the WWF Caucasus PO include promoting transboundary cooperation, establishing transborder protected areas, promoting sustainable forestry, strengthening conservation legislation, conserving leopard, red deer, bezoar goat, and other endangered species, and promoting sustainable use of natural resources. WWF Caucasus PO has received support for its work from the German Ministry for Economic Cooperation (BMZ), from the Government of Germany and Georgia through the German Bank for Reconstruction and Development (KfW), the MacArthur Foundation, the World Bank, UNDP, the Swiss Agency for Development and Cooperation (SDC), and others.

WWF Caucasus PO has working relations with governmental institutions in all Caucasus countries and cooperates closely with NGOs and the scientific community. Together with other stakeholders, WWF in cooperation with German Bank for Reconstruction and Development (KfW) is presently promoting establishment of the Caucasus Regional Council for Biodiversity Conservation and Sustainable Use. This will be an independent regional body consisting of representatives from governments, NGOs, and the scientific community. The intention is to improve coordination in the field of biodiversity conservation and sustainable use of natural resources in the Caucasus.

In 2003 WWF Caucasus PO coordinated preparation of the CEPF Ecosystem Profile – a strategic document directing CEPF's activities in the Caucasus Hotspot. The profile defines universal conservation outcomes for the region and identifies conservation targets on species, site, and landscape corridor levels. The Ecosystem Profile formulates CEPF's niche and recommends a five-year investment strategy that will contribute to the conservation of biodiversity in this globally significant region in coming years. This funding strategy was developed based on stakeholder workshops and background reports; more than 130 experts representing a variety of scientific, governmental, and nongovernmental organizations in the six countries participated in preparation of the document. WWF Caucasus PO' role in preparation of the Ecosystem Profile as well as its experience in the region puts us at a comparative advantage to serve as the coordinating organization for implementation of the CEPF Ecosystem Profile and five-year investment strategy.

Alongside the CEPF Ecosystem Profile, WWF Caucasus PO is elaborating an Ecoregional Conservation Plan (ECP) – a comprehensive strategy for action to conserve and restore the biodiversity of the Caucasus Ecoregion over the span of several decades. The ECP is a guiding document for medium-term conservation in the Ecoregion (20 years). Governments, NGOs, and donor organizations will find the document useful to assist in planning and coordinating conservation activities in the Caucasus and reducing redundancy. The ECP is based on a biodiversity vision elaborated by stakeholders from the region. The vision has a horizon of 50 years and sets long-term goals for conservation of the region's biodiversity, identifying priority conservation areas and strategies regardless of national borders. The collective action plan, an integral part of the ECP, covers a five-

year period and provides a framework for implementing immediate actions towards achieving the biodiversity vision and its long-term goals for biodiversity conservation in the region.

WWF Caucasus PO has a long-term interest in promoting biodiversity conservation in the Caucasus Hotspot. Its projects and efforts will carry on for many years after the first five-year stages of CEPF and ECP investments are completed. With nearly 15 years of experience in the region, WWF is clearly well positioned for facilitating implementation of the CEPF investment strategy. WWF Caucasus PO is invested in ensuring the success of conservation efforts in the region over the long-term. CEPF's contribution will go a long way to helping WWF Caucasus PO and other conservation groups achieve the vision for biodiversity conservation in the Caucasus Hotspot.

Forests are the most important biome for biodiversity conservation in the Caucasus. They harbour many endemic and relict species of woody plants and herbs and are home to rare and endangered animals. At the same time they provide sustenance and livelihoods for rural people and essential environmental services such as preventing avalanches and soil erosion and regulating the quantity and quality of water supplies.

These values are threatened by unsustainable management and exploitation, which, if they continue unchecked, will lead to irreversible loss of biodiversity and of the products and services on which many people depend.

In this document WWF's strategy is set out for forest conservation in the southern Caucasus – Armenia, Azerbaijan, Georgia and north eastern Turkey. The strategy is aimed at halting forest degradation and restoring strategically important forest landscapes to regain ecological integrity and enhance human well being. It builds on the Eco-region Conservation Plan developed in partnership with the Critical Eco-system Partnership Fund and in collaboration with many national NGOs and individual experts.

WWF's choice of strategy is based on a detailed analysis of the underlying causes of forest degradation and loss and the actions that need to be taken to tackle them. The causes are many and complex. They include rural poverty, lack of affordable alternative energy supplies, and weaknesses in legislation and in the structures and capacities of government institutions; areas in which other– government and civil society – organizations have a crucial part to play. WWF will focus its activities where it can be most effective but in the knowledge that its own goals depend on other organizations acting to bring about other changes.

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Acronyms

AP	WWF Action Plan for Caucasus Eco-region
CR	Wildlife Corridor
EB	enforcement body (institution responsible for enforcing forest law, for example the Ministry of Environment)
ECP	WWF Eco-regional Conservation Plan
FDP	Forests Development Project (Georgia)
FISP	Forest Institutional Support Project (Armenia)
FME	forest management enterprise (which in this report may be a state enterprise, private corporation, private individual, community or any other organisation responsible for the physical management of a forest territory).
IIED	International Institute for Environment and Development
MCPFE	Ministerial Conference on the Protection of Forests in Europe
PA	Protected Area
PCA	Priority Conservation Area
SFM	Sustainable forest management
s.o.b.	solid over bark (timber volume)
TDP	Target Driven Programme (of WWF International)
WB	World Bank
WWF	World Wide Fund for Nature
WWF CauPO	WWF Caucasus Programme Office

Pattern of unsustainable forestry in the Caucasus : Kharagauli National Forest, Georgia
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1 Snapshot of southern Caucasus forests

1. The forests of the Caucasus are rich in biodiversity and provide timber and other essential goods and services that sustain rural livelihoods and contribute to the region's economy. These values are threatened by a combination of unsustainable logging, over-grazing and poor management practice. International and domestic demand for timber is strong and the region's markets do not discriminate between sustainable and non-sustainable sources. Rural people and in some parts of the region city dwellers depend on fuel wood for heating and cooking because there is no affordable alternative. Grazing is not controlled and the owners of livestock that use the forest have no alternative livelihoods. The protected areas network is inadequate and management of forests and enforcement of (forest) law inside and outside the network is weakened by low institutional capacity.

1.1 Extent and types

2. The forests of the South Caucasus (Armenia, Azerbaijan and Georgia) and north eastern Turkey lie within the Caucasus Eco-region (Figure 1 below), one of the Global 200 eco-regions. Extending to four million hectares – 21% of the territory - forests are the most important biome for biodiversity conservation in the Eco-region, harbouring many endemic and relic species of woody plants and herbs, and providing habitats for globally rare and endangered animals. In addition to their high value to wildlife conservation the forests of the South Caucasus and Turkish Caucasus make an important contribution to national sustainable development and sustainable rural livelihoods.

Figure 1 – *Distribution of forests in the Caucasus Eco-region (source: CEPF 2003)*

3. The forests of the Caucasus are highly diverse. Broadleaf forests of oriental beech, oak, hornbeam and chestnut make up most of the forested landscape of the Caucasus. Dark coniferous forests of oriental spruce and Caucasian fir are found in the western part of the Lesser Caucasus Range and on both sides of the western and

central Greater Caucasus Range. Pine forests occur in the Kura River watershed in Georgia and Azerbaijan. Arid open woodlands form on dry, rocky slopes in the eastern and southern Caucasus, made up of juniper and pistachio species. Lowland forests are found in floodplains and on low river terraces, generally growing on alluvial, swampy, or moist soils.

1.2 Forest values

1.2.1 Biodiversity

4. Most of the region's rare and endangered animal species are associated with forest ecosystems. Most bat species, brown bear, wild goat, chamois, Caucasian red deer, European bison, two endemic species of salamanders, and the Caucasian leopard depend on ecologically intact forest. Most endemic invertebrates such as Caucasian running beetle and Beech snail are also strictly associated with forest ecosystems.

5. Forests provide the leaves, nuts and roots on which roe deer and wild boar feed. Forest ecosystems are also associated with the common otter and European mink. West- and east-Caucasian turs and the Caucasian black grouse - species that live in the sub-alpine belt - use mountain forests as wintering habitats. Caucasian populations of European wild cat and pine marten are relatively abundant and important for conservation of these species world-wide.

6. The forests of the western Caucasus and Talysh are largely isolated from other large forest massifs in Europe and Central Asia and contain most of region's endemic species. Most of these endemic species are associated with forest landscapes; Caucasian adder, Caucasian mud-diver and Caucasian toad (all three are on the IUCN Red List), several endemic rodents including Robert's snow vole, Pontic mouse, Caucasian mole and Shelkownikow's water shrew.

7. Caucasian forests are also rich in bird species harboring eagle owls,, seven species of woodpeckers and some species of smaller birds coexisting here with wide-spread European birds.

1.2.2 Economy and livelihoods

8. Forests provide a variety of goods and services and are a source of livelihoods for thousands of rural people. In many rural areas and in the towns of some parts of the region **fuel wood** is the primary source of energy for heating and cooking. Some rural households consume as much as 15 cubic metres of fuel wood annually. In Georgia alone, annual consumption has been estimated at 2 million cubic metres - nearly seven times the Forest Department's official figure (RWA 2003).

9. The region's forests are an important source of **industrial wood** for domestic markets, in particular construction and furniture and Georgia supplies substantial quantities to international markets. Precise figures are not available because the system of licensing of forest use is subject to abuse and actual removals are not always recorded accurately. Estimates for Georgia in 2001 showed that 550,000 cubic metres of industrial wood were harvested compared to the official figure of 70,000 cubic metres (RWA 2003).

10. **Non-wood forest products** including nuts, berries and mushrooms and medicinal plants are important direct sources of sustenance and well-being for rural people and together with tree seed, in particular of *Abies nordmaniana* from Georgia, are important sources of income for rural economies. Forests are used by rural people for **grazing** for cattle, goats, sheep and pigs. **Hunting and game management** provide some income to state budgets and **tourism and recreation** provide income to local economies. **Environmental services** provided by forests such as watershed protection and prevention of soil erosion make a substantial invisible contribution to the rural and national economies of the region.

1.3 Threats to forest values

11. The region's forests are threatened by unsustainable logging, unsustainable grazing and neglectful or environmentally harmful forest management practices. Careless clear-cutting of mountain beech stands has permanently damaged a significant portion of valuable beech forests. Oak forests, largely cleared for farmlands and pastures, have been spared mostly only in remote canyons and on relatively poor soils. Chestnut forests in the Colchic foothills and in the northwestern Caucasus have also been logged intensively. In northeastern

Turkey, broadleaf forests are cleared for tea and hazelnut plantations. Coniferous forests are logged for paper production and timber, resulting in severe depletion of these forests. Very few lowland forests have been preserved to this day; some stands remain only in the Lenkoran and Kolkheti lowlands and in the Kura, Iori, Samur and Alazan-Agrichay river valleys.

Unsustainable logging

12. Two main types of unsustainable logging can be distinguished based on their underlying causes and the actors involved: unsustainable logging of **industrial timber** for processing and sale into domestic and international markets; and unsustainable cutting of trees for **fuel-wood** by or for rural people who have no affordable alternative.

13. Unsustainable logging is often **illegal** (logging without permission, logging with a permission that has been issued in return for a bribe, logging with a permission that has been issued without following the procedures laid down in law - for example, the permission has been granted in the absence of an approved management plan) – see Box 1. But unsustainable logging is also often legal, for example when selection of stands for logging does not pay full regard to conservation values.

14. Impacts of unsustainable logging on conservation values include: long term change in stand structure due to over-harvesting of valuable mature trees for industrial wood; gradual opening of forest margins leading to permanent loss of forest and reduction in conservation and other environmental services; damage to remaining trees, soil and water as a result of bad harvesting practices.

Unsustainable grazing

15. Grazing levels in forests around settlements are in the most instances far above carrying capacity. Overgrazing prevents regeneration of herb, shrub and tree layers and causes permanent damage to soils. Lack of regeneration and the gradual disappearance of protective vegetation leads to soil erosion, land slide and forest habitat loss.

Neglectful/harmful forestry practices

16. Poorly planned and executed logging operations using inappropriate machinery reduces conservation values by causing damage to the remaining trees, herb and shrub layers and soil. Potential environmental impacts of logging operations are not always identified and/or or steps taken to avoid or mitigate damaging impacts. Regeneration is not always ensured.

Box 1 – *Patterns and root causes of unsustainable logging in the southern Caucasus*

Armenia

The Armenia country report prepared for the WSSD (UN 2002) records that 'large peri-urban areas have been denuded of forests, negatively affecting soil and water resources. It has been estimated that in each of the last six years at least 1,000,000 m3 of wood has been illegally cut. Approximately 70,000 m3 of timber is currently harvested in Armenia on an official basis, of which about 20,000 m3 are considered commercial cuttings, a harvest which satisfies only 10-14% of Armenian internal needs.'

Illegal logging is mainly in the form of unofficial removals from state owned forests by individuals from local communities for subsistence purposes (estimated through surveys of rural households to be at least 568,000 solid m^3 per annum) and unofficial removals by commercial operators of fuelwood for sale in urban centres (estimated at 150,000 solid m^3, through transport and sawmill surveys). In comparison, officially authorized removals in 2003 amounted to just 63,000 m^3. Much lower proportion of the total illegal logging demand of 847,000 m^3 was estimated for commercial wood processing purposes. However, the survey results of this aspect of illegal logging were more limited and it may be that illegal logging for timber processing has been under-estimated. Also, though it may not be a serious problem at the moment it has the potential to rapidly become so due to the currently installed but under-utilised wood processing capacity (only 15% of installed capacity is being used).

Azerbaijan

All forests ***in*** the A***zerbaijan***, because of their protective functions, are designated as **'**forests of the first group**'** ***where*** commercial ***logging (main use)*** is prohibited. Officially recoreded (UN ECE. 2003) average annual forest cut was about 60,000 m3 for sanitary and maintenance purposes only. However, from 2003 forest cuttings for sanitary purposes have been suspended and only forest residues are collected. It was also roughly estimated that an additional 30,000-40,000 m3 per year is cut illegally. There is concern that the actual figure could be higher because of military conflict and increased demand for fuelwood in remote mountainous areas where there is a shortage of natural gas supply.

Georgia

The picture in Georgia is significantly different from Armenia. Illegal logging for industrial use is a substantial proportion of the total harvest. RWA's report for the Forests Development Project (FDP) (RWA 2003) states that 1.7 million cubic metres are being logged illegally for fuel wood and 550,000 cubic metres for industrial wood. The officially authorised volumes (from forest use permits) were 0.3 million cubic metres fuel wood and 0.07 million cubic metres industrial wood. According to the analyses held in 2001-2002 by the Ministry of Environment and Natural Resources Protection of Georgia total volume of average annual illegal logging was estimated as 3.5 million cubic metres.

The distribution of the timber harvested for industrial use between its immediate and ultimate destinations is not known precisely. Officially recorded exports are estimated at 90,000 cubic metres s.o.b, mostly beech and mostly to Turkey, but exports of walnut and chestnut are also known to be significant (WWF CauPO. 2004b).

Turkey

Estimates of illegal logging in Turkey are available from different sources, but they are not consistent. According to one estimate, the volume of illegal logging in the whole of Turkey in recent years has been about 5-6 million m3 annually (World Bank 2001), nearly 15 percent of the annual increment (34 million m3) in addition to an average harvesting level of about 15 million m3, which is almost equally divided between industrial and fuel wood. The primary cause of illegal logging is believed to be fuel wood collection especially in rural areas due to insufficiency of fuel wood supply to meet the actual demand which is provided by the state forestry organization at subsidized prices. Illegal fuel wood cutting has been identified as one of the most important factors of forest loss in Turkey. There are no systematic data available on illegal logging from the Turkish forests for industrial wood, although there are observations of individual examples.

2 Forest governance

2.1.1 Forest tenure

17. The forests of Armenia, Azerbaijan and Georgia and almost all of Turkey's forests are state property. According to present laws the state may place forest use-rights with various central and local government institutions, non-governmental and private business organisations, and individuals. Georgia's and Turkey's Forest Codes provide for private ownership of forests but Azerbaijan's and Armenia's do not.

2.1.2 System of forest use

18. Authority to use forests for timber harvesting, grazing, production and collection of non-wood forest products, and other purposes such as hunting and research is granted by a government body acting on behalf of the state. Forest use licences are issued in return for a fee which should be paid into the state budget. The fee may be determined competitively – by auction or tender – or may be set administratively.

19. The Forest Codes of the four countries require preparation of forest management plans and their approval by a government body before forest use licences are issued and before forest use can start. Approval may be subject to submission of an environmental impact assessment of the management plan. Due to lack of funding the three South Caucasus countries have not been able to maintain the cycle of inventory and management planning since they became independent. All management plans in Armenia and Georgia and those for two thirds of Azerbaijan's forests are already out of date.

2.1.3 Actors

National government

20. National government institutions play a central role in deciding how forests are used and who uses them and in controlling forest use. Government acts as owner, manager and policeman. Functions are arranged in different ways in the different countries of the region. In Armenia the Ministry of Agriculture is responsible for forest policy and legislation, the Ministry of Nature Protection for enforcing forest law, and the state forest management enterprise 'Hyantar' for allocating and controlling forest use. In Azerbaijan, Georgia (since 2004) and Turkey all of these functions sit within a single ministry (respectively Ministry of Ecology and Natural Resources of the Azerbaijan Republic, Ministry of Environment Protection and Natural Resource of Georgia, Ministry of Environment and Forests of the Republic of Turkey).

21. Since independence from the former Soviet Union, central government in the three South Caucasus countries has been characterized by constant change in structures and people. The stable institutional environment needed to support sustainable forest management has been lacking. More changes can be expected as governments respond to pressure from international donor organizations to adopt 'western' models of forest governance.

Local government

22. In the South Caucasus local (self-)governing bodies have certain rights and responsibilities over forests but their nature and scope is not clear. They are often associated with former kolkhoz forests (plantations established on collective farms for soil and crop protection, shelter for animals and fuel wood). The exact area under local governing body control is not known because the legal process of transferring responsibility has not been completed and tenure, rights and responsibilities are confused because of contradictions between different laws.

Households

23. Before their independence from the former Soviet Union the three South Caucasus countries had plentiful and reliable fossil fuel and hydro-electricity supplies. Following independence and the collapse of the energy supply system rural households became dependent on fuel wood for heating and cooking. Rural households also use forests for grazing and for non-wood forest products for their own consumption and for income. These pressures are very significant, but at the same time there is a general lack of concern for the environment because of more immediate problems and lack of awareness. Because of social and economic urgent present needs, households

see no reason to take their impacts on forests seriously and are anyway not able to act in an environmentally more responsible way (WWF CauPO. 2004d).

Private business

24. There are a large number of small businesses engaged in harvesting and processing of timber for the industrial timber and fuel wood markets and only a small number of medium to large enterprises, which have the largest share of production for export. The sector is characterised by substantial over-capacity, a high level of illegal activity including corruption of government forestry officials, transfer pricing and fraudulent declarations of volume harvested and exported. The sector has a low level of sensitivity to environmental issues and those companies that would like to purchase sustainably produced timber have no means of discriminating between sustainable sources and non-sustainable sources.

NGOs

25. Typically for former Soviet Union countries there are large number of **local NGOs** but few (mainly in Armenia) that are seriously engaged with the forestry sector. The Regional Environmental Centre for the Caucasus (REC Caucasus) assists Armenia, Azerbaijan and Georgia in solving environmental problems, supports building civil society, promotes public participation in the decision making process and helps develop the free exchange of information.

26. Apart from WWF, **international NGOs** engaged in the forestry sector in field work, monitoring or advocacy include the Critical Eco-system Partnership Fund, Transparency International; Bank Watch and the Trans-national Crime and Corruption Centre. Other international NGOs such as Oxfam and CARE are running humanitarian and poverty reduction programmes that address some of the underlying causes of forest degradation and loss.

2.1.4 Policies and programmes

27. The four countries are at different stages in the development of national forestry policies and programmes.

28. The Government of **Armenia** has recently adopted a new National Forestry Policy and Strategy with the involvement of a wide range of stakeholders. It sets out a vision for the country's forests and the actions that need to be taken to bring it about. **Turkey** has recently completed its National Forest Program (NFP) after a participatory process. The NFP addresses, among other matters, tenure and management of forests. The NFP is currently awaiting governmental approval.

29. **Azerbaijan** and **Georgia** do not have national forest policies as such. For **Azerbaijan**, some goals, principles and strategies for forests are set out in the Forest Act and in national development plans. In 2002 the *Main Principles of Government Policy for Georgia's Forest Sector Development* were formally adopted. It's main purpose was to support Georgia's bid for World Bank funding for the *Forests Development Project* (FDP) and its scope, in terms of identification of and response to key issues, is correspondingly limited; there was little involvement by stakeholders in the preparation of the programme even within the key governmental agencies. In February 2004 was signed a partnership agreement with the FAO/UNDP National Forest Programme Facility aimed at developing a national policy and strategy. A national stakeholder workshop was held in April 2004. Nothing further happened until the end of 2004 when the Ministry of Environment Protection and Natural Resources appointed a steering group and co-ordinator in very non-transparent manner. The process and timetable has not been made public. In the first half of 2005 top management of the Ministry of Environment Protection and Natural Resources was entirely replaced and as a result new steering group and co-ordinator were appointed, but the process and timetable are still uncertain.

2.1.5 Legislative framework

30. Since their independence the three South Caucasus countries have adopted new Forest Codes and other new laws connected to forests, for example laws on environmental assessment, nature conservation, national protected areas networks, control of pesticides, protection of water supplies.. More detailed rules are set out in secondary legislation (regulations or decrees) made by Ministries, Cabinets of the Ministers and/or Presidents.

The Government of Azerbaijan, for example, has issued 20 regulations including the Forest Management Planning Regulation, Afforestation Regulation, Production Regulation, and National Parks Regulation. These new legal frameworks contain many contractions, ambiguities and gaps. As a result they are not clear and are not enforced.

2.1.6 Protected areas network

31. All four countries have an established network of protected areas that include some forest territories. In **Armenia** about one third of the total forest area lies within protected areas (Government of Armenia 2004). The Ministry of Nature Protection of Armenia has elaborated a strategy for expansion of the country's protected areas system - the plan calls for creation of several new strict nature reserves and national parks (WWF CauPO 2004b).

32. **Azerbaijan** has 13 strict nature reserves and 2 National Parks covering 309,896 ha or 3.5 percent of the country, including some forest reserves. The National Academy of Sciences of Azerbaijan has elaborated a strategy for expansion of the country's protected areas system by 2010. The plan calls for creation of two new strict nature reserves and four national parks, adding an area of more than 350,000 hectares to the current protected areas network (WWF CauPO 2004b).

33. **Georgia** Georgia's protected areas include 268,295 hectares (9.6%) of State Forest Fund land of which 248,609 hectares are forest. The Government of Georgia has made a commitment to protect 15 percent of forests in protected areas (IUCN Categories I-IV) by 2012 (WWF CauPO 2004b).

34. Nature reserves, national parks and nature parks cover nearly 2% of **Turkey**'s territories in the Caucasus Ecoregion. Two of the six national parks in the Ecoregion (Mount Agri and Forest of Sarikamis) have been declared very recently in October 2004. Additionally, Turkey has 10 natural monuments and 16 sanctuaries (covering 322,287 ha) in the region. Altogether, in the Caucasus part of Turkey, nearly 520,000 hectares are offered some form of protection. Almost all (except Mount Agri, covering 87,380 ha, primarily grassland and some Betula woodlands) of this falls in forest ecosystems. Turkey's potential accession to EU may lead to some developments in the near future as it will have to develop its Natura 2000 network (WWF CauPO 2004b).

35. Regarding the **status of the protected areas network**, there are many deficiencies and gaps in the current system. Most strict nature reserves and national parks in the Ecoregion are too small to guarantee long-term biodiversity conservation; existing protected areas are distributed randomly around the Ecoregion and linking corridors are non-existent; government support for the protected areas system is often insufficient – both financially and politically (WWF CauPO 2004a).

3 Underlying causes of forest degradation and loss

36. Degradation and loss of the region's forests is caused by a large number factors acting together in a complex system. International and domestic markets driven by profit pay little or no regard to the environmental and social impacts of their activities and are not able to discriminate between sustainable and non-sustainable sources they wish to. Rural households are driven by poverty, lack of alternative energy supplied and lack of alternative livelihoods to cut or purchase fuel wood and use forests illegally for grazing their livestock. State forest management agencies and forest law enforcement bodies lack the resources necessary for proper planning and control of forest protection and exploitation. National policies and programmes for forestry and connected sectors are poorly developed and legal frameworks are weakened by gaps or ambiguities in and conflicts between laws. Government planning and monitoring lacks transparency and civil society's voice is weak or ignored.

37. The main threats to the region's forests – unsustainable logging for industrial timber and fuel wood, unsustainable grazing and inappropriate operational practices – are the result of a large number of underlying causes acting. The first three threats each have some distinct underlying causes: in the case of unsustainable logging of industrial timber these are international and domestic demand for industrial timber; in the case of fuel wood, demand for energy for heating and cooking and no alternative to fuel wood, or inability to pay for the alternative; in the case of unsustainable grazing, rural poverty' lack of awareness among graziers, and the lack of alternative livelihood opportunities. Common to all four threats is the central role played by forest managers, who generally lack the understanding of and motivation and capacity to implement SFM principles and prevent illegal activity.

38. The significance of the threats and role played by each of the causes connected most closely to them vary between the different countries of the region (see Table 3). It is important to bear in mind that regional and national picture presented in the table does not show variation at a local level, so although grazing is a lower level threat than unsustainable logging at regional and national levels, in some parts of the eco-region it may be a very significant threat.

39. The real picture is much more complicated than this; a large number of other factors need to be painted into the picture to make it complete. Many of them are associated with weaknesses in the forest governance system. WWF has carried an assessment of forest governance in the region based on the assessment tool – The Pyramid – developed for the World Bank/WWF Alliance (IIED 2002). A fuller account of the assessment is at Annex 1. What follows is a summary of the main weaknesses (differences between countries are not reflected in the summary that follows but they are shown in Annex 1).

3.1 Weaknesses in the forest governance system

Some pre-requisites of good forest governance are lacking:

- Although basic democratic systems are in place there is a widespread disregard of the rule of law which makes it more difficult to combat incipient corruption and illegal logging.
- The roles of the government institutions responsible for forestry are not widely recognised which makes it more difficult forge effective relationships between the government and civil society.
- Factors which shape the nature of forest assets protective (ecological) functions, recreational potential and aesthetic values are not understood by some of the stakeholders that have the most influence on the nature of forest assets including government officials, (and representatives of other sectors with influence on forests eg development, civil works, energy, roads, tourism, mining, etc) and forest users. This lack of understanding makes it less likely that stakeholders will be able to influence forest policy and practices in an appropriate direction.
- Tenure of the local forest fund is not clear. Lack of clarity contributes to responsibility not being assigned and accepted and no accountability for the condition of some forest territories.

Table 3 – *Significance of main threats and underlying causes*

Threat/underlying cause	**AM**	**AZ**	**GE**	**TR**
Unsustainable logging for industrial wood	**!!!**	**!!**	**!!!**	**!!**
- International demand for industrial wood	-	-	✓✓	-
- Domestic demand for industrial wood	✓✓✓	✓✓✓	✓✓✓	✓✓✓
- Forest managers' lack of understanding of and motivation and capacity to implement SFM principles and prevent illegal activity	✓✓✓	✓✓✓	✓✓✓	✓
Unsustainable logging for fuelwood	**!!**	**!!!**	**!!!**	**!!**
- Demand for energy, lack of alternatives and poverty	✓✓✓	✓✓✓	✓✓✓	✓✓✓
- Forest managers' lack of understanding of and motivation and capacity to implement SFM principles and prevent illegal activity	✓✓✓	✓✓✓	✓✓✓	✓
Unsustainable grazing	**!**	**!**	**!**	**!**
- Rural poverty and lack of alternative livelihood strategies	✓✓✓	✓✓✓	✓✓✓	✓✓✓
- Poor range management stemming from. forest managers' lack of understanding of and motivation and capacity to implement SFM principles and prevent illegal activity	✓✓	✓✓	✓✓	✓✓
Inappropriate operational practices	**!!**	**!!**	**!!**	**!!**
- Lack of funds to implement best practice	✓✓✓	✓✓✓	✓✓✓	✓✓
- Lack of awareness of current best practice	✓✓✓	✓✓✓	✓✓✓	✓✓✓
- Lack of motivation to implement current best practice (including weakness in enforcement)	✓✓✓	✓✓✓	✓✓✓	✓✓

- Key agreements including the Rio Forest Principles, the Criteria and Indicators and the Forest Level Guidelines of the MCPFE are not understood and engaged with by some key stakeholders, in particular government policy makers and legislators and state and community forest managers. Lack of full understanding makes it difficult to secure commitment of policy holders and to ensure that forest policies, plans and practices conform to international principles of SFM.
- Forest sector actors do not engage to the fullest possible extent with the system of constitutional rights and guarantees, eg the Aarhus Convention. As a result, forest values are not given full consideration in national sustainable development policies and action plans.
- Forest sector actors do not engage with government macro-economic policies. Forest values are not given full consideration in national sustainable development policies, regional plans and national and regional budgets.
- Forest sector actors do not engage with agricultural extension and subsidy systems and this contributes to ignorance of the impacts of grazing on forest values.
- Forest sector actors do not engage to the fullest possible extent with energy policies and developments. Lack of full engagement prevents pressures of energy demand on forests being addressed.
- Forest sector actors do not engage fully with local government and decentralisation policies and developments. Local government plays a significant role in the management of the local forest fund and in managing pressures on other forest lands. Lack of full engagement prevents positive intervention by local government actors.
- Forest sector actors do not engage with education and training policies. Forest sector education and training is considered in isolation or not at all. Lack of engagement prevents weaknesses in forestry education and training provision from being addressed.

- Mechanisms of inter-sectoral co-ordination, learning and action on land use and land management are weak. Weaknesses prevent full account of forest values being taken in national and local sustainable development policies and action plans.

Stakeholder roles and institutions are not negotiated and fully developed:

- Sectoral policy holders generally do not recognise that there are multiple valid perspectives and stakeholders. They tend to act without regard for the needs and views of stakeholders outside government. As long as ministers and officials responsible for policy on forests do not recognise that there are multiple valid perspectives and stakeholders, forest policy and management will not reflect societal needs and concerns.
- National environmental and social NGOs have capable representatives, local NGOs and community groups less so. Government representatives generally have poor understanding of the role of forests, interactions between people and forests and forests and other sectors and are not ready to negotiate. Government's lack of understanding and lack of readiness to negotiate prevents societal needs and concerns from being accommodated in forest policy and management practice**.**
- No organised participation system or systems are weak. Lack of effectively organised participation makes it more difficult for civil society's voice to be heard by government.
- Information on forest assets, demands and uses is available but information on condition and trends is poor and not widely available. Lack of information prevents reasoned discussion about the challenges faced by the sector and actions to tackle the challenges.
- There is no vision of the role of forests in land use and livelihoods. Without a vision, government and other actors cannot discuss and decide the merits of different strategies or monitor progress.
- Lead agencies do not have the motivation or the capability to support human resources development amongst stakeholders. Poor motivation and weak capability prevent adequate human resources development among stakeholders.
- Mechanisms for development of skills are weak. Forestry education and in-service training systems are under-funded and curricular are out of date. Under-funding of forestry education and in-service training contribute to chronic lack of skills in forest management agencies.
- Few examples of collaboration and partnerships are being pursued; attention to lesson-learning and adaptation is poor. Absence of lesson-learning and adaptation culture reduces the impact of projects.

Forest policies, standards for sustainable forest management and supportive legislation are not in place:

- There are no nationally agreed visions for the forest sector and consensus on the most appropriate institutional architecture. Society's needs and concerns are not reflected in central forest policies and laws.
- There are no forest sector priority setting methods/criteria. The actions taken by the forest sector and the way in which the forest sector develops will not reflect society's priorities.
- A vision of the permanent forest estate under various kinds of ownership and land capability has not been developed. Government decisions on forest ownership, for example privatisation, are therefore unlikely to reflect society's wishes and needs.
- A system of granting some use rights in return for economic compensation is in place but procedures for granting rights are not equitable and pricing mechanisms do not ensure full economic compensation. Potential revenues are not captured in full and are not made available to forest managers for investment in forest protection and regeneration.
- Procedures to optimise benefits from the forest are defined (the system of forest management planning) but they are being implemented in only a small part of the territory due to lack of funds. Defined procedures do not ensure that social and environmental externalities are incorporated, that efficient local processing is encouraged, or that equitable livelihoods are supported. Gaps in procedures and failures to follow procedures make it unlikely that forest use will be sustainable.

- There are no formal systems to define, implement, monitor and improve forest policy and standards and to ensure their coherence with other policies. Lack of systems make it unlikely that forest use will be sustainable.
- There is no process for defining national SFM standards. Lack of national standards makes it unlikely that forest use will be sustainable.

A coherent set of instruments is missing:

- Forest laws are not clear and are not enforced and therefore fail to protect public and intergenerational interests in forests. Anti-corruption systems are not strong enough to prevent rent-seeking by government forestry officials. Lack of clarity in forest law is a barrier to effective law enforcement. Weaknesses in anti-corruption systems allow government officials to facilitate and engage in illegal and corrupt activity unhindered.
- The system of forest use licences is obscure and inequitable and market information, for example pricing, is not made widely available. There is no attention to demand-side incentives for increasing the sustainable production of forest goods and environmental services. There is no strategy for financing the forest sector. Lack of transparency in issue of forest use licences makes it more difficult to identify and combat corrupt activity. Absence of a strategy for financing the forest sector makes it impossible to guarantee SFM.
- There is no system in place for information co-ordination and flow to develop knowledge and motivation among stakeholders. Absence of system prevents stakeholders from engaging meaningfully or at all in forest policy and forest planning.
- Structure and capabilities are underdeveloped. Formal commitments to agreed role and policy changes have not been made. Strategies, job descriptions and human resource capabilities therefore do not reflect sector and institutional needs. There is only very limited support for poor and marginalised stakeholders' power to make decisions, claim rights and enter partnerships. Management guidelines are inadequate. Negotiation and conflict management systems are not in place or are not functioning. Codes of conduct, joint financing and sector-wide approaches for funding/supporting the forest sector do not exist. Structures and capabilities do not reflect society's needs and concerns. Critical weaknesses are: human resource capabilities in enforcement and management institutions; absence of management guidelines; lack of support for stakeholders to enter into partnerships.
- Planning for the sector is ineffective and the sector is unlikely to follow a path of sustainable forest management.

Promotion of sustainable forest management to stakeholders is not adequate:

- Mechanisms to disseminate and share information on SFM practice, associated legislation, instruments, incentives and markets and on resources required for SFM are underdeveloped or non-existent. Absence of effective mechanisms contributes to ignorance of SFM practice and forest law.
- Information about the public benefits of SFM and of specific SFM products is not widely available among domestic consumers. Lack of access to information prevents consumers from acting in support of SFM.
- There are no mechanisms for passing credible information about the sustainability of forest products produced in the region up the supply chain. Lack of information prevents supply chain actors acting in support of SFM.
- Communication between the public and forestry, education and media institutions in the multiple benefits of SFM is poor or non-existent. Absence of good communication contributes to ignorance of forest values and SFM practice.
- Forest authorities have inadequate information on SFM practices and do not have the capacities or resources to communicate such information. Lack of information and weak capacity to communicate it contributes to ignorance of SFM practice among forest managers.
- Forest authorities do not regularly conduct stakeholder needs assessments and do not adopt responses targeted to specific groups. Stakeholder needs are nevertheless well known from various studies but forest authorities have not adopted effectively targeted responses.

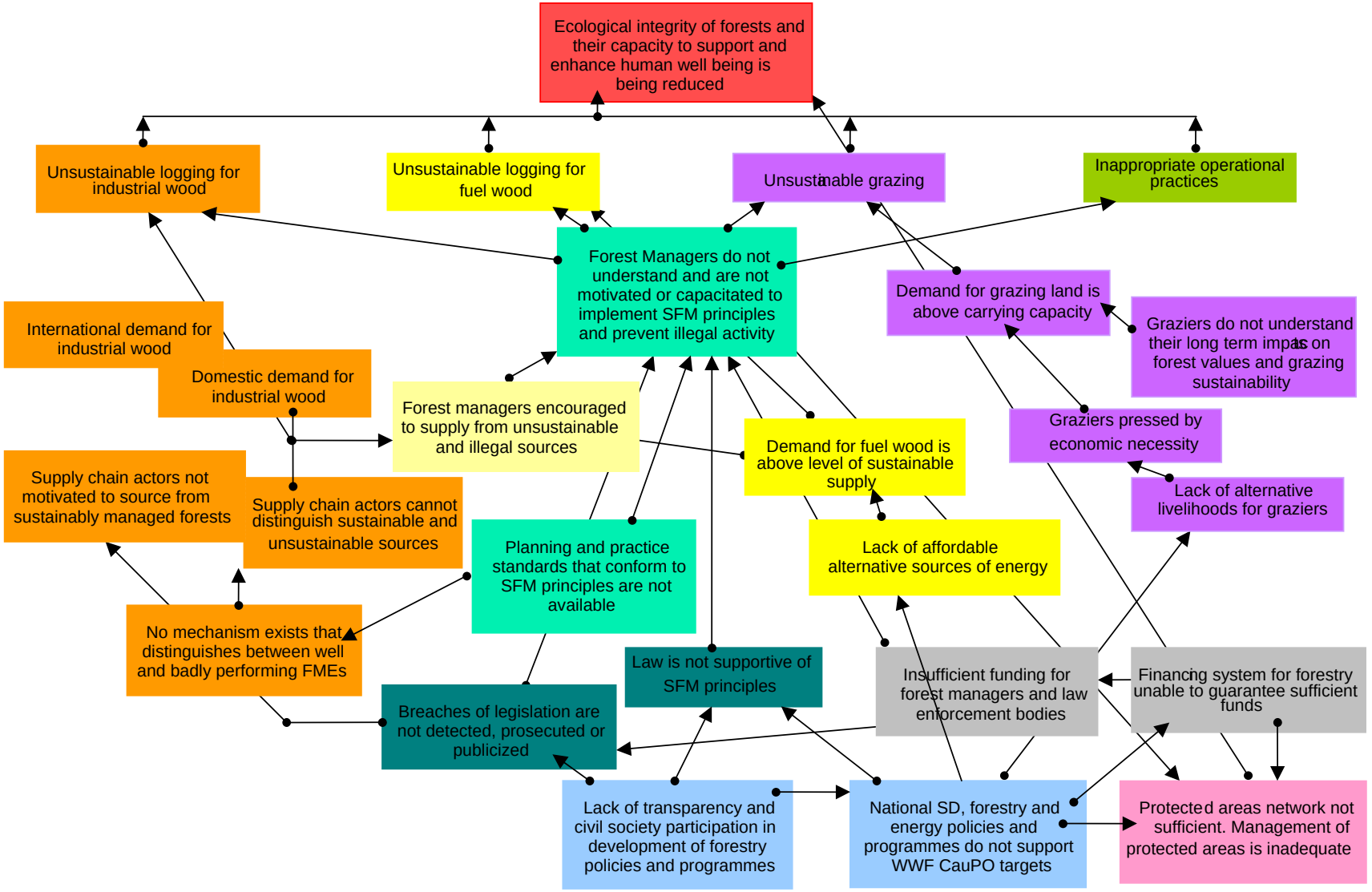
3.2 Charting the main causes – the Problem Tree

40. The main causes of forest degradation and loss are brought together in the Problem Tree in Figure 1. Nine groups of problems are evident:

- **Markets.** Domestic and international demand for industrial wood puts pressure on forest managers to supply from unsustainable and illegal sources. Supply chain actors are not motivated to source from sustainably managed forests and even if they were they have no mechanism for distinguishing sustainable from unsustainable sources.
- **Grazing.** Demand for grazing land is above carrying capacity. Graziers do not understand their long term impacts on forest values and grazing sustainability and anyway they are pressed by economic necessity and lack alternative livelihood options.
- **Fuel wood.** Demand for fuel wood is above sustainable supply. Households do not have access to affordable alternatives energy sources. As with industrial wood forest managers are under pressure to supply from unsustainable and illegal sources.
- **Capacity of forest management enterprises.** Forest management enterprises are not able to control excess demand for industrial wood, fuel wood and grazing and to manage forests sustainability because they do not understand and are not motivated or capacitated to implement sustainable forest management and prevent illegal activity.
- **Law enforcement.** Forest law enforcement bodies are under-resourced and breaches of legislation are not detected, prosecuted and publicised, so an important incentive to obey the law is missing. Anyway, the law is in many respects not supportive of sustainable forest management principles.
- **Principles of sustainable forest management.** Sustainable forest management standards have not been development or contain gaps. So law makers have no benchmark against which to judge the quality of existing and draft laws and there is no basis for assessing the quality of forest management and distinguishing between well performing and poorly performing forest management enterprises.
- **National policies and programmes.** National policies and programmes for forestry and subjects are not fully developed and not mutually supportive. Lack of transparency and lack of civil society participation in the development of policies and programmes contributes to the problem.
- **Financing.** The financing system for forestry is not able to guarantee sufficient funds for state forest management and law enforcement bodies. As a result, officials are paid poorly and are not motivated to manage forests in a more sustainable way.
- **Protected areas.** The protected areas network is not adequate and, due to problems such as financing, law enforcement and capacity management enterprises and forest law enforcement bodies, management is not effective.

41. Having set out the problems in this way we can develop, in the next Chapter, a strategy for addressing the problems that will help us to achieve our objectives for forest conservation.

Figure 1 *–Underlying causes for forest degradation and loss– the Problem Tree*



4 Strategy analysis

42. In every region in which WWF works, our overall objectives for forest conservation are guided by our global forestry targets, which are expressed under the three directions Protect, Manage and Restore. These targets are the basis for the strategy analysis that leads us to the identification of the programmes and projects that WWF will implement in the southern Caucasus. Drawing from the Problem Tree the first step in our analysis is to chart the conditions that must be met in order that we can achieve our objectives. The resulting Objectives Tree enables us to assess different intervention options for WWF and other actors in the region.

4.1 WWF's forestry targets

43. WWF has three global forestry targets:

- **Protect**: A representative network of forest protected areas is established and effectively managed.
- **Manage**: Degradation of forests is halted and conservation values are maintained and enhanced
- **Restore**: Strategically important forest landscapes are restored to regain ecological integrity and enhance human well being.

44. These targets are the starting point for developing our strategy for forest conservation in the southern Caucasus.

4.2 The Objectives Tree

45. The intermediate objectives that need to be met in order that WWF can achieve its overall objectives and the connections between them are shown as an Objectives Tree in Figure 2. Some of the intermediate objectives will be easily recognised as the positive expression of some of the underlying causes in the Problem Tree. Other intermediate objectives have been added based on our understanding of forest governance in the region and our experience in other regions. The Problem Tree shows what needs to be done. WWF can some of these things but we cannot do everything – for example provide the money that state forest management enterprises need to invest in training, forest management planning, information technology. Other actors need to be involved, in particular the region's governments and the international donor community.

46. At the top of the Objectives Tree are WWF's overall objectives for forests under the headings Protect, Manage and Restore. In the first row below are the four main threats expressed as objectives: reducing unsustainable industrial logging, fuelwood logging grazing and inappropriate operational practices. They act on all three of the overall objectives. In the same row is an additional objective: Strategically important forest landscapes identified, restoration plans made and implemented, which is an essential step to meeting WWF's Restore target.

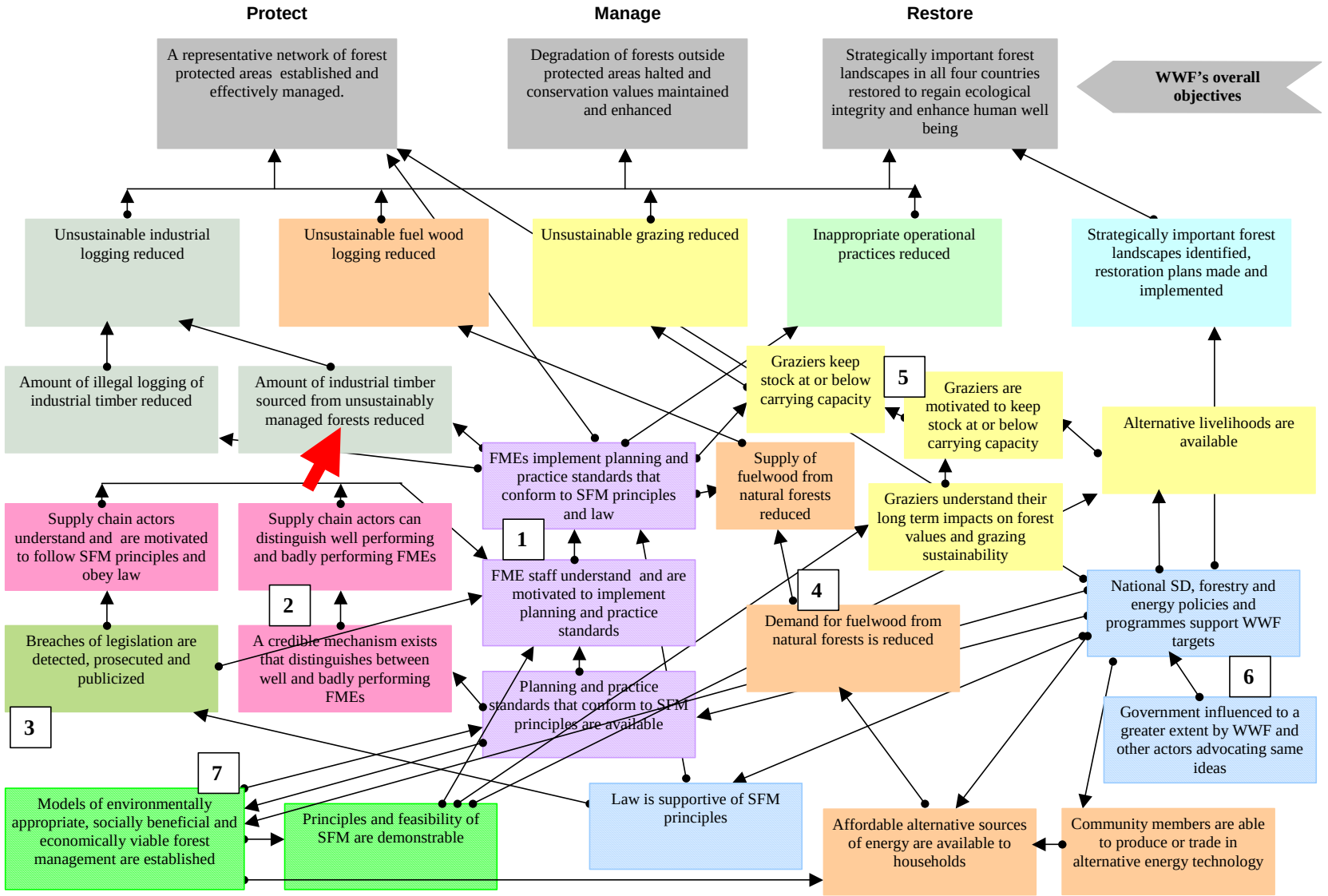
47. Below this first tier of intermediate objectives, other intermediate objectives are grouped into seven main directions:

- **1. Getting forest management enterprises to implement sustainable forest management standards**. Forest management enterprises are central to the strategy. Reducing illegal and unsustainable logging, unsustainable grazing and inappropriate operational practices depends primarily on forest management enterprises (FMEs) implementing planning and practice standards that conform to sustainable forest management principles (SFM) and the law (assuming that the law is supportive of SFM principles). FMEs must also act to prevent illegal activities by other actors. They also have central role in forest landscape restoration.
- **2. Getting supply chain actors to source from sustainable managed forests.** FMEs, who are the producers, are influenced by the market, which is composed of supply chain actors. Supply chain actors need to understand and be motivated to follow SFM principles and the law and be able to distinguish well performing and badly performing FMEs. They need a credible mechanism to help them distinguish between well performing and badly performing FMEs.
- **3. Enforcing forest law.** Supply chain actors and FMEs will be motivated to comply with the law if illegal activity is detected, prosecuted and publicized. The law needs to be supportive of SFM principles.
- **4. Bringing demand for and supply of fuel wood into a better balance.** The focal intermediate objective is to reduce the supply of fuel wood from natural forests (the term 'natural forests' means any forest that

originates from a natural forest whether it is managed or not and regardless of its conservation values). The focal objective is addressed by two streams of intermediate objectives: FMEs acting to implement legal and sustainable practices; and reducing the demand for fuelwood from natural forests by providing affordable alternatives.

- **5. Getting graziers to keep their stock at or below carrying capacity.** The focal intermediate objective is to get graziers to keep their stock below carrying capacity. This is addressed by two streams of intermediate objectives: FMEs acting to implement legal and sustainable practices; motivating graziers to keep their stock at or below carrying capacity.
- **6. Making government policies, programmes and legislation more supportive of sustainable forest management.** The Objectives Tree includes the focal objective *National SD (sustainable development), forestry and energy policies and programmes support WWF CauPO targets.* This objective has a positive direct or indirect influence on every other intermediate objective in the tree (in green) except for *Graziers understand their long term impacts on forest values and grazing sustainability*, though this could also be influenced by including agricultural extension policy in the focal objective.
- **7. Demonstrating that forests can be managed in a way that is socially beneficial and economically viable as well as being environmentally appropriate.** The Objectives Tree includes the focal objective *Principles and feasibility of SFM are demonstrable* has been added to the tree (in red). The logic for this is that policy holders, FMEs and communities need to be shown what environmentally appropriate and socially beneficial forest management means in practice, that it can be economically viable and that it need not have negative impacts on livelihoods provided that alternative livelihood strategies are available. The connected, preceding objective of establishing models of environmentally appropriate, socially beneficial and economically viable forest management is informed by, and informs the development of, planning and practice standards that conform to SFM principles. These standards can act directly through FMEs or indirectly through the market on FMEs. The models can be designed in such a way as to develop, test and demonstrate alternative energy supplies and thus act on fuelwood demand, to develop, test and demonstrate alternative livelihood strategies for graziers affected by reductions in stocking levels, and help explain to graziers their relationship to forest values.

Figure 2 –*Major conditions for the achievement of WWF's forestry targets in the southern Caucasus: the Objectives Tree*



Notes: **FME** is 'forest management enterprise' and may be state, private corporation, private individual, community. **EB** is 'enforcement body' (e.g. Ministry of Environment).

4.3 Intervention options

48. This section of the report presents indicative actions that could be taken by various actors including WWF to achieve the objectives in Figure 2. The actions are grouped under different themes or 'levers'. Each theme is considered for its **relevance** to WWF's overall goals and its **appropriateness** for WWF to act on.

4.3.1 Forest landscape restoration

49. Forest landscape restoration is a priority for WWF because of our global targets. Restoration of the integrity of degraded forest landscapes could be taken forward in a separate programme, but other objectives could be combined with it – for example demonstration forests, sustainable grazing, sustainable fuel wood management. A programme of forest landscape restoration will require commitment from and involvement by national governments and local governments and communities in the selected territories.

4.3.2 Strengthening the protected areas network

50. This is another high priority for WWF. Already, in collaboration with the Critical Eco-System Partnership Fund and other regional NGOs and individual experts, we have identified 'priority conservation areas' that we want to see brought into the protected areas network and 'wildlife corridors' connecting these areas and that are essential for animal migration and as an additional layer of protection (WWF CauPO 2004a). This comprehensive system of 'eco-nets' will be the basis for our protected areas programme and will help us to identify the forest landscapes that WWF will include in our forest landscape restoration programme.

4.3.3 Getting forest management enterprises to implement sustainable forest management standards

Relevance

51. We have seen in the Objectives Tree that forest management enterprises (FMEs) have a central role in achieving our overall objectives. We can break this down into two main groups of intermediate objectives. **Providing forest managers with forest management standards and guidelines** that will help them implement sustainable forest management and provide a basis for benchmarking the performance of forest management enterprises has high relevance to WWF targets in all four countries. Well designed forest management planning and practice standards can help ensure that FMEs including protected area management bodies pay due regard to conservation values in deciding timber harvest volumes and sites, management of grazing, planning and implementation of individual operations to prevent or mitigate damaging impacts. **Building the capacity** of forest management enterprises so that they are able to implement the standards and guidelines also has high relevance; institutional weakness are a major enabler of illegal and unsustainable practices.

Indicative actions

52. The actions that WWF and other actors could take on **standards and guidelines** include:

- *Advocate, support and engage in the development of national forestry standards.* Beneficial outcomes: greater understanding of and a consensus on SFM practice among stakeholders; a benchmark for assessing and communicating the performance of forest management enterprises and acting to raise the standards of poor performers. An essential precondition for implementing an internationally recognised certification scheme.
- *Advocate, support and engage in the development and implementation of systems to assess, communicate and act to improve the performance of forest management enterprises against agreed standards.* Beneficial outcomes: adoption of SFM practices by forest management enterprises including practices that maintain and enhance conservation values.
- *Advocate, support and demonstrate the incorporation of the concept of High Conservation Value Forest (HCVF) into forest management planning.* Beneficial outcomes: forest management plans pay due regard to the values of HCVF.

- *Advocate, support and engage in the development of management planning and practice guidelines for HCVF and priority forest landscapes.* Beneficial outcomes: planning and practice in HCVF and priority forest landscapes support the protection and maintenance of conservation values; restoration of priority forest landscapes planned and carried out in the ways that best support the enhancement of conservation values.

53. Actions that could be taken to **build capacity** include:

- *Advocate, support and engage in the development and implementation of training programmes for forest managers, forest law enforcement officials and logging companies.* Beneficial outcomes: more wide-spread and more intensive application of forest management standards and forest management planning and practice guidelines.
- *Advocate changes in the governance of state forest institutions that will establish management boards with representation from civil society.* Beneficial outcomes: greater transparency in the management of state forest institutions; institutions more responsive to the values of civil society.
- *Advocate more transparent systems for forest use licenses and systems for collating and communicating information on prices.* Beneficial outcomes: fewer opportunities for corrupt practices to act to the detriment of conservation values; the market able to operate more freely and forest management enterprises able to generate higher revenues.
- *Advocate, support and engage in the development of a strategy for financing the forest sector including more effective and equitable systems for capturing and allocating forest rents for reinvestment to maintain forest values.* Beneficial outcomes: higher levels and greater security of financing for activities that support protection and enhancement of conservation values.

Appropriateness for WWF

54. **Standards**. Highly appropriate for WWF as an acknowledged leader in the development and application of the HCVF concept and the development and application of forest planning and practice standards inside and outside forest protected areas.

55. **Capacity**: Some actions are highly appropriate (for example WWF could play a significant role in developing and delivering training programmes for forest managers, forest law enforcement officials and logging companies and in representing conservation interests on the boards of state forestry institutions). Others are not appropriate for WWF – for example, WWF could not help fund the investment needed in institutional strengthening such as offices, information technology, motivational salaries.

4.3.4 Getting supply chain actors to source from sustainably managed forests

Relevance.

56. For Georgia (international and domestic markets) and for Armenia and Azerbaijan (domestic markets), high relevance to protection and management targets and moderate relevance to restoration targets. For Turkey, high relevance to all three targets in terms of establishing a responsible purchasing group as Turkey imports significant amounts of timber from Georgia.

57. The actions that WWF and other actors could take include:

- *Advocate, support and engage in the development and implementation of systems to assess, communicate and act to improve the performance of forest management enterprises against agreed standards.* Beneficial outcomes: adoption of SFM practices by forest management enterprises including practices that maintain and enhance conservation values.
- *Establish a producer group for companies engaged in logging of industrial timber in the South Caucasus. Separately or as part of the producer group, establish a responsible purchasing group targeted at importers of timber from the South Caucasus.* Beneficial outcomes: lower rates of illegal logging and movement towards SFM.

- *Establish a system of rating companies engaged in logging in the southern Caucasus in terms of concern for and implementation of SFM and publicize the results to supply chain actors.* Beneficial outcomes: lower rates of illegal logging and movement towards SFM.

Appropriateness for WWF

58. Highly appropriate. WWF has experience in many regions over many years of tackling the timber market through the indicative actions listed here.

4.3.5 Enforcing forest law

59. **Relevance**: High relevance to protection and management and medium relevance to restoration in Armenia, Azerbaijan and Georgia as a means of combating illegal logging for industrial use. Medium relevance to restoration in Georgia. Low relevance in Turkey where illegal logging for industrial use is not significant.

60. **Indicative actions:**

- *Identify, help to bring to justice and publicise cases of illegal logging.* Beneficial outcomes: lower rates of illegal logging.
- *Build the capacity of forest law enforcement bodies.*

Appropriateness for WWF

61. Monitoring forest activity to detect and then publicize case of illegal logging is highly appropriate for WWF as we have had some successes with a similar initiative in Russia. Building the capacity of forest law enforcement bodies – as with forest management enterprises – is beyond our capacity, apart from training.

4.3.6 Bringing demand for and supply of fuel wood into a better balance

Relevance

62. High relevance to all three targets in all four countries.

Indicative actions

63. Advocate, support and engage in the development of alternative to fuel wood energy supplies for rural households such as solar heating and wind power. Beneficial outcomes are lower demand for fuel wood and less pressure on forest management enterprises to supply from unsustainable and illegal sources.

Appropriateness for WWF

64. Managing the demand for fuel wood from natural forests is far beyond the capability of WWF acting directly and should therefore not be the subject of a stand-alone WWF project. However WWF can act on demand by influencing government policy and can act on the supply of fuel wood by influencing forest management enterprises through forest management standards and better law enforcement. We can also develop, test and demonstrate alternative energy supplies as part of a model forest project perhaps working with NGO partners whose focus is on rural poverty including energy poverty.

4.3.7 Getting graziers to keep their stock at or below carrying capacity

Relevance

65. In parts of the eco-region highly relevant to all four targets in all four countries, mainly in the forest edge close to rural communities.

Indicative actions

- *Advocate, support and engage in the piloting of alternative livelihood strategies to enable graziers to reduce their stocks.* Beneficial outcomes – reduced grazing pressure.

- *Raise graziers' awareness of their impacts on forests and work with them to develop more sustainable range management practices.* Beneficial outcomes – reduced grazing pressure.

Appropriateness for WWF

66. WWF cannot act to make alternative livelihoods available on a large enough scale to influence behaviour at a national or regional level. However, together with other NGOs can work with rural communities to pilot alternative livelihood strategies and it would be more efficient if WWF was to do this as part of a programme of forest landscape restoration.

4.3.8 Making government policies, programmes and legislation more supportive of sustainable forest management

67. **Relevance**: High relevance to WWF targets in all four countries. Acts against the proximate threats and in support of the targets in a variety of ways, for example: getting recognition of the values that need to be taken into account in management planning procedures and practices; getting government to adopt and enforce legislation; getting government to join-up the policies of the forestry and energy sectors.

68. **Indicative actions**:

- *Advocate, support and engage in the development of national forestry policies and strategies.* Beneficial outcomes: greater awareness and readiness to act in support of conservation values in sustainable development policies, forest policy and strategies.
- *Forge national partnerships of civil society organisations to develop and advocate common positions to policy holders.* Beneficial outcomes: stronger voice for protection and enhancement of forest conservation values in forest policy and legislation.
- *Advocate, support and engage in the development of systems to monitor and communicate forest condition.* Beneficial outcomes: greater awareness among policy holders of the state of and trends in forest condition including conservation values and greater readiness and urgency to act.
- *Advocate, support and engage in improving the legal framework for forest use, in particular with regard to: criteria for zonation of use; mandatory standards for forest planning and practice; obligations and performance criteria into forest use permissions and leases.* Beneficial outcomes: zonation procedures that support the protection and enhancement of conservation values; rights and responsibilities of communities clearly defined, understood and acted on; more effective state control over forest management enterprises that fail to implement responsible forest management.
- *Advocate, support and engage in the application of HCVF methodology as the basis for identifying priority forest landscapes, ensuring appropriate management in HCVFs and identifying priority landscapes for restoration.* Beneficial outcomes: HCVF as a basis for identifying priority forest landscapes and zoning forest use accepted by policy holders; priority landscapes identified and forest use zoned paying full regard to conservation values.
- *Advocate, support and engage in the identification of priority areas for restoration interventions within priority forest landscapes.* Beneficial outcomes: restoration of forest landscapes built into governments' forestry programmes; greater likelihood of engagement by state FMEs; greater likelihood of attracting funding from donor organisations.

Appropriateness for WWF

69. Highly appropriate for WWF. The organization is recognized internationally for its practical knowledge of forest management and is better placed than most other NGOs in the region to be accepted by government as a partner in developing forest policy or at least to be able to influence policy.

4.3.9 Demonstrating that forests can be managed in a way that is socially beneficial and economically viable as well as being environmentally appropriate

70. **Relevance.** High relevance to the protection and management targets in all four countries. High relevance to the restore target in all four countries.

71. **Indicative actions:**

- *Advocate and support action to increase capacity of local NGOs and communities to participate in forest management planning carried out by national and local government bodies.* Beneficial outcomes: greater awareness of and account taken of the full range of forest values in national and local level forest planning.
- *Advocate, support and engage in improving the legal framework for forest use and tenure in particular with regard to criteria for zonation of use, strengthening tenure and use rights of communities, incorporation of obligations and performance criteria into forest use permissions and leases.* Beneficial outcomes: zonation procedures that support the protection and enhancement of conservation values; rights and responsibilities of communities clearly defined, understood and acted on; more effective state control over forest management enterprises that fail to implement responsible forest management.
- *Advocate, support and engage in the preparation and implementation of collaborative projects to pilot and learn lessons from community forest management; sustainable fuel-wood supply; grazing management; alternative livelihood strategies; sustainable management of production forests by state and/or private management enterprises.* A cross-cutting action that acts on a large number of pre-conditions. Beneficial outcomes: different strategies for implementing management systems and practices that alleviate threats to conservation values and support protection and enhancement of conservation values tested on the ground and lessons learned.
- *Advocate, support and engage in the development and implementation of strategies to communicate SFM benefits and practice to key, non-professional audiences (domestic consumers of wood, rural people who interact with forests and whose actions can have positive as well as negative impacts on conservation values).* Beneficial outcomes: greater awareness among non-professional actors and greater readiness to act in ways that protect and enhance conservation values.

Appropriateness for WWF

72. Highly appropriate. WWF has experience of working with communities in other transition countries and has demonstrated that it can gain their support and collaboration in ‘joint ventures’.

5 WWF's selected strategy

73. WWF's assessment of the threats to forests in the southern Caucasus and their underlying causes, and WWF's analysis of the actions that need to be taken to help us achieve WWF's overall objectives for protection, management and restoration leads us to the selection of six priority programmes and projects. To implement them WWF will need to work in partnership with other actors: in government at national and local levels; communities; private business; and other NGOs; and crucially the international donor community. WWF will strengthen WWF CauPO's regional forests team so that WWF can plan, identify funding, build partnerships and implement WWF's strategy effectively and efficiently. WWF will collaborate with other actors who WWF depend on to implement programmes and projects that WWF is not able to carry out ourselves and that are needed to achieve other conditions for success.

5.1 Priority programmes and projects

74. Based in the strategy analysis in Chapter 4 identified six programmes and projects have been identified that will form WWF's forests strategy for the southern Caucasus. They are:

- ❑ Protected areas
- ❑ Restoration and sustainable management of forest landscapes
- ❑ Developing forest management standards and benchmarking present practice
- ❑ Working with the supply chain
- ❑ Monitoring and detection of illegal logging
- ❑ Influencing government policy, programmes and legislation

75. Draft logframes have been prepared to demonstrate the relationship of each programme and project to WWF's overall objectives and the internal logic of the programmes' and projects' purposes, results and activities. The logframes are at Annex 2. The logframe for the protected areas programme includes objectively veriable indicators of the result but does not go down to the activity level; the programme is set out in more detail in the Eco-system Conservation Plan prepared by WWF CauPO in collaboration with other partners (WWF CauPO. 2004a).

5.1.1 Protected areas programme

76. **Overall Objective (by 2025):** A representative network of forest protected areas (and linking corridors) is established in the Caucasus eco-region and effectively managed.

77. **Purpose (by 2025):** To establish and bring into effective management a representative network of forest protected areas (and linking corridors in the southern Caucasus.

78. **Result (by 2015):** a substantial part of the existing network is extended and to bring the existing and the new protected areas into effective management.

5.1.2 Restoration and sustainable management of forest landscapes programme

79. **Overall goal (by 2025):** Halt the degradation of forests in the southern Caucasus, maintain and enhance their conservation values and enhance human well being. Restore degraded forest landscapes in the southern Caucasus to regain ecological integrity and enhance human well being.

80. **Purpose (by 2015):** To restore strategically important forest landscapes and demonstrate economically viable models of environmentally appropriate and socially beneficial forest management

81. Results:

- ❑ (by 2005) Forest landscapes for restoration have been selected and conditions necessary to proceed with planning have been achieved.
- ❑ (by 2006) Funding has been identified and allocated. Project teams have been established for each selected landscapes.

- ❑ (by 2006) Restoration and sustainable forest management plans have been prepared in collaboration with national and local government and communities and are being implemented.
- ❑ (by 2007) A strategy is being implemented to communicate the models of restoration and sustainable forest management and their environmental, social and economic benefits.

5.1.3 Developing forest management standards and benchmarking present practice project

82. **Overall goal (by 2025)**: Halt the degradation of forests in the southern Caucasus, maintain and enhance their conservation values and enhance human well being

83. **Purpose (by 2008)**: Develop sustainable forest management standards and benchmark present practice.

84. Results:

- ❑ (by 2007) SFM standards that conform to FSC process and content requirements are available
- ❑ (by 2007) Subsidiary planning and practice standards that support implementation of the SFM standard are available
- ❑ (by 2008) Present day standard of forest management has been assessed against the SFM standard and the results communicated to stakeholders

5.1.4 Working with the supply chain project

85. **Overall goal (by 2025):** Halt the degradation of forests in the southern Caucasus, maintain and enhance their conservation values and enhance human well being.

86. **Purpose (by 2015):** To substantially reduce illegal and unsustainable logging of industrial timber.

87. Results:

- ❑ (By 2007) Users of industrial timber adopt and implement policies to buy only legally logged timber from FMEs committed to moving to sustainable.
- ❑ (By 2007) A mechanism exists that enables the market to distinguish legal/moving to sustainable from illegal/unsustainable.

5.1.5 Monitoring and detection of illegal logging project

88. **Overall goal (by 2015):** Substantially reduce the amount of illegal logging of industrial timber for commercial gain in the southern Caucasus.

89. **Purpose (by 2010):** To encourage forest management enterprises and logging companies to supply and purchase only legally harvested timber

90. Results:

- ❑ (by 2006) Incidents of illegal logging of industrial timber in the southern Caucasus for commercial gain are being detected, publicized and brought to justice.

5.1.6 Influencing government policy, programmes and legislation programme

91. **Overall goal (by 2025):** Halt the degradation of forests in the southern Caucasus, maintain and enhance their conservation values and enhance human well being.

92. **Purpose (by 2008 and continuing):** Get national government policies, legislation and programmes in the southern Caucasus to support environmentally appropriate and socially beneficial forest management and to act positively on the levers that will bring it about.

93. Results:

- ❑ (by 2005) WWF CauPO and other national and regional environment, rural development and poverty reduction NGOs are engaged with and influencing national government policies, legislation and programmes to support WWF's forestry goals.

- (by 2008) National policies, legislation and programmes are aligned to WWF's forest conservation objectives.

5.2 Implementation

94. WWF will take all these programmes and projects forward as soon as WWF is able to identify funds and partners. For some, WWF will start by carrying out some essential preparatory work. For the **working with the supply chain** project WWF will carry out a feasibility study to determine that there is sufficient interest amongst market actors in participating in a 'forests and trade group' for taking the project further. For the **monitoring and detection of illegal logging** project WWF will evaluate different models for the detection teams and their relationships with government law enforcement bodies in the region. For the **restoration and sustainable management of forest landscapes programme** WWF will start by identifying strategically important forest landscapes and preparing the ground with government state forest management organisations and local government and then specify each project in more detail. For the others WWF will start immediately to identify strategic partners and funding.

95. WWF's strategy is ambitious but WWF is determined to carry it through. Self–assessement of the WWF's own capacity is done to take the strategy forward and WWF will strengthen WWF CauPO's team in critical areas. As a first step WWF CauPO will recruit a regional forest officer to lead on implementation of the strategy and build the relationships with the international donor community and regional partners in government, private business and the NGO community that will be essential for success.

Annex 1 – Assessment of Forest Governance in the Southern Caucasus

Notes: This assessment is based on the methodology developed by IIED for the WB-WWF Alliance (IIED 2002). The methodology has been adapted for this study by replacing the two columns "What's working" and "What's not working" with "Present state" and "Relevance" in order to identify and explain in the table the significance of a weakness in any of the elements of good governance and therefore whether action is needed. IIED's methodology arranges the elements of good governance in a pyramid. At the base of the pyramid are the Foundations of good governance - pre-requisites of good forest governance which are under the influence, but not the control, of those within the forest sector. Five tiers are built on the foundations: Tier 1 – Roles; Tier 2 – Policies; Tier 3 – Instruments; Tier 4 – Extension; and Tier 5 – Certification. Tier 5 has been omitted from this assessment because the governance elements contained within it concern voluntary certification driven by the market and in the consultant's opinion the southern Caucasus countries are many years away from being able to implement voluntary certification on a significant scale. The applicability of the assessment to each of the three countries is indicated by the use of the abbreviations **AM, AZ, GE, TR.**

	Present state ☹ = dire 😐 = significant gaps ☺ = OK	**Relevance** H = High M = Medium L = Low	**What needs to be done** H = High priority M = Medium priority L = Low priority
FOUNDATIONS: Pre-requisites of good forest governance which are under the influence, but not the control, of those within the forest sector			
F.1 *Basic democratic systems, human rights and rule of law* accepted by society and enforced	😐 Basic democratic systems in place but there is widespread disregard of the rule of law. **AM, AZ, GE, TR**	H Disregard for the rule of law makes it more difficult to combat incipient corruption and illegal logging.	H Communicate the impacts of illegal logging on forest values. Identify, bring to justice and publicise cases of illegal logging.
F.2 The *need for a forest sector*, and the role and authority of one or more lead forest institutions, is generally recognised in society	😐 The need for a forest sector is generally recognised but the role of the government institutions responsible for forestry are not widely recognised. **AM, AZ, GE**	H Lack of recognition of the role of government forestry institutions makes it more difficult forge effective relationships between the government and civil society.	M Can be addressed by forest authority communications strategies (4.6). Role will become more widely recognised as a result of government agencies engaging with other stakeholders on specific actions, eg. national forest policy and strategy.
F.3 *Historical reasons* for current roles, policies and power structures in the forest sector are understood by stakeholders in forest governance	😐 Historical reasons for current roles, policies and power structures are not understood by all stakeholders. **AM, AZ, GE, TR**	L Not a significant influence on the condition of forests in the region.	L No action needed.
F.4 *Factors which shape the nature of forest* assets and the ecological influences on them (and caused by them) are understood by stakeholders	☹ Factors which shape the nature of forest assets are not understood by some of the stakeholders that have the most influence on the nature of forest assets including	H Lack of understanding makes it less likely that stakeholders will be able to influence forest policy and practices in an appropriate direction.	H Advocate, support and assist the preparation and dissemination of informational materials to stakeholders. Can be done as part of 4.2, 4.4 and F6.

	government officials and forest users. **AM, AZ, GE, TR**		
F.5 *Economic and financial conditions* within which the forest sector operates understood by stakeholders	😐 Economic and financial conditions are not fully understood by all stakeholders. **AM, AZ, GE, TR**	M Lack of full understanding makes it more difficult to ensure sufficient funds for sustainable forest management.	L Action would not be good value for money.
F.6 *Social-cultural interactions* with forests are understood by stakeholders	😐 Social-cultural interactions are not fully understood by all stakeholders. **AM, AZ, GE, TR**	M Lack of full understanding makes it more difficult to ensure that social-cultural values are taken into account in forest policy at a national level and forest planning at a local level.	H Advocate, support and assist the preparation and dissemination of informational materials to stakeholders. Can be done as part of 4.2, 4.4 and F4.
F.7 *Land and property tenure* is secure, clear, documented and non-discriminatory against forestry	☹ Tenure is not clear in the case of former kolkhoz forest lands **AM, AZ, GE** and other local forests **AM, AZ, GE, TR**.	H Lack of clarity contributes to responsibility not being assigned and accepted and no accountability for the condition of former kolkhoz forest lands.	H Advocate, support and assist in establishment of clear and secure tenure over former kolkhoz forest lands and other forest lands that could form part of a local forest fund.
F.8 Full range of *international obligations/ conventions*, targets and principles which affect the forest sector understood and engaged with by relevant stakeholders	☹ Rio Forest Principles, the Criteria and Indicators and the Forest Level Guidelines of the MCPFE are not understood and engaged with by some key stakeholders, in particular government policy makers and legislators and state forest managers. Engagement with the Aarhus Convention is not serious. **AM, AZ, GE, TR**	M Lack of full understanding makes it difficult to secure commitment of policy holders and to ensure that forest policies, plans and practices conform to international principles of SFM.	H Achievement of full understanding should form part of the national forestry policy and strategy process (see 1.5).
F.9 *Market, investment and trade* conditions and flows understood and engaged with by stakeholders	😐 Market, investment and trade environment as it affects the forest sector is not understood well.	M Ignorance of conditions contributes to weaknesses in national forest programmes and strategies.	L Achievement of full understanding of market, investment and trade conditions should form part of the national forestry policy and strategy process (see 1.5).
F.10 *System of constitutional guarantees and rights* engaged with (may be able to influence e.g. citizen environmental rights and appeal, development rights, etc)	☹ Forest sector actors do not engage to the fullest possible extent with the system of constitutional rights and guarantees, eg the Aarhus Convention. **AM, AZ, GE, TR**	H Forest values are not given full consideration in national sustainable development policies and action plans.	H National forestry policy and strategy process (see 1.5) should strengthen permanently engagement in the system of constitutional guarantees.
F.11 *Government macro-economic policies* engaged with e.g. national and regional plans, structural adjustment, budget allocation, taxation, pricing and exchange rates	☹ Forest sector actors do not engage with government macro-economic policies. **AM, AZ, GE**	H Forest values are not given full consideration in national sustainable development policies, regional plans and national and regional budgets.	H National forestry policy and strategy process (see 1.5) should permanently strengthen engagement in macro-economic policies.

F.12 *Labour* and employment, and health and safety, policies and institutions engaged with	☹ Forest sector actors do not engage with labour and employment and health and safety policies. **AM, AZ, GE**	L Health and safety conditions of forest workers are not relevant to WWF's forest goals.	None.
F.13 *Agricultura*l extension and subsidy systems, and other direct land use policies/sectors (e.g. wildlife, tourism, mining, resettlement, watershed) engaged with and distortions tackled	☹ Forest sector actors do not engage with agricultural extension and subsidy systems. **AM, AZ, GE, TR**	H Lack of engagement with agricultural extension systems contributes to ignorance of the impacts of grazing on forest values.	H National forestry policy and strategy process (see 1.5) should engage the forestry sector in agricultural extension policies and programmes.
F.14 *Transport and infrastructure* policies and developments engaged with	☹ Forest sector actors do not engage with transport and infrastructure policies. **AM, AZ, GE, TR**	L Not a significant factor in SFM in the region and therefore not important to WWF's forest goals.	None.
F.15 *Energy* policies and developments engaged with and price controls tackled	😐 Forest sector actors do not engage to the fullest possible extent with energy policies and developments. **AM, AZ, GE, TR**	H Lack of full engagement prevents pressures of energy demand on forests being addressed.	H National forestry policy and strategy process (see 1.5) should engage the forestry sector in energy policies and programmes.
F.16 *Local government* and decentralisation policies and developments engaged with	☹ Forest sector actors do not engage fully with local government and decentralisation policies and developments. **AM, AZ, GE, TR**	H Local government plays an significant role in the management of the local forest fund and in managing pressures on other forest lands. Lack of full engagement prevents positive intervention by local government actors.	H National forestry policy and strategy process (see 1.5) should engage the forest sector with local government.
F.17 *Education and training* policies and developments engaged with	☹ Forest sector actors do not engage with education and training policies. Forest sector education and training is considered in isolation or not at all. **AM, AZ, GE, TR**	H lack of engagement prevents weaknesses in forestry education and training provision from being addressed.	H National forestry policy and strategy process (see 1.5) should engage the forest sector with education and training policies.
F.18 *Water* allocation and service policies and developments engaged with	☹ Forest sector actors do not engage with water allocation and service policies. **AM, AZ, GE, TR**	L Not a significant factor in SFM in the region and therefore not important to WWF's forestry goals.	None.
F.19 Effective mechanisms in place for *inter-sectoral coordination*, learning and action on land use and land management: - Consultation and participation systems - Information and analysis systems - Cost-benefit-risk assessment - SD principles enshrined in policy/law e.g. precautionary, polluter-pays.	☹ Mechanisms of inter-sectoral co-ordination, learning and action on land use and land management are weak. **AM, AZ, GE, TR**	H Weaknesses prevent full account of forest values being taken in national and local sustainable development policies and action plans.	H Forest sector actors need to engage in national sustainable development policy preparation, monitoring and review.

- Priority-setting mechanisms using above - Cross-sectoral visions, policies and strategies based on above			
Tier 1. ROLES: Stakeholder roles and institutions negotiated and developed			
1.1 Recognition amongst current sectoral policy-holders that there are *multiple valid perspectives and stakeholders* in the sector.	☹ Sectoral policy holders generally do not recognise that there are multiple valid perspectives and stakeholders. They tend to act without regard for the needs and views of stakeholders outside government. **AM, AZ, GE, TR**	H As long as ministers and officials responsible for policy on forests do not recognise that there are multiple valid perspectives and stakeholders, forest policy and management will not reflect societal needs and concerns.	H Get policy holders to recognise that there are multiple valid perspectives and stakeholders in the sector. Do this by forging partnerships between the government and other stakeholders to address specific issues and to prepare and implement specific programmes, eg national forestry councils to steer the development of national forestry programmes. If government is not ready to form meaningful partnerships, adopt campaigning strategies that will pave the way to partnerships.
1.2 Capable *representatives* of different stakeholder groups (not necessarily all stakeholders to start with) ready to negotiate	☹ National environmental and social NGOs have capable representatives, local NGOs and community groups less so. Government representatives generally have poor understanding of role of forests, interactions between people and forests and forests and other sectors and are not ready to negotiate. **AM, AZ, GE, TR**	H Government's lack of understanding and lack of readiness to negotiate prevents societal needs and concerns from being accommodated in forest policy and management practice.	H As 1.1.
1.3 Organised *participation system* comprising a mix of fora at national and local levels for analysis, consultation and decision-making	☹ No organised participation system **AM, AZ, GE** or systems are weak **TR**.	H Lack of organised participation makes it more difficult for civil society's voice to be heard by government.	H As 1.1.
1.4 *Information* generated and accessible on an equitable basis by stakeholders - on forest assets, demands and uses	☹ Information on forest assets, demands and uses is available but information on condition and trends is poor and not widely available. **AM, AZ, GE, TR**	H Lack of information prevents reasoned discussion about the challenges faced by the sector and actions to tackle the challenges.	H Develop systems to assess and monitor forest values, demands and uses (eg Forest Score Card, National Criteria and Indicators of the MCPFE) and communicate results to stakeholders.

1.5 A *vision* of the role of forests in land use and livelihoods is developed and shared	☹ There is no vision of the role of forests in land use and livelihoods. **AM, AZ, GE, TR**	H Without a vision, government and other actors cannot discuss and decide the merits of different strategies or monitor progress.	H Advocate, support and assist in the preparation of national forest policies and programmes.
1.6 Stakeholder *roles* in forestry and land use -comprising rights, responsibilities, returns and relationships - negotiated and clear to all	☹ Stakeholder roles have not been negotiated **AM, AZ, GE** or are not clear **TR**..	M Lack of clarity over roles makes it less likely that needs and concerns of stakeholders will be given attention.	L Will be addressed by action on 1.1 to 1.5.
1.7 Basic forest *institutional architecture* (structures) and decision-making rights and powers agreed and in place	😐 Basic forest institutional architecture is in place but decision-making rights and powers are not clear. **AM, AZ, GE.**.	😐 Weakness in the institutional architecture are a barrier to developing and enforcing effective legislation and management guidelines and to combating corruption.	M Advocate and participate in preparations for reform of institutional architecture.
1.8 Capability of *lead agencies* to drive and support human resource development amongst stakeholders developed	☹ Lead agencies do not have the motivation or the capability to support human resources development amongst stakeholders. **AM, AZ, GE.**	H Poor motivation and weak capability prevent adequate human resources development among stakeholders.	L No action. Lead agencies cannot be expected to drive and support human resource development among stakeholders when they have few resources and more urgent issues.
1.9 Mechanisms for *development of skills*, motivation and interactions of all stakeholders in place	☹ Mechanisms for development of skills are weak. Forestry education and in-service training systems are under-funded and curricular are out of date. **AM, AZ, GE, TR**	H Under-funding of forestry education and in-service training contribute to chronic lack of skills in forest management agencies.	H Advocate and secure improvements in the provision of training.
1.10 Domestic and foreign sources of *finance* for the sector - commercial, NGO and public – identified, assessed and engaged with at national level	😐 Potential sources of finance are known. Some have been assessed and some are being engaged with at national level. **AM, AZ, GE**.	L Gaps are not significant compared to other weaknesses in the governance system.	L Continue to maintain information on sources of finance.
1.11 *Collaborations and partnerships* for forest management arranged and pursued with active attention to lesson-leaning and adaptation	☹ Few examples of collaboration and partnerships are being pursued. Attention to lesson-learning and adaptation is poor. **AM, AZ, GE, TR**	M Absence of lesson-learning and adaptation culture reduces the impact of projects.	H Advocate and engage in the preparation and implementation of collaborative projects, in particular on community forest management, forest landscape restoration, national park management.
1.12 *International agencies* and NGOs involved and supportive of nationally-agreed priorities for forest governance	☹ International agencies and NGOs are involved in the forest sector. The projects in which they are engaged are in general supportive of national priorities, though the priorities have not necessarily been agreed by all stakeholders. **AM, AZ, GE, TR**	M Some investments may deliver outputs that are not relevant to national needs or will not address national needs in the most appropriate way	L Development of national forest policies and programmes (see above) will provide a stronger basis for evaluating project proposals of international agencies and NGOs.

Tier 2. POLICIES: Forest policies, standards for SFM and legislation in place			
2.1 Agreed *vision, roles and basic institutional architecture* (structures) of the forest sector recognised in central forest policies and laws	☹ There is no nationally agreed vision for the forest sector and no consensus on the most appropriate institutional architecture (see Tier 1). **AZ, GE.**	H Society's needs and concerns are not reflected in central forest policies and laws.	H Will be addressed by preparation of national forestry policy and programme (see 1.5).
2.2 National forest sector *priority-setting* methods/criteria agreed and adopted	☹ There are no forest sector priority setting methods/criteria. **AZ,GE**.	H The actions taken by the forest sector and the way in which the forest sector develops will not reflect society's priorities.	H Should be addressed as part of national forestry policy and programme (see 1.5).
2.3 National ('permanent') *forest estate* designated, under various kinds of ownership, based on shared vision (see 2.1) and on land capability: covering protection forest, 'livelihood' mixed use forest, and commercial production forest as needed	☹ A vision of the permanent forest estate under various kinds of ownership and land capability has not been developed. **AZ, GE**.	H Government decisions on forest ownership, for example privatisation, are unlikely to reflect society's wishes and needs.	H Shared vision of the national permanent estate, types of ownership and types of forest should be developed as part of the national forest policy and programme (see 1.5).
2.4 Clear, equitable and legally defensible *rights* in place: rights to manage the forest resource (based on free and informed consent of others with legal and customary rights); rights to extract resources from public forests given in return for full economic compensation, including externalities	☹ A system of granting rights in return for economic compensation is in place but procedures for granting rights are not equitable and pricing mechanisms do not ensure full economic compensation. **AM, AZ, GE.**	H Forest rents are not captured in full and are not made available to forest managers for investment in forest protection and regeneration.	H Advocate and participate in the development of more effective, equitable systems for capturing forest rents.
2.5 *Stakeholders aware* of their rights; local and marginalised communities' legal and customary rights recognised and respected	☹ Stakeholders are not aware of their rights and legal and customary rights are not respected. **AM, AZ, GE, TR**	L Lack of awareness of and respect for rights are not significant influences on the condition of forests.	L No action needed.
2.6 *Procedures to optimise benefits* from the forests in place, so that: - forest management is economically viable, incorporating environmental and social externalities; - multiple benefits of forests are safeguarded during operations; - efficient local processing is encouraged;	☹ Procedures to optimise benefits from the forest are defined (the system of forest management planning) but they are being implemented in only a small part of the territory due to lack of funds. Defined procedures do not ensure that social and environmental externalities are incorporated, that efficient local processing is encouraged, or that equitable livelihoods are supported. **AM, AZ, GE, TR**	H Gaps in procedures and failures to follow procedures make it unlikely that forest use will be sustainable.	H Advocate and participate in the development of forest management planning procedures that pay full regard to all forest values.

- equitable livelihoods are supported.			
2.7 Formalisation of systems to define, implement, monitor and improve forest *policy and standards*, and ensure their *coherence* with other policies	☹ There are no formal systems to define, implement, monitor and improve forest policy and standards and to ensure their coherence with other policies. **AM, AZ, GE, TR**	H Lack of systems make it unlikely that forest use will be sustainable.	H Should be addressed in the development of a national forest policy and strategy (see 1.5).
2.8 *Process for defining national standards* (PCI&S) for SFM in place, which is based on: - an agreed and well-communicated purpose of standards within the broader vision for the forest sector; - an agreed basis for introduction of standards (voluntary and/or mandatory); - local consultation and research; - good forestry practice as recognised by the majority of stakeholders international obligations - international C&I for SFM schemes where relevant, to ensure recognition	☹ There is no process for defining national SFM standards. **AM, AZ, GE, TR**	H Lack of national standards makes it unlikely that forest use will be sustainable.	H Advocate and participate in the development of national forest management standards.
2.9 *Forest legislation* in place, which balances controlling and enabling functions to support the above; with adequately delegated powers	☹ Legislation emphasises control rather than enablement and centralises power. **AM, AZ, GE.**	L Emphasis on control is appropriate under present conditions.	L No action needed.
Tier 3. INSTRUMENTS: Coherent set of 'carrots and sticks' for implementation in place			
3.1 *Knowledge* created amongst stakeholders of the availability, purpose, degree of choice, implications, and capacity necessary for use of instruments employed in the forest sector	☹ Knowledge among stakeholders of the availability, purpose, degree of choice, implications, and capacity necessary for use of instruments employed in the forest sector is poor, **AM, AZ, GE, TR.**	L Lack of awareness of alternative instruments is not a significant influence on forest condition.	L No action needed.

3.2 *Coherent mix/set of instruments* – with net effect promoting both a demand for SFM and a supply of SFM (within framework of roles and policies) – strived for at national level	☹ Government uses only command and control instruments. **AM, AZ, GE.**	L Emphasis on control is appropriate under present conditions.	L No action needed.
3.3 *Regulatory instruments* – clear, practical/ affordable and equitable (proportionate) rules and sanctions in place for the forest sector, including: - Forest tenure rights and allocation systems, and their defence (recourse) - Protection of public and intergenerational interests in forests - Forest management and investment conditions and controls - Market access for stakeholders - Anti-corruption provisions - Revenue system (based on equivalence of domestic/export forest product prices)	☹ Forest laws are not clear and are not enforced and therefore fail to protect public and intergenerational interests in forests, **AM, AZ, GE.** Anti-corruption systems are not strong enough to prevent rent-seeking by government forestry officials, **AM, AZ, GE, TR.**	H Lack of clarity in forest law is a barrier to effective law enforcement. Weaknesses in anti-corruption systems allow government officials to facilitate and engage in illegal and corrupt activity unhindered.	H Advocate and assist with the amendment of laws and strengthening of anti-corruption provisions.
3.4 *Market instruments* – achieving equitable distribution of costs and benefits, and incorporation of full social and environmental externalities including: - Property rights based approaches (concessions, licences, permits, etc) to improve supply - Demand-side incentives for increasing types, volumes and sources of sustainably produced forest goods and environmental services - Market enabling measures such as information disclosure requirements - Strategy for financing the forest sector	☹ The system of forest use licences is obscure and inequitable and market information, for example pricing, is not made widely available, **AM, AZ, GE**. There is no attention to demand-side incentives for increasing the sustainable production of forest goods and environmental services, **AM, AZ, GE, TR**. There is no strategy for financing the forest sector, **AM, AZ, GE, TR**.	H Lack of transparency in issue of forest use licences makes it more difficult to identify and combat corrupt activity. Absence of a strategy for financing the forest sector makes it impossible to guarantee SFM.	H Advocate and assist in the implementation of more transparent systems for forest use licenses and systems for collating and communicating information on prices. H Advocate and assist in the development of a strategy for financing the forest sector.

3.5 *Informational instruments* – systems in place for information coordination and flow to develop knowledge and motivation amongst stakeholders (Tier 4)	☹ There is no system in place for information co-ordination and flow to develop knowledge and motivation among stakeholders, **AM, AZ, GE, TR.**.	H Absence of system prevents stakeholders from engaging meaningfully or at all in forest policy and forest planning.	H Advocate and assist the development of systems for information co-ordination and flow.
3.6 *Institutional/contractual instruments* - structures and capabilities developed around agreed roles, including: - Formal commitments to agreed role and policy changes e.g. associations/codes - Strategies, job descriptions and human resource capabilities in line with agreed roles and changes - Support for poor and marginalised stakeholders' power to make decisions, claim rights, and enter partnerships - Clear management guidelines/rules (not necessarily comprehensive management plans) - Negotiation and conflict management systems - Codes of conduct, joint financing and sector-wide approaches for funding/ supporting the forest sector - Ongoing brokering, bargaining power-building and learning in partnerships, alliances and collaborations for forest management	☹ Structure and capabilities are underdeveloped. Formal commitments to agreed role and policy changes have not been made. Strategies, job descriptions and human resource capabilities therefore do not reflect sector and institutional needs. There is only very limited support for poor and marginalised stakeholders' power to make decisions, claim rights and enter partnerships. Management guidelines are inadequate. Negotiation and conflict management systems are not in place or are not functioning. Codes of conduct, joint financing and sector-wide approaches for funding/supporting the forest sector do not exist, **AM, AZ, GE, TR**.	H Structures and capabilities do not reflect society's needs and concerns. Critical weaknesses are: human resource capabilities in enforcement and management institutions; absence of management guidelines; lack of support for stakeholders to enter into partnerships.	H Advocate and assist in the strengthening of human resource capabilities. H Advocate, support and assist the development of management guidelines (eg for biodiversity conservation). H Advocate, support and assist the development of systems for assessing conformance of forest management practice on the ground to national forest management standards and guidelines. H Provide support to local NGOs and communities to participate in forest management planning carried out by national and local government bodies.
3.7 *Capacities* to plan, coordinate, implement and monitor the above	☹ Capacity of government and other actors to plan, co-ordinate and monitor are weak, **AM, AZ, GE, TR**.	H Planning for the sector is ineffective and the sector is unlikely to follow a path of sustainable forest management.	H Advocate and provide support to strengthen the capacity of the lead government agencies.
Tier 4. EXTENSION: Promotion of SFM to stakeholders undertaken			

4.1 Forest producers are equitably involved in mechanisms to receive and share information: on SFM practice and its rewards/costs/risks; on associated legislation, instruments, incentives, markets; and on resources required for SFM	☹ Mechanisms to disseminate and share information on SFM practice, associated legislation, instruments, incentives and markets and on resources required for SFM are underdeveloped or non-existent, **AM, AZ, GE, TR.**.	H Absence of effective mechanisms contributes to ignorance of SFM practice and forest law.	H Addressed by action on 3.5 above.
4.2 Consumers of forest products (domestic and export) have access to information both on the multiple public benefits of SFM and on specific SFM products	☹ Information about the public benefits of SFM and of specific SFM products is not widely available among domestic consumers, **AM, AZ, GE, TR**.	H Lack of access to information prevents consumers from acting in support of SFM.	H Advocate, support and participate in the preparation and dissemination of information about the benefits of SFM to key groups.
4.3 Forest producers, investors, processors, middlemen, retailers and consumers have access to mechanisms for passing 'sustainability' information both up and down the supply chain	☹ There are no mechanisms for passing credible information about the sustainability of forest products produced in the region up the supply chain, **AM, AZ, GE, TR**.	H Lack of information prevents supply chain actors acting in support of SFM.	L Markets into which timber from southern Caucasus forests are being sold are not environmentally conscious and therefore unlikely to act on information about the sustainability of their purchases.
4.4 The general public enjoys good communication with forestry, education and media institutions on the multiple benefits of SFM (goods, services and other values)	☹ Communication between the public and forestry, education and media institutions in the multiple benefits of SFM is poor or non-existent, **AM, AZ, GE, TR**.	H Absence of good communication contributes to ignorance of forest values and SFM practice.	H Addressed by 4.2 above.
4.5 Forest authorities have access to accurate, recent information on all relevant SFM practices and their extent, and have capacities and resources to communicate it	☹ Forest authorities have inadequate information on SFM practices and do not have the capacities or resources to communicate such information, **AM, AZ, GE, TR**.	H Lack of information and weak capacity to communicate it contributes to ignorance of SFM practice among forest managers.	H Can be addressed by national criteria and indicators (1.4), national forestry standards (2.8) and forest management guidelines (3.6).
4.6 Forest authorities regularly conduct stakeholder needs assessment for the above, and adopt responses targeted to specific groups	☹ Forest authorities do not regularly conduct stakeholder needs assessments and do not adopt responses targeted to specific groups, **AM, AZ, GE, TR**.	L Stakeholder needs are well known but forest authorities have not adopted effectively targeted responses.	H Advocate, support and assist the development of forest authority communications strategies.

Annex 2 - Logical Frameworks for WWF's selected programmes and projects

A. Protected Areas Programme

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions
Overall objective	A representative network of forest protected areas (and linking corridors) is established in the Caucasus eco-region and effectively managed.	• By 2025, all eco-nets identified in the Caucasus Eco-system Conservation Strategy have been established as protected areas and the eco-nets and linking wildlife corridors are being managed effectively.	• Legislation establishing new protected areas. • Documented assessment of management effectiveness.	
Project purpose	To establish and bring into effective management a representative network of forest protected areas (and linking corridors in the southern Caucasus.	• By 2025, all eco-nets in the southern Caucasus identified in the Caucasus Eco-system Conservation Strategy have been established as protected areas and the eco-nets and linking wildlife corridors are being managed effectively.	• Legislation establishing new protected areas. • Documented assessment of management effectiveness.	
Results	1. A substantial part of the extended network and to bring the existing and the new protected areas into effective management.	• By 2015 half of Greater Caucasus Econet is created, an additional 150.000 ha of forests is protected and management is improved on at least 100.000 ha of existing protected areas.	• Legislation establishing new protected areas. • Documented assessment of management effectiveness.	National governments are willing to legislate for additional protected areas and provide funding to support their creation and effective management.
		• At least two transboundary protected areas are established as part of the Greater Caucasus Econet	• Legislation establishing new protected areas. • Documented assessment of management effectiveness.	

A. Protected areas programme

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions
		• Half of Lesser Caucasus Econet is created, an additional 100,000 ha of forests is protected and management is improved on at least 100,000 ha of existing protected areas.	• Legislation establishing new protected areas. • Documented assessment of management effectiveness.	
		• Create at least one transboundary reserve to be included into Lesser Caucasus Econet	• Legislation establishing new protected areas. • Documented assessment of management effectiveness.	
		• Half of Talysh-Gilyan Econet is created, an additional 50,000 ha of forests is conserved and management is improved on at least 50,000 ha of existing protected areas	• Legislation establishing new protected areas. • Documented assessment of management effectiveness.	
		• An additional 5,000 ha of forests and open woodlands are protected in the Kura-Araks Lowlands and Iori basin and conservation in existing reserves improves (50.000 ha)	• Legislation establishing new protected areas. • Documented assessment of management effectiveness.	
				Preconditions: None

B. Restoration and sustainable management of forest landscapes programme

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions
Overall objective	Halt the degradation of forests in the southern Caucasus, maintain and enhance their conservation values and enhance human well being. Restore degraded forest landscapes in the southern Caucasus to regain ecological integrity and enhance human well being.	• By 2025 the ecological integrity of all of strategically important forest landscapes has been restored and human well-being has been enhanced	• Ex-ante and ex-post assessments of ecological integrity of the selected landscapes • Ex-ante and ex-post surveys of sources of livelihoods in the selected landscapes and the sustainability of livelihoods • Ex-ante and ex-post comparison of forests' conservation and social values.	Ex-ante and ex-post data is available on the conservation and social values of a representative sample of forests
Project purpose	To restore strategically important forest landscapes and demonstrate economically viable models of environmentally appropriate and socially beneficial forest management	• By 2007 restoration of 3 forest landscapes is underway • By 2008 the selected landscapes will be demonstrating economically viable, socially beneficial and environmentally appropriate forest management • By 2010 senior managers of the FMEs responsible for at least 75% of the region's forests, all senior civil servants in the region responsible for forest policy, all senior managers of forest law enforcement and extension bodies in the region, representatives of all the regions's second tier (region) governing bodies and representatives of the all the third tier (district or village) governing bodies adjacent to the selected landscapes have visited demonstration sites, understand the principles that are being	• Programme documentation and evaluation of project activities and results in the selected landscapes • Ex-ante and ex-post survey of forest dependent households to determine change in pressures on forests and benefits derived from forests and from other livelihood strategies. • Programme and project documentation. • Ex-post survey of visitors from among the target audience to assess understanding and level of support	

B. Restoration and sustainable management of forest landscapes programme

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions
		demonstrated and support the system of forest management • By 2015 the ecological integrity of the selected forest landscapes has been substantially restored and the landscapes are supporting more sustainable livelihoods		
Results	1 Forest landscapes have been selected and conditions necessary to proceed with planning have been achieved	• By 2005 forest landscapes selected, boundaries defined, partnership/collaboration agreements made with FMEs, ex-ante condition assessed	• Programme documentation • Documented assessment of ex-ante condition	
	2 Funding has been identified and allocated and project teams established for the selected landscapes.	• By 2006 project teams have been established for all selected landscapes	• Programme and project team staff complements • Programme and project budgets	
	3 Restoration and sustainable forest management plans have been prepared in collaboration with national and local government and communities and are being implemented.	• By 2006 restoration plans have been prepared for all selected landscapes and are being implemented	• Programme and project documentation	
	4. A strategy is being implemented to communicate the models of restoration and sustainable forest management and their environmental, social and economic benefits	• By 2007 a communication strategy and communication materials have been agreed and documented and target audiences are being reached	• Programme documentation • Number of press articles, TV and radio slots and minutes.	
	5. Programme is effectively managed	• Programme and project milestones are achieved on time and to satisfactory standard	• Programme and project monitoring reports	
Activities	1.1 Decide criteria for selecting the forest landscapes for restoration.	• By 2005 criteria have been decided and tested	• Programme documentation	

B. Restoration and sustainable management of forest landscapes programme

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions
	1.2 Select the landscapes to be included in the programme	• By 2005 the landscapes to be included in the programme have been selected	• Programme documentation	
	1.3 Negotiate collaboration / partnership agreements with the responsible FMEs	• By 2006 agreements have been made with all the FMEs responsible for the territories covered by the restoration plans	• Programme documentation	FMEs responsible for management of forests in strategically important forest landscapes are willing and capacitated to collaborate
	2.1 Determine staffing and other resources requirements and prepare budgets	• By 2006 staff numbers and competencies and quantity and cost budgets have been prepared	• Programme documentation	
	2.2 Recruit project teams and provide them with the necessary means to implement the projects	• By 2006 project teams with the necessary skills are in place and the resources they need are available to them	• Programme and project staff schedules, asset registers and budgets	Suitably qualified staff available
	3.1 Establish forest management 'councils' with community representatives	• By 2007 councils have been established for all the model forests and procedures have been agreed	• Programme and project documentation	Suitably qualified people are willing and capacitated to participate in the councils
	3.2 Agree forest management principles	• By 2007 all the model forest councils have agreed forest management principles that conform to FSC Principles and Criteria	• Assessment of documented principles against FSC Principles and Criteria	
	3.3 Assess conformity of management principles to state forestry regulations and secure any exemptions or modifications that are necessary	• By 2007 state forestry regulations permit model forests to be managed in accordance with the principles agreed by the councils	• Documented assessment of conformity • Documented changes to or exemptions from state regulations	The responsible government bodies are willing to amend the regulations are to give exemptions
	3.4 Carry out forest inventory and an assessment of impacts from grazing and fuelwood	• By 2007 forest inventories and grazing and fuelwood impact assessments have been carried out in all model forests	• Documented inventory • Documented impact assessments	
	3.5 Identify and assess ways of reducing impacts including alternative livelihood strategies	• By 2007ways of reducing impacts including alternative livelihood strategies have been identified and	• Study report	

B. Restoration and sustainable management of forest landscapes programme

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions
		assessed		
	3.6 Prepare management plans, operational plans and budgets	• By 2007 plans showing the desired future states of all the selected landscapes and the interventions needed to achieve those states have been prepared	• Programme documentation	
	4.1 Prepare communication strategy	• By 2008 a communication strategy has been agreed and documented	• Programme documentation	
	4.2 Implement communication strategy	• By 2009 the communication strategy is being implemented	• Communications documentation	
	5.1 Recruit programme team and provide it with the necessary means to implement the project	• Team in position and trained, essential initial equipment in place and future resource needs allocated	• WWF CauPO staffing records and project budget	Suitably qualified staff available
				Preconditions: None

C. Developing forest management standards and benchmarking present practice project

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions
Overall objective	Halt the degradation of forests in the South Caucasus and Turkish Caucasus, maintain and enhance their conservation values and enhance human well being	• By 2005 conservation and social values of forests in the region are stable or increasing	• Ex-ante and ex-post comparison of forests' conservation and social values.	Ex-ante and ex-post data is available on the conservation and social values of a representative sample of forests[1]
Project purpose	Develop sustainable forest management standards, benchmark present practice.	• By 2007 standards and supporting guidelines have been prepared • By 2008 present practice in all four countries has been assessed against the standard	• Documented standards, guidelines • Documented benchmarking report	
Results	1. SFM standards that conform to FSC process and content requirements are available	• By 2007 a standard addressing all relevant FSC Principles and Criteria has been adopted by consensus by a representative stakeholder group	• Documented standard and records of meetings of the standards group	
	2. Subsidiary planning and practice standards that support implementation of the SFM standard are available	• By 2007 subsidiary standards addressing all critical aspects of SFM have been prepared	• Project documentation	
	3. Present day standard of forest management has been assessed against the SFM standard and the results communicated to stakeholders	• By 2008 present practice has been assessed a report on the conformity of forestry practice to SFM principles has been communicated to key stakeholders	• Project documentation and survey of stakeholders	
	4. Project is effectively managed	• Project milestones are achieved on time and to satisfactory standard	• Project monitoring records	

[1] This assumption could lead us to add another project aimed at monitoring forest condition in the region.

C. Developing forest management standards and benchmarking present practice project

Activities	1.1 Establish a regional standards group and agree objectives and procedures	• By 2005 a representative group is established and objectives and procedures have been agreed	• Project documention. • Group documentation and procedures	Representatives of key stakeholder groups willing and resourced to participate
	1.2 Provide training to group members to ensure a common understanding of SFM principles and FSC requirements	• By 2005 all members of the group understand SFM principles and FSC requirements	• Records of outcomes from training	
	1.3 Draft and test the standard and identify subsidiary standards needed to support its implementation	• By 2007 the standard has been tested and revised as necessary and subsidiary standards have been identified	• Field test report • Group documentation	
	2.1 Research planning and practice standards that exist or are planned or under development by other projects and decide which subsidiary standards should be prepared by the project	• By 2007 a list of necessary subsidiary standards has been documented and the project(s) that will prepare them identified	• Project documentation	
	2.2 Prepare the subsidiary standards and/or influence other projects that are developing standards to ensure that they conform to the requirements of the regional standards group	• By 2007 all the subsidiary standards exist, have been field tested and necessary changes made	• Project documentation	Other projects that are preparing standards are willing to accommodate the regional standards group's concerns
	3.1 Carry out an assessment of conformity of FMEs to the SFM standard	• By 2008 a representative sample of FMEs has been assessed	• Assessment reports	FMEs are willing to allow an assessment of their practices
	3.2 Communicate the results of the assessment	• By 2008 key stakeholders are aware of how present practice compares with SFM principles	• Survey of stakeholders	
	4.1 Recruit project co-ordinator and provide him/her with the necessary means to implement the	• Co-ordinator in position and trained, essential initial equipment in place and future resource needs allocated	• WWF CauPO staffing records and project budget	Suitably qualified staff available

C. Developing forest management standards and benchmarking present practice project

	project			
				Preconditions: None[2]

[2] Questions - Are there any pre-conditions?

D. Working with the supply chain project

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions
Overall objective	Halt the degradation of forests in the South Caucasus and Turkish Caucasus, maintain and enhance their conservation values and enhance human well being.	• By 2025 conservation and social values of forests in the region are stable or increasing	• Ex-ante and ex-post comparison of forests' conservation and social values.	Ex-ante and ex-post data is available on the conservation and social values of a representative sample of forests[3]
Project purpose	Reduce illegal and unsustainable logging of industrial timber.	• By 2015 75% of industrial timber from the region's forests is purchased by companies implementing legal and sustainable sourcing policy	• Ex-ante and ex-post assessments of the volume of illegally-logged industrial timber.	Producers are willing and able to ensure legal logging and sustainable management over a sufficient volume of timber and area of forest.
Results	1 Users of industrial timber adopt and implement policies to buy only legally logged timber from FMEs committed to moving to sustainable.	• By 2007 10% of industrial timber from the region's forests is purchased by companies implementing legal and sustainable sourcing policy • By 2010 25% of industrial timber from the region's forests is purchased by companies implementing legal and sustainable sourcing policy	• Data on purchases from companies implementing legal and sustainable sourcing policies compared with estimates of total harvest of industrial timber from the region[4]	Users of industrial timber are interested to adopt and implement legal and sustainable sourcing policies.
	2 A mechanism exists that enables the market to distinguish legal/moving to sustainable from illegal/unsustainable.[5]	• By 2007 mechanism is in operation and is being used by buyers of industrial timber	• Mechanism procedures and reports of assessments of legality/sustainability • Survey of companies in Year X of project.	

[3] This assumption could lead us to add another project aimed at monitoring forest condition in the region.

[4] Question – is it possible to obtain reliable estimates of the total harvest of industrial timber?

[5] It is not realistic to plan for timber being available from sustainable sources (FSC or equivalent standard) in the next 5 years. Producers will need to move step-wise to sustainable forest management. The mechanism developed by this project will be an interim measure.

D. Working with the supply chain project

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions
	3 Project is effectively managed	• Project milestones are achieved on time and to satisfactory standard	• Project monitoring reports.	
Activities	1.1 Research companies buying industrial timber from the region and identify candidates for a regional forests and trade group.	• Documented analysis of attitude of companies sourcing timber from the region to adopting policies of legal and sustainable sourcing	• Project documentation.	
	1.2 Establish forests and trade group.	• By 2006 a viable group is established	• Group documentation.	Sufficient interest among companies to join a forests and trade group.
	1.3 Develop model purchasing policy. Get commitments with targets from member companies.	• Documented model purchasing policy by 2007. • By 2007 all group members have adopted challenging targets.	• Group documentation.	
	1.4 Develop and implement communication programme targeted at non-members and forest management enterprises.	• By 2006 a communication programme is being implemented.	• Project documentation.	
	2.1 Research methods short of FSC certification for assessing legal/moving to sustainable (eg IKEA) and communicating the results to group members	• By 2006.	• Project documentation	
	2.2 Prepare and test mechanism procedures and agree with group members	• By 2007	• Documented test results and group protocol • Project and group documentation	
	3.1 Recruit project co-ordinator and provide him/her with the necessary means to implement the project	• By 2006 co-ordinator is in position and trained, essential initial equipment in place and future resource needs allocated	• WWF CauPO staffing records and project budget	Suitably qualified staff available

D. Working with the supply chain project

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions
	project			
				Preconditions: None[6]

[6] Questions - Are there any pre-conditions?

E. Monitoring and detection of illegal logging project

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions
Overall objective	Substantially reduce the amount of illegal logging of industrial timber for commercial gain[7] in the South Caucasus and Turkish Caucasus	• By 2015 the volume of illegally logged industrial timber has been reduced by 90%	• Ex-ante and ex-post assessments of the volume of illegally-logged industrial timber.	
Project purpose	Encourage FMEs and logging companies to supply and purchase only legally harvested timber	• By 2010 detections of illegal industrial timber have been reduced by 75% in volume	• Project monitoring reports of detections of illegal industrial timber	
Results	1. Incidents of illegal logging of industrial timber for commercial gain detected, publicized and brought to justice	• By 2007 50 incidents of illegal logging of industrial timber for commercial gain detected and publicised and 25% of incidents successfully prosecuted • By 2010 500 incidents of illegal logging of industrial timber for commercial gain detected and publicised and 50% of incidents successfully prosecuted	• Project monitoring records • Court records	Prosecuting bodies are willing to proceed based on information obtained by the detection teams and are capacitated to do so
	2. Project is effectively managed	• Project milestones are achieved on time and to satisfactory standard	• Project monitoring records	
Activities	1.1 Carry out an analysis of laws and decide which provisions should be used for the purposes of detecting illegality	• By 2005 definition of illegality has been decided	• Documented legal analysis and definition	
	1.2 Determine detection teams' working methods and their relationship to state law enforcement bodies	• By 2005 agreement has been reached with state law enforcement bodies on working methods	• Documented working methods • Documented agreements with state law enforcement bodies	State law enforcement bodies willing to collaborate, including to provide armed back-up

[7] The project is aimed at reducing illegal logging of industrial timber commercial gain. We do not want to criminalise rural people who are dependent on wood for fuel.

E. Monitoring and detection of illegal logging project

	Intervention Logic	**Objectively Verifiable Indicators**	**Sources of Verification**	**Assumptions**
	1.3 Establish regional detection teams	• By 2006 detection teams have been established in those parts of the two countries most badly affected by illegal logging	• Project documentation	Sufficient numbers of people willing and capacitated to participate
	1.4 Train the detection teams and law enforcement bodies	• By 2006 all detection teams and their counterparts in law enforcement bodies have been trained	• Project training records	
	1.5 Provide the detection teams with the necessary equipment	• By 2007 all teams have the necessary equipment and have started their activities	• Project purchase records and asset registers	
	2.1 Recruit project co-ordinator and provide him/her with the necessary means to implement the project	• By 2005 co-ordinator in position and trained, essential initial equipment in place and future resource needs allocated	• WWF CauPO staffing records and project budget	Suitably qualified staff available
				Preconditions: None

F. Influencing government policy, programmes and legislation programme

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions
Overall objective	Halt the degradation of forests in the southern Caucasus, maintain and enhance their conservation values and enhance human well being	By 2025 conservation and social values of forests in the region are stable or increasing	Ex-ante and ex-post comparison of forests' conservation and social values.	Ex-ante and ex-post data is available on the conservation and social values of a representative sample of forests[8]
Project purpose	Get national government policies, legislation and programmes in the [South Caucasus and Turkish Caucasus] to support environmentally appropriate and socially beneficial forest management and to act positively on the levers that will bring it about[9]	• By 2008 and from then on relevant national policies and programmes and key legislation support WWF's forestry goals in the region	• Internal review of national policies, programmes and key legislation in 2008	
Results	1 WWF CauPO and other[10] national and regional environment, rural development and poverty reduction NGOs are engaged with and influencing national government policies, legislation and programmes to support WWF's forestry goals	• By 2005 policy holders are taking steps to prepare, or revise existing, policies, programmes and key legislation • y 2008 national policies, legislation and programmes are aligned to WWF's forest conservation objectives	• Internal review of government actions on policies, programmes and legislation	Other key organisations willing to collaborate with WWF CauPO in a coalition[s] or to act together under an umbrella body[ies]
	2. Project is effectively managed	• Project milestones are achieved on time and to satisfactory standard	• Project monitoring records	
Activities	1.1 Establish a coalition[s] or umbrella organisation[s] representing NGOs whose interests connect to WWF's	• By 2005 a coalition or umbrella organisation[s] representing civil society's 'forestry voice' in the	• Documented agreements between NGOs	

[8] This assumption could lead us to add another project aimed at monitoring forest condition in the region.

[9] Is there a connection between this project's purpose and the institutional strengthening section of the ECP?

[10] Better for WWF to act in concert with other NGOs to strengthen the impact.

F. Influencing government policy, programmes and legislation programme

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions
	forestry goals in the region	[region][countries] has been established	• Umbrella organisation documentation	
	1.2 Carry out a study of government policies, programmes and legislation that identifies gaps and conflicts relevant to threats to forests and additions / changes needed to address them	• By 2005 a study has been carried out	• Report of study	
	1.3 Develop common positions on the changes that NGOs should seek in policies, programmes and legislation	• By 2005 common positions adopted on necessary additions / changes to policies, programmes and legislation	• Documented coalition / umbrella organisation position statements	
	1.4 Develop a strategy for engaging with and influencing policy holders	• By 2005 key NGOs have agreed a strategy for influencing government to address gaps / conflicts	• Documented coalition / umbrella organisation strategy	
	1.5 Implement the strategy	• By 2005 the coalition / umbrella organisation's strategy is being implemented	• Coalition / umbrella organisation and member NGO documentation	
	2.1 Recruit project team and provide it with the necessary means to implement the project	• Team in position and trained, essential initial equipment in place and future resource needs allocated	• WWF CauPO staffing records and project budget	Suitably qualified staff available
				Preconditions: None

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