



Forest Congress for the Caucasus and Central Asia

28 – 31 May 2019, Karven Four Seasons Hotel, Sary Oy village, Issyk-Kul region, Kyrgyzstan

Background

The Forest Congress for the Caucasus and Central Asia will be covering recent forest developments while strengthening regional cooperation and outline strategic common approaches for future projects.

The Forest Congress will focus on three main topics:

- **STATE OF FORESTS OF THE CAUCASUS AND CENTRAL ASIA**

The report *The State of Forests of the Caucasus and Central Asia* (SoCCAF) will be launched presenting the forest resources and the forest sector of the region, including trends and challenges, policies and institutions, as well as the policy responses in place or planned to address the challenges.

- **NATIONAL-LEVEL FOREST MONITORING SYSTEMS**

All participating countries of the UNECE/FAO, UNDA project *Accountability Systems for Sustainable Forest Management in the Caucasus and Central Asia* will present their criteria and indicators' (C&I) sets for sustainable forest management. These national-level C&I sets were developed between 2016 and 2019 and will set the basis and framework for forest monitoring systems at the national level and for international forest reporting.

- **FOREST LANDSCAPE RESTORATION**

The road to implementation of forest landscape restoration to fulfill the country pledges¹ towards the Astana Resolution² will be mapped out and funding opportunities will be discussed. Countries will present their forest landscape restoration projects and approaches as well as their strategies to implement pledges to achieve the restoration of over 2.5 million hectares by 2030 as a contribution to the Bonn Challenge.

Participation

Country delegations will be invited to prepare a national poster on their forest sector which will be presented over the whole period of the Congress and discussed at a session. Ministries responsible for forestry from Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan are invited to the Forest Congress. In addition, participants reflecting a range of expertise and experiences related to forest policy and management, forest information, forest landscape restoration as well as forest and/or climate financing are expected. The Congress seeks to balance a multi-stakeholder mix from governments, NGOs, academia, private sector, international organisations and agencies as well as from central and local level, young and old, male and female.

¹ http://www.unece.org/fileadmin/DAM/timber/meetings/2018/20180621/Astana_Roundtable_Summary_Report_ENG.pdf

² http://www.unece.org/fileadmin/DAM/timber/meetings/2018/20180621/Resolution_ENG.pdf

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	Tuesday 28 May Monitoring Systems	Wednesday 29 May Monitoring and State of Forests	Thursday 30 May Forest Landscape Restoration	Friday 31 May
M O R N I N G	Registration at 9.15 Start sharp at 9.30 I. Preliminaries Welcome and opening remarks Mr. Bakyt Yrsaliev, <i>State Agency on Environment Protection Kyrgyzstan</i> Mr. Ekrem Yazici, <i>Deputy Head UNECE/FAO FTS</i> Key note speech on linking C&I to the national forest strategy, Mr. Tamer Otracrier	Registration at 9.15 Start sharp at 9.30 III. Interactive launch of the SoCCAF study Kick-off presentation by Mr. Roman Michalak, <i>UNECE/FAO</i> National Perspectives, national experts from all CCA countries	Registration at 9.15 Start sharp at 9.30 Opening of the Forest Landscape Restoration day Welcome by the host country, <i>UNECE/FAO, IUCN</i> FLR – a holistic approach What is degradation and how to address it? Mr. Niels Thevs, <i>ICRAF</i> The many faces of FLR and ROAM, Mr. Roman Volosyanchuk, <i>IUCN</i> International targets and indicators aligned with FLR, Mr. Roman Michalak, <i>UNECE/FAO</i>	Field trip day (Visit to the Grigoriev Gorge and the local forestry department)
	Break 11.00 - 11.30 II. Sharing – country presentations of C&I sets Armenia – Mr. Areg Karapetyan, <i>National Focal Point to UNDA project, Director of “Hyantar” SNCO</i> Georgia – Mr. Carl Amirgulashvili, <i>Head of Forest Policy Service</i> Kazakhstan – Mr. Maxat Yelemessov, <i>Head of Forestry and Protected Areas</i> Kyrgyzstan – Ms. Suizanna Seideeva, <i>project coordinator</i> Uzbekistan – Mr. Abduvokhid Zakhadullaev, <i>State Committee on Forestry</i>	Break 11.00 - 11.30 III. Interactive launch of the SoCCAF study To be continued Panel 1 – Addressing challenges, moderated by Mr. Mati Valgepea <ul style="list-style-type: none"> – How to increase benefits provided by forests to society? – How to improve monitoring of forests? – How to strengthen forest sector institutions and improve funding? 	Break 11.00 - 11.30 Panel: Road to implementation national perspectives Moderated by Mr. Maxat Yelemessov Topics: <ul style="list-style-type: none"> – Achievements since the Astana Ministerial Roundtable – Hurdles for implementation. – Which policies can enable FLR? – National perspectives and strategies for implementation. 	
	Lunch 13.00 - 14.00 II. Sharing – country presentations of C&I sets To be continued Peer-review of the sets and discussion	Lunch 13.00 - 14.00 IV. Forest degradation and restoration Degradation and restoration indicators, presentation, Mr. Michael Köhl, <i>University of Hamburg</i> Examples of forest regeneration monitoring and forest landscape restoration in Russia, Ms. Irina Vukolova Panel 2 – Forest Degradation, moderated by Mr. Vardan Melikyan <ul style="list-style-type: none"> – What are key drivers and types of forest degradation? – What are the major needs of countries in preventing degradation and promoting restoration of forest ecosystems? 	Lunch 13.00 - 14.00 Panel: Road to implementation international perspectives Moderated Panellists: <i>IUCN, World Bank, FAO, APFNet, GIZ</i>	
	Break 15.30 - 16.00 Impacts of C&I processes, presentation, Ms. Stefanie Linser, <i>BOKU</i> Comparison of the SFM vision at the beginning and end of the project – poster exhibition.	Break 15.30 - 16.00 V. Reflection session about the projects and the way forward UNDA follow up, feedback, evaluation and reflection; other areas for cooperation and upcoming projects.	Break 15.30 - 16.00 The way forward Presentation of the Bonn Challenge Barometer, Mr. Roman Volosyanchuk, <i>IUCN</i> Peer-to-peer exercise: <ul style="list-style-type: none"> – How are other countries tracking progress? – What are further support needs? Wrap up and conclusions Needs assessment and way forward	
	Close 17.30	Close 17.30 Networking Dinner	Close 17.30	
A F T E R N O O N				

C&I set for sustainable forest management - KYRGYZSTAN

As of February 2019

Criterion 1

Maintenance of the forest ecosystems and forest resources conditions

- 1.1. The dynamics of change in the share of the forest covered area of all categories of land.
- 1.2. The proportion of perennial plantations from the total forest area.
- 1.3. The share of exploited forests from the total area of forests, forests designated for exploitation (recreation, tourism, forestry activities).
- 1.4. The areas of forest lands transferred to leasehold use, including those covered by forests and the number of forest users.
- 1.5. Dynamics of changes in the areas of forest pastures for every 5 years.
- 1.6. Areas of stable plantations to the total area of forests (for Leshozes based on forest inventory materials).
- 1.7. Distribution of forests by types and types of forest.
- 1.8. The area of forests affected by climatic and anthropogenic factors.
- 1.9. Poles of the areas of settlements from the total area of the state forest fund and SPNT.

Criterion 2

Conservation and maintenance of forest biodiversity

- 2.1 Dynamics of forest area change in specially protected natural areas, SFF and area designated for creation of SPNT.
- 2.2. The share of forests of particularly valuable wood and shrubby species from the total forest area.
- 2.3. The costs of scientific research in the conservation of biodiversity.
- 2.4. The area of forest territories intended to preserve or maintain the genetic diversity of forests (including nurseries, arboretums, plantations of particularly valuable species, seed banks, etc.).
- 2.5. The amount of funds allocated for biotechnical activities.
- 2.6. Total area of forests susceptible to diseases and pests (annually based on the results of the forest survey).

Criterion 3

Conservation and increase of forest productivity

- 3.1. Share of forests covered by forest management and forest management planning (annually).
- 3.2. Stocks of wood by species.
- 3.3. Average annual growth and volume of cut wood from all cuttings.
- 3.4. Volumes of use of non-timber forest products, including wild medicinal plants, fruit products, mushrooms, honey, technical raw materials and game (annually).
- 3.5. Annual volume of afforestation and reforestation.
- 3.6. The volume of industrial plantations of different directions.

- 3.7. The amount of pasture use.
- 3.8. Number of forest management plans.
- 3.9. Number of tickets issued for grazing
- 3.10. Number of forest reserves

Criterion 4

Increasing the socio-economic importance of forests

- 4.1. The share of forestry in the gross national product.
- 4.2. The volume of investments directed to the forest industry.
- 4.3. The number of people permanently residing on the territory of the forest fund.
- 4.4. Number of workplaces open at forestry enterprises
- 4.5. The population that receives income from the forest.
- 4.6. The amount of budgetary allocations directed to the forest industry.
- 4.7. Development of alternative sources of income for the local population.
- 4.8. The area of certified forests according to international standards.
- 4.9. Number of rental agreements
- 4.10. Number of rental agreements for recreational purposes
- 4.11. Number of contracts for the creation of plantations
- 4.12. Scope of technical support

Criterion 5

Political, legislative and institutional framework for sustainable forest management

- 5.1. National forest policy and legislative framework.
- 5.2. Improvement of the organizational structure of SAEPF and its subordinate organizations.
- 5.3. Financial and economic instruments in the field of sustainable forest management.
 - 5.3.1. Payments for ecosystem services
- 5.4. Collaboration with Scientific Institutions for Sustainable Forest Management
- 5.5. Development of research and implementation of scientific developments and technologies.
 - 5.5.1. Data for the assessment of ecosystem services for forests (may be a criterion for biodiversity)
- 5.6. Development of human resources.
 - 5.6.1. Increased skills and knowledge
 - 5.6.2. Age structure of forestry workers
- 5.7. Participation of stakeholders in the development and implementation of forest policy.
- 5.8. International cooperation in the field of forest relations.
- 5.9. Monitoring, evaluation and reporting on the management and development of the forest sector.
- 5.10. Dissemination of information on forestry

Criterion 6

Improvement of social status of forestry workers

- 6.1. Average salaries of forestry workers
- 6.2. Social benefits
- 6.3. Improvement of infrastructure

Approved by the
by order of the chairman of the Committee for Forestry and Wildlife of the
Minister of Agriculture
Republic of Kazakhstan
on _____ 2019
№ _____

National Criteria and Indicators for SFM on the territory of the Republic of Kazakhstan

№ п/п	Criterion	Indicators	Measurement Unit	Information source
1.		2.	3.	5.
1.	CONSERVATION OF BIODIVERSITY	1. Forest area by region and types (mountain forests, desert forests, floodplain forests, tugai forests, spun forests, Kazakh low-mountain forest, belt forests, island forests) and their percentage of the total area of the State Forest Fund	ha / %	Official statistical data
		2. Protected forest areas and their percentage in the total area of specially protected natural territories	ra / %	Official statistical data
		3. Distribution of areas of the State Forest Fund by the main tree species.	ha	Official statistical data
2.	MAINTAINANCE OF THE PRODUCTIVE CAPACITY OF FOREST ECOSYSTEMS	4. The total stock of wood in the forests.	cubic m	Official statistical data
		5. Area of the private forest fund and timber stock of the private forest fund	ha	Official statistical data
		6. The annual volume of harvested timber for all types of felling	cubic m	institutional reporting Ministry of Agriculture, RK
		7. Annual volume of harvesting non-timber forest resources (secondary usage)	ha	institutional reporting Ministry of Agriculture, RK

№ n/n	Criterion	Indicators	Measurement Unit	Information source
1.		2.	3.	5.
3.	PROTECTION OF FORESTS FROM FOREST FIRES, PESTS AND DISEASES	8. Area of forest affected by harmful insects, forest diseases, including the invasive species	ha	institutional reporting Ministry of Agriculture, RK
		9. Area of forest damaged by forest fires	ha	Official statistical data
4.	MAINTAINING AND EXPANDING LONG- TERM MULTIPLE SOCIO- ECONOMIC BENEFITS TO MEET THE NEEDS OF SOCIETY	10. Capital investment and annual expenses on forestry, production of timber and non-timber products produced or collected, forest ecosystem services, recreation and tourism.	housand tenge	Official statistical data
		11. Annual investment and expenses from the state budget: 1) for forest research; 2) for education.	thousand tenge thousand tenge	Official statistical data
		12. Area and share of forests used for recreation and tourism.	ha	institutional reporting Ministry of Agriculture, RK
		13. The cost of one visit, the number of visits, receipt of funds for the use of forests for tourism and recreational purposes.	man	institutional reporting Ministry of Agriculture, RK

Full criteria and indicator set UZBEKISTAN

as of January 2019

(7 criteria, 37 indicators and 47 sub indicators)

C. 1 Extent of forest resources and global carbon cycle

- 1.1 Policies, institutions and instruments to maintain and appropriately enhance forest resources and their contribution to the global carbon cycles
- 1.2 Area of the State Forest Fund
 - 1.2.1 *Land classified as forest*
 - 1.2.2 *Of which area of natural forests*
 - 1.2.3 *Of which area of semi-natural forests*
 - 1.2.4 *Land not classified as forest*
- 1.3 Area of forests and the area of other wooded land
 - 1.3.1 *Forest area by age stages*
- 1.4 Forest area dedicated to specialized services (hunting, medical herbs)
- 1.5 Growing stock on forest and other wooded land
- 1.6 Carbon stock and carbon stock changes

C. 2 Forest ecosystem health and vitality

- 2.1 Policies, institutions and instruments to maintain forest ecosystem health and vitality
- 2.2 Forest roads
- 2.3 Forest damage
 - 2.3.1 *Area of grazing*
 - 2.3.2 *Area of fire damage*
 - 2.3.3 *Illegal fellings*
 - 2.3.4 *The number of pests*
 - 2.3.5 *The number of forest diseases*
 - 2.3.6 *Number of threatened forest areas*
- 2.4 Rehabilitated forest area
- 2.5 Degraded forest area

C. 3 Biological diversity in forest ecosystems

- 3.1 Policies, institutions and instruments to maintain, conserve and appropriately enhance the biological diversity in forest ecosystems
- 3.2 Diversity of tree species
 - 3.2.1 *Number of forest dependent species at risk*
 - 3.2.2 *Forest area and distribution of forest ecosystems*
 - 3.2.3 *Number of forest dependent species with reduced ranges*
- 3.3 Area of plantations
- 3.4 Number of introduced species
- 3.5 Area of protected natural territories
 - 3.5.1 *Forest area managed for genetic resources*
 - 3.5.2 *Number of species of flora and fauna on the territory of the State Forest Fund*
 - 3.5.3 *Number of permits issued for special use of flora and fauna*

C. 4 Productive functions of forests

- 4.1 Policies, institutions and instruments to maintain and encourage the productive functions of forests
- 4.2 Rate of conversion of forests to non-forestry land uses
- 4.3 Production of non-wood forest products
 - 4.3.1 *Production of medical herbs*
 - 4.3.2 *Fishery*
 - 4.3.3 *Beekeeping*
 - 4.3.4 *Agriculture*
 - 4.3.5 *Contribution of forests to food security*
- 4.4 Wood production
 - 4.4.1 *Annual balance between growth and removals of wood*
- 4.5 Seed resources

C. 5 Forest management plan

- 5.1 Policies, institutions and instruments to improve the management of forests
- 5.2 Percentage of forests/other wooded lands managed according to management plans

- 5.2.1 *Forests under integrated management plans*
- 5.2.2 *Forests under functional management plans*
- 5.2.3 *Forests under other plans*
- 5.2.4 *The area managed for multiple forest functions*
- 5.2.5 *The area managed for pasture*
- 5.2.6 *Proportion of forest area under a long-term forest management plan*
- 5.2.7 *Areas and percentage of forest lands managed for environmental protection*
- 5.2.8 *The area of silvicultural treatments*
- 5.3 Forest fire security roads and strips
- 5.4 Number of allowed livestock in the State Forest Fund's pasture lands
- C. 6 Protective functions of forests**
- 6.1 Policies, institutions and instruments to maintain and appropriately enhance the protective functions in forest management
- 6.2 Soil conditions
- 6.3 Combating desertification and land degradation
- 6.4 Area of newly created protective forest
 - 6.4.1 *Area of newly created protective forest within the area of the State Forest Fund*
 - 6.4.2 *Area of newly created protective forest in the territory of agricultural enterprises*
 - 6.4.3 *Area of newly created protective forest in the territories of other land users*
- C. 7 Socio-economic functions and conditions**
- 7.1 Policies, institutions and instruments to maintain other socio-economic functions and conditions
- 7.2 Forest sector workforce
 - 7.2.1 *Number of persons employed and workforce in the forest sector*
 - 7.2.2 *Employment by gender and age group, education and job characteristics*
 - 7.2.3 *The number of workers employed in enterprises related to forestry*
 - 7.2.4 *Employment generated in NGOs*
 - 7.2.5 *Employment generated by international funds*

- 7.3 Economic contribution of the forest sector
 - 7.3.1 *Value of wood products*
 - 7.3.2 *Value of non-wood products*
 - 7.3.3 *Revenue from forests*
 - 7.3.4 *Revenue from export of forest products and services*
- 7.4 Share of wood energy in total primary energy supply
- 7.5 Investments in forests and forestry
 - 7.5.1 *Total public investments in forests and forestry*
 - 7.5.2 *Assistance in the organization of export-import activities, securing of grants and investments from international and other financial institutions*
 - 7.5.3 *Total value of domestic grants*
 - 7.5.4 *Funds from international sources*
- 7.6 The number of registered enterprises related to forestry
- 7.7 The number of small workshops and commercial organizations involved in the processing of additional forest products
- 7.8 The number of applications of individuals and legal entities for cooperation on co-management forest land

C&I set for sustainable forest management - KYRGYZSTAN

As of February 2019

Criterion 1

Maintenance of the forest ecosystems and forest resources conditions

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Conservation and maintenance of forest biodiversity

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Criterion 3

Conservation and increase of forest productivity

- 3.1. Share of forests covered by forest management and forest management planning (annually).
- 3.2. Stocks of wood by species.
- 3.3. Average annual growth and volume of cut wood from all cuttings.
- 3.4. Volumes of use of non-timber forest products, including wild medicinal plants, fruit products, mushrooms, honey, technical raw materials and game (annually).
- 3.5. Annual volume of afforestation and reforestation.
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- 3.8. Number of forest management plans.
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Criterion 4

Increasing the socio-economic importance of forests

- 4.1. The share of forestry in the gross national product.
- 4.2. The volume of investments directed to the forest industry.
- 4.3. The number of people permanently residing on the territory of the forest fund.
- 4.4. Number of workplaces open at forestry enterprises
- 4.5. The population that receives income from the forest.
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- 4.7. Development of alternative sources of income for the local population.
- 4.8. The area of certified forests according to international standards.
- 4.9. Number of rental agreements
- 4.10. Number of rental agreements for recreational purposes
- 4.11. Number of contracts for the creation of plantations
- 4.12. Scope of technical support

Criterion 5

Political, legislative and institutional framework for sustainable forest management

- 5.1. National forest policy and legislative framework.
- 5.2. Improvement of the organizational structure of SAEPF and its subordinate organizations.
- 5.3. Financial and economic instruments in the field of sustainable forest management.
 - 5.3.1. Payments for ecosystem services
- 5.4. Collaboration with Scientific Institutions for Sustainable Forest Management
- 5.5. Development of research and implementation of scientific developments and technologies.
 - 5.5.1. Data for the assessment of ecosystem services for forests (may be a criterion for biodiversity)
- 5.6. Development of human resources.
 - 5.6.1. Increased skills and knowledge
 - 5.6.2. Age structure of forestry workers
- 5.7. Participation of stakeholders in the development and implementation of forest policy.
- 5.8. International cooperation in the field of forest relations.
- 5.9. Monitoring, evaluation and reporting on the management and development of the forest sector.
- 5.10. Dissemination of information on forestry

Criterion 6

Improvement of social status of forestry workers

- 6.1. Average salaries of forestry workers
- 6.2. Social benefits
- 6.3. Improvement of infrastructure

National criteria and indicator set for SFM – ARMENIA

as of February 2019

Criterion 1: Forest Area

- 1.1 Area of forest and other wooded land
- 1.2 Share of forest and other wooded land of the country's total area
- 1.3 The share of forest and forest lands under a forest management plan
- 1.4 Forests area under protection, with special significance and for production
- 1.5 Forest area within protected areas
- 1.6 Area of natural and artificial reforestation and afforestation
- 1.7 Age structure distribution of forest and other wooded land
- 1.8 Forest carbon balance and biomass stock in forest and other wooded land
- 1.9 Area of degraded forests

Criterion 2: Biodiversity

- 2.1 Area of high conservation value forests
- 2.2 Species diversity (diversity index)
- 2.3 Density of endemic species
- 2.4 Area occupied by invasive species and their density
- 2.5 Number of threatened forest species classified according to IUCN National Red List categories in relation to total number of forest species
- 2.6 Fragmentation of forests (number and area of fragments)

Criterion 3: Forest Health

- 3.1 Forest area damaged by fire, pests and diseases
- 3.2 Forests area threatened directly by human activities (loggings, fires, *forest products harvesting*, mining, other economic activities which did not pass the Environmental Impact Assessment)¹

Criterion 4: Productive functions of forest resources

- 4.1 Net annual increment in forest
- 4.2 Annual wood production derived from sustainably managed forests
- 4.3 Total annual wood removals and area of removals, including timber and fuel wood
- 4.4 Volume and consumption of non-wood forest products

Criterion 5: Protective functions of forests

- 5.1 Area and percent of forest whose designation or land management focus is the protection of soil or water resources
- 5.2 Area of forest cover in watersheds

Criterion 6: Socio-economic functions of forest resources

- 6.1 Volume of import and export of timber and wood products
- 6.2 Profit of forest enterprises

¹ <https://www.arlis.am/documentview.aspx?docid=91594>

- 6.3 Number of persons employed in the forest sector, classified by gender, age groups and education
- 6.4 Capacity building of the workforce in the forest sector
- 6.5 Average salary of employees in the forest sector
- 6.6 Environmental awareness raising of forest neighboring communities
- 6.7 Mechanisms for the equitable sharing of the costs and benefits of forest management
- 6.8 Annual consumption of marketed non-wood forest products
- 6.9 Value of marketed services on forest and other forest lands
- 6.10 Procedures to ensure the health and safety of forest workers

Criterion 7: Legal, policy and institutional framework

- 7.1 Presence of forest policy and National Forest Program
- 7.2 Presence of forest monitoring plans and report on an annual basis
- 7.3 Presence of an action plan to expand the forest cover
- 7.4 Policies and regulations that are supporting SFM
- 7.5 Presence of a system of performance and reporting on international obligations
- 7.6 Public participation in the discussions on drafting legal acts
- 7.7 Application of legislation on sustainable forest management
- 7.8 National and international public and other funding committed to SFM
- 7.9 Taxation, financial and economic tools that are supporting the sustainable management of forests
- 7.10 National Forest Management Information System
- 7.11 Presence of forest and forest land cadaster
- 7.12 Forestry research programs (quantity)
- 7.13 Availability of biennial reports on greenhouse gas inventories
- 7.14 Improved and new technologies that are supporting SFM (quantity)

Approved by the
by order of the chairman of the Committee for Forestry and Wildlife of the
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National Criteria and Indicators for SFM on the territory of the Republic of Kazakhstan

№ п/п	Criterion	Indicators	Measurement Unit	Information source
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		6. The annual volume of harvested timber for all types of felling	cubic m	institutional reporting Ministry of Agriculture, RK
		7. Annual volume of harvesting non-timber forest resources (secondary usage)	ha	institutional reporting Ministry of Agriculture, RK

№ n/n	Criterion	Indicators	Measurement Unit	Information source
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3.	PROTECTION OF FORESTS FROM FOREST FIRES, PESTS AND DISEASES	8. Area of forest affected by harmful insects, forest diseases, including the invasive species	ha	institutional reporting Ministry of Agriculture, RK
		9. Area of forest damaged by forest fires	ha	Official statistical data
4.	MAINTAINING AND EXPANDING LONG- TERM MULTIPLE SOCIO- ECONOMIC BENEFITS TO MEET THE NEEDS OF SOCIETY	10. Capital investment and annual expenses on forestry, production of timber and non-timber products produced or collected, forest ecosystem services, recreation and tourism.	housand tenge	Official statistical data
		11. Annual investment and expenses from the state budget: 1) for forest research; 2) for education.	thousand tenge thousand tenge	Official statistical data
		12. Area and share of forests used for recreation and tourism.	ha	institutional reporting Ministry of Agriculture, RK
		13. The cost of one visit, the number of visits, receipt of funds for the use of forests for tourism and recreational purposes.	man	institutional reporting Ministry of Agriculture, RK

Final set of national criteria and indicator for SFM – Georgia

As of March 2019

Criterion	Indicator	Measurement units	Data sources
Ecological Principle			
1. The area covered by forest in Georgia is maintained.	1.1. Total forest area	Ha	Forest cover map. (Sentinel 2, 10m resolution). In combination with a visual pre-assessment of the plots using international forest definitions
	1.2. Forest area as proportion of total land area	% of total area of Georgia	
	1.3. Forest area annual net change rate	Forest area (ha) lost. Forest area (ha) gained.	Info from Forest Management Bodies; Better: FIMS a) from Central Forest Register; b) from FIMS Forest activity records; from FIMS Incident recording module using RS based forest loss and gain detection
	1.4. Forest area available for wood supply	ha, % of total forest area	Forest categories 2.9.3.1 (GIS info) From FIMS: Forest Function Mapping/Zoning Module; step by step improved during each Forest Management Plan
	1.5. Forest area within legally established protected areas (including Emerald sites)		FIMS and Forest Atlas/portal
	1.6. Primary forest area = Forest area undisturbed by man		FMP/FIMS/Portal
	1.7. Protective forest area		
	1.8. Recreation forest area		
	1.9. Proportion of forest area under long-term forest management plans		
2. The natural biodiversity of the forests in Georgia is maintained and enhanced	2.1. Naturally regenerated forest area	ha, % of total forest area	FMP/FIMS/Portal
	2.2. Planted forest area		NFI/FMP/FIMS/Portal
	2.3. Tree species composition/diversity		
	2.4. Abundance/frequency of endemic tree species		
	2.5. Abundance/frequency of introduced tree species and share of invasive tree species		

Criterion	Indicator	Measurement units	Data sources
	2.6. Abundance/frequency of endangered tree species/red list tree species		
	2.7. Structure of forest stands classified according to number of layers (vertical structure) and stem distribution (horizontal structure)	Ha per class of layers (1, 2, multiple) Ha per class according to stem distribution	
	2.8 Abundance/frequency of habitat trees	m ³ /ha % of growing stock	NFI/FMP/FIMS/Portal
	2.9 Standing dead wood	m ³ /ha and decay class	
	2.10. Lying dead wood	class	
	2.11. Area/proportion of old-grown forest	ha, % of total forest area	
3. The vitality of the forests in Georgia is maintained and enhanced ensuring the protective functions of the forest	3.1. Regeneration capacity of forest stands classified by different tree species, height classes, damage and health	Per ha	NFI/FMP/FIMS/Portal
	3.2. Forest damage by abiotic, biotic and anthropogenic causes classified by different tree species, causes and severity of damage	% of total forest area Ha	
	3.3. Forest land degradation classified by driver and severity of degradation	Area (ha) of degraded forest	
4. The productivity of Georgia's forest is enhanced	4.1. Standing volume of wood classified by tree species compared with standing volume of the respective natural forest type	m ³ /ha % of standing volume of respective natural forest type	NFI/FMP/FIMS/Portal
	4.2. Increment of timber classified by tree species compared with increment in the respective natural forest type	m ³ /ha % of increment of respective natural forest type	
	4.3. Age class distribution in even-aged forest stands classified by tree species	ha/tree species and age class	
	4.4. Diameter distribution in even-aged and uneven-aged forests classified by tree species	ha/tree species and diameter class	
5. The contribution of Georgia's forests to the carbon cycles is enhanced	5.1. Carbon stock in forest biomass above ground	T/ha	NFI/FMP/FIMS/Portal
	5.2. Carbon stock in forest biomass below ground		NFI/FIMS/Portal
	5.3. Carbon stock in litter		
	5.4. Carbon stock in dead wood (lying dead wood, standing dead wood, stumps)		
	5.5. Carbon stock in soil		
	5.6. Carbon stock in harvested wood products		FIMS Operations module: Sales statistic and model for wood product production

Criterion	Indicator	Measurement units	Data sources
	5.6. Share of wood-based energy in total primary energy consumption	%	Ministry of Economy. FIMS/Portal
Economic Principle			
6. The productive function of Georgia's forests is maintained on a sustainable level	6.1. Volume of harvested wood from authorised cutting classified by tree species and quality	m ³ /tree species and quality	FIMS/Portal
	6.2. Volume of wood damaged by abiotic and biotic factors		
	6.3. Volume of illegally harvested wood classified by tree species and quality		
	6.4. Total volume of legally and illegally harvested wood and wood from unplanned incidents compared with increment (see indicator 4.2) classified by tree species	% of increment	
	6.5. Value of roundwood (including fuel wood) legally and illegally obtained from Georgia's forests	Per tree species and year: GEL/m ³ /diff qualities	
	6.6. Consumption of wood (including fuelwood) and products derived from wood	m ³ roundwood equivalent m ³ / household	
	6.7. Imports and exports of wood (including fuel wood) and products derived from wood	m ³ roundwood equivalent for diff. products	Ministry of economy/Revenue service/ Portal
7. The processing of timber in Georgia is promoted	7.1. Number, territorial distribution and operating capacity of secondary wood processing facilities (e.g. carpentries, enterprises)	N/m ³ % of secondary wood processing facilities in rural areas	MoF/ Public Registry/Portal
8. The contribution of the forest sector to the Georgian economy is increased on a sustainable basis and acknowledged	8.1. Contribution of the forest sector to the GDP classified by: — Wood products — Non-Wood Forest Products (NWFP) — Marketed Services (see indicator 10.1)	GEL/ year %/ year	FIMS/Portal/Ministry of economy/revenue service
	8.2. State budget allocated for forestry sector State institutions	GEL/ ha /year	MoF/MEPA/FIMS/Portal
	8.3. State budget allocated for forest management bodies classified by: total budget, % of budget for road construction and maintenance, % of budget for employees)	GEL/ha /year %	
	8.3. Share of State budget allocated for the forest sector (8.2.1 + 8.2.2) in total state budget	%	
	8.4. Donor support of forest sector		MEPA/FIMS/Portal
	8.5. Net revenue of public forest management bodies (e.g. NFA, Ajara Forest Agency, APA, Akhmeta municipality, etc.)	GEL/year	

Criterion	Indicator	Measurement units	Data sources
	8.6. Damage induced by illegal use of forest	GEL Qualitative	
9. The commercial collection of NWFP is promoted on a sustainable level	9.1. Quantity and market value of non-wood forest products	Per NWFP and year: – Amount of raw material in m ³ , tonnes, or another appropriate unit – GEL/unit	MEPA/FIMS/Portal
	9.2. Quantity of marketed non-wood forest products compared with identified sustainable amounts specified in the license contract	% of legally allowed amount	MoF/MEPA/Portal
10. Services provided by Georgian forests are enhanced without compromising the protective functions of the forest	10.1. Value of marketed services of forest	GEL/year	MEPA/Portal
Social Principle			
11. Working conditions in the forest sector are “decent”	11.1. Employees in the forest sector on different levels (central, regional, district) classified by gender and position	N/% per age class N/% per sex N/% per occupational category	MEPA/Portal GEOSTAT Private companies
	11.2. Compliance of salary with average salary of similar positions in other sectors	%	
	11.3. Fatal and non-fatal occupational accidents and occupational diseases classified by type of work and seriousness of accidents	N total accidents % accidents/class % injuries/class	
12. Job applications from people living in the vicinity of the forest areas are prioritized in case of similar qualification	12.1. Employees of Forest Management Body on forest district level originating from villages in the vicinity of the forest	% from total number of employees on district level	Private companies
13. Staff employed in the forest sector has adequate qualification	13.1. Qualification of employees based on the requirements of specific positions	% of employees with required certificates	
	13.2. On-the-job-training for employees of forest management and supervisory bodies as well as private companies and license holders to gain the required certificates classified by subjects	N of trainings N of trained staff	
14. Forest education is improved	14.1. Students studying forestry or forest related topics at universities (bachelor, master, PhD) and at Vocational Education Training colleges	N of graduated students	Ministry of Education Universities VET colleges
	14.2. Education within State forest sector institutions	N of internships/traineeships	MEPA/Portal Management bodies
	14.3. Access to forestry education for rural population	Qualitative	Ministry of Education