Report of the Regional Inception Workshop “Criteria and Indicators for Sustainable Forest Management in the Caucasus and Central Asia”

Yerevan, Armenia, 15 to 18 November 2016

Organized by the UNECE/FAO Forestry and Timber Section in partnership with "Hayantar" SNCO Ministry of Agriculture of the Republic of Armenia, and UNDP Armenia under the UNECE/FAO project “Accountability Systems for Sustainable Forest Management in the Caucasus and Central Asia”, which is funded through the UN Development Account (UNDA)

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1 Introduction

This report gives an overview of the outcomes of the UNECE/FAO, UNDA Regional Inception Workshop on "Criteria and Indicators for Sustainable Forest Management in the Caucasus and Central Asia". The workshop launched the UNECE/FAO, UNDA project "Accountability Systems for Sustainable Forest Management in the Caucasus and Central Asia", which will be implemented between 2016 and 2019 for the project-target countries **Armenia, Georgia, Kazakhstan, Kyrgyzstan and Uzbekistan.** The workshop languages were English and Russian (with interpretation). It was organized with the kind support of UNDP Armenia which provided their conference hall and helped with logistics.

The workshop brought together 36 experts from Armenia, Estonia, Georgia, Germany, Iran, Kazakhstan, Kyrgyzstan, the Russian Federation and Uzbekistan to discuss, exchange experiences, map out the needs as well as to formulate recommendations for the future work on Criteria and Indicators for Sustainable Forest Management in the target countries.

In the opening the workshop was addressed by Mr. Ruben Petrosyan - Deputy Director and Chief Forester of "Hayantar" SNCO, the Ministry of Agriculture of the Republic of Armenia. The workshop was supported by specialists for the criteria and indicator processes from the Montreal, the Pan-European and the Low Forest Cover Country processes. The participating group of experts worked three days with various presentations and group work exercises on the topic "Criteria and Indicators for Sustainable Forest Management in the Caucasus and Central Asia". The workshop was facilitated by Mr. Peter O'Hara. On the fourth day, all participants were invited to a fieldtrip to the tree nursery of Hrazdan Enterprise, the natural oak forest of mount Teghenis and the afforestation area of the shrunk lake Sevan.

More information (program, presentations, news release, photographs) about the workshop is available here: https://www.unece.org/index.php?id=43759#/

More information about the entire 3-year project framing this workshop is available here: http://www.unece.org/forests/areas-of-work/capacity-building/unda2016-2019.html

2 Criteria and Indicators for Sustainable Forest Management

After the collapse of the Soviet Union, Armenia, Georgia, Kazakhstan, Kyrgyzstan and Uzbekistan struggled with the important task to set up a sustainable forest management. Some of these countries, except Georgia (40.66%) and Armenia (12.04%) have less than 10% of forest cover and are therefore defined as Low Forest Cover Countries (LFCCs) (Kazakhstan 1.30%, Kyrgyzstan 3.46%, Uzbekistan 7.33%[1]). Forests in all target countries fulfil recognized and valuable protective functions like freshwater renewal and prevention of wind and mudslide erosion and desertification, but their ecological, economic and social functions are often not fully and equally recognized.

Criteria and indicators (C&I) is the key tool to define and implement sustainable forest management. The concept was developed after Rio '92 Earth Summit and implemented in many regions. The most important international criteria and indicator processes for sustainable forest management are the Montreal Process, the Pan-European Process (FOREST EUROPE), the Low Forest Cover Country Process and the C&I process of ITTO. Out of the Caucasian and Central Asian countries, only Georgia participates in the pan-European C&I process. Kyrgyzstan is a member of the Near East Process[2], but there are no recent activities. However, neither Georgia nor the other countries have so far developed criteria and indicators for sustainable forest management at a national level. UNECE/FAO supports the development of these national efforts.

Sustainable Forest Management (SFM), has been defined by the Ministerial Conference on the Protection of Forests in Europe (MCPFE, 1993) as "The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfill, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems".

Advancement of, and progress towards SFM can be measured by the use of criteria and indicators (C&I). Both criteria and indicators must be simple and clearly defined. The **criteria** defines WHAT area is important to measure, they are increasingly broadening to cover social, economic as well as ecological aspects of SFM. **Indicators** define HOW to measure progress towards reaching the criteria. They (indicators) could be both QUALITATIVE and QUANTITATIVE. Usually several indicators are used for each criterion. The indicators are expected to be **s**pecific, **m**easureable **a**chievable, **r**ealistic and **t**ime-bound (SMART).

[1] http://www.fao.org/forest-resources-assessment/explore-data/flude/en/ data from 2016
[2] ftp://ftp.fao.org/docrep/fao/meeting/010/af995e/af995e00.pdf

3 Country contexts: gap analysis related to SFM and C&I

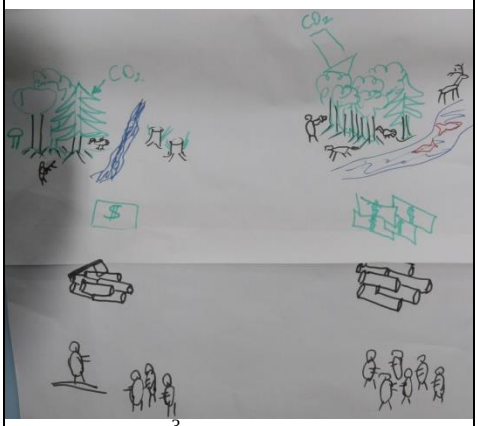
All five target countries presented their current forest management practices and the state of their forests and the forest sector, based on a country analysis they prepared for the workshop (see Annex 0). Further, they pictured a vision of an ideal of sustainable forest management and brainstormed on the major challenges and obstacles that hinder the fulfillment of this vision.

Participants discussed with each country gaps and challenges they identified within their country analysis.

As a last step, the countries evaluated each other's performances to identify appropriate C&I to realize SFM.

3.1 Group work: Current forest management and future sustainably managed forests – ideal vision in pictures

The countries drew the current and the ideal vision of sustainable forest management and its services in the future (20 years from now) and mentioned the barriers they have to overcome.

Armenia  Forest Area: [3] 332.00 1 ha Growing Stock in forest: [4] 40.67 (million m^3)	Current forest management: • Income from harvesting and selling wood • Hunting • 100% Public ownership Future forest management: • Increase income from harvesting and selling wood, but also marketing of non-wood forest products and ecotourism • Increase biodiversity and protected forest areas • Increase CO_2 sequestration • Promote forest monitoring and training • Well educated forestry staff • Woodland sanitation Barriers: • Climate change • Forest health • Lack of proper forest monitoring to take actions • Lack of funding • Bureaucracy • Cutting licenses • Illegal logging

[3] http://www.fao.org/forest-resources-assessment/explore-data/flude/en/ data from 2016
[4] Forest Resources Assessment 2015

Georgia

Forest Area:

2822.40 1 ha

Growing Stock in forest:

454.50 (million m^3)

Current forest management:

- Timber production leads to income and job creation
- Non-timber forest products
- Development of tourism
- Importance of protective functions, e.g. for clean water
- Water for hydro power
- No clear cutting
- Close to nature forest management
- Forest monitoring only on district level
- 10 years forest management plans
- 9% protected forest areas (PFAs)
- 98% public ownership, 2% church owned forests

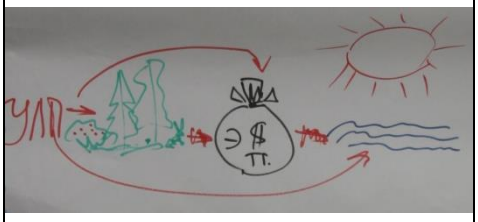
Future forest management:

- Promote training and education
- Increase the PFAs
- Decrease pressure on forests due to fire wood demand
- Biodiversity monitoring system (development presently ongoing (GIZ project))

Barriers:

- Finance
- High level policy makers should put it on agenda
- High firewood demand → need for alternative renewable energy
- Existing cutting licenses, but since 2012 no new concessions anymore
- Illegal logging

Kazakhstan



Forest Area:

3309.00 1 ha

Growing Stock in forest:

364.95 (million m^3)

Current forest management:

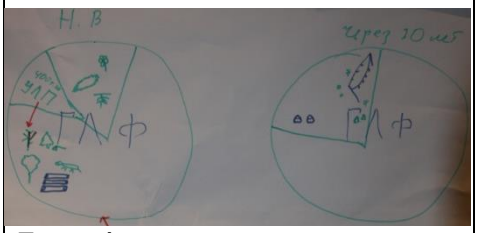
- Huge afforestation, increasing forest area
- Local population use many non-wood forest products
- Spiritual and cultural forest values are of importance
- Well educated forest staff
- 120 forest enterprises
- 49 years concessions for timber, 10 years concessions for berries and mushrooms
- 9% protected forest areas, 12 National Parks
- 79% of forest area managed by communities, 21% by public

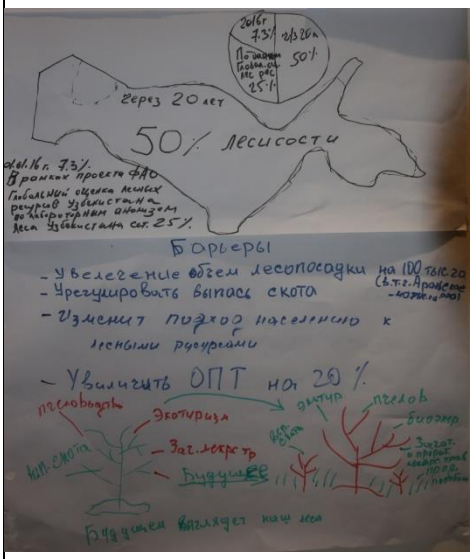
Future forest management:

- SFM leads to increased income, which is good for ecology and employers / employees
- Public enterprise will monitor 1 Mio ha by 2020
- Private company investment in forests and nurseries
- Increased protected forest areas, preferably around all settled areas

Barriers:

- Absence of strategic document and regulations

	• Investors not yet attracted in the forest sector • Lack of proper wood processing industry • Salt desert in the Aral lake area • Forest fires • Illegal logging
Kyrgyzstan  Forest Area: 637.00 1 ha Growing Stock in forest: 48.00 (million m^3)	Current forest management: • Based on Forest Code from 1999 and Forest Strategy from 2006 • Use of medical plants and other non-timber forest products • Eco tourism • Special Walnut (*Juglans nigra*) Program • 1000 ha annual afforestation areas • Considers water regulation and soil protection • 10 and 25 years forest management plans • 7,7% Protected forest areas (PFAs), 10 National Parks, 5 years management plans for PFAs • 100% public ownership (Kyrgyz Forest Fund) • 27150 people on payroll in forest enterprises • 20000 concessions (logging, cattle grazing, collecting herbs) for up to 40 years Future forest management: • National forest inventory provides solid data base • Increase nature tourism • Increase protected forest areas • Participation of local people and the private sector in sustainable forest management Barriers: • Need to review the national plan • Need for alternative income (i.e. tourism, honey) • Lack of political will • No trade of wood • Illegal logging (but it is decreasing) • Uncontrolled grazing and firewood collection by local people

Uzbekistan	Current forest management: • 65% young stands, 10% mature forests, 25% over mature forests • 39000 ha forest area with threat of desertification, huge reforestation activities • Honey production • Eco tourism • Use of medical plants • Staff well educated • Cooperation with soil and water sectors • 1% Protected forest areas Future forest management: • Increase of the forest area in the next 20 years by 50% • Afforestation also around Aral Sea • Increase Eco tourism, honey production, bioenergy, use of medical plants • Implementation of sustainably managed wood pastures • Regulation of grazing • Teach population about sustainable forest use • Participation • Increase protected forest areas up to 10% Barriers: • Grazing destroys forest • Salt desert in the Aral lake area • No wood manufacture, no timber industry • No timber export
 Forest Area: 3219.90 1 ha Growing Stock in forest: 25.50 (million m^3)	

3.2 Group work – Review of the Country Analysis Task and peer assessment of country synthesis and gaps

Before the workshop started, the countries provided information about their current forest sector in a questionnaire “Country Analysis Task” (see Annex 0). These country analyses got reviewed by the participants, who asked questions (see Annex 6.4 Questions about the Country Analysis Task) and identified gaps in the country analysis. Main questions concerned policy structure and institutions, the forest management and the monitoring. It was left open what the understanding of a best practice in forest management is and how it is defined for each country.

Based on the country presentations, country teams evaluated each other´s current performances of the forest sector (score out of 5) to identify appropriate C&I to realize SFM (see image below).

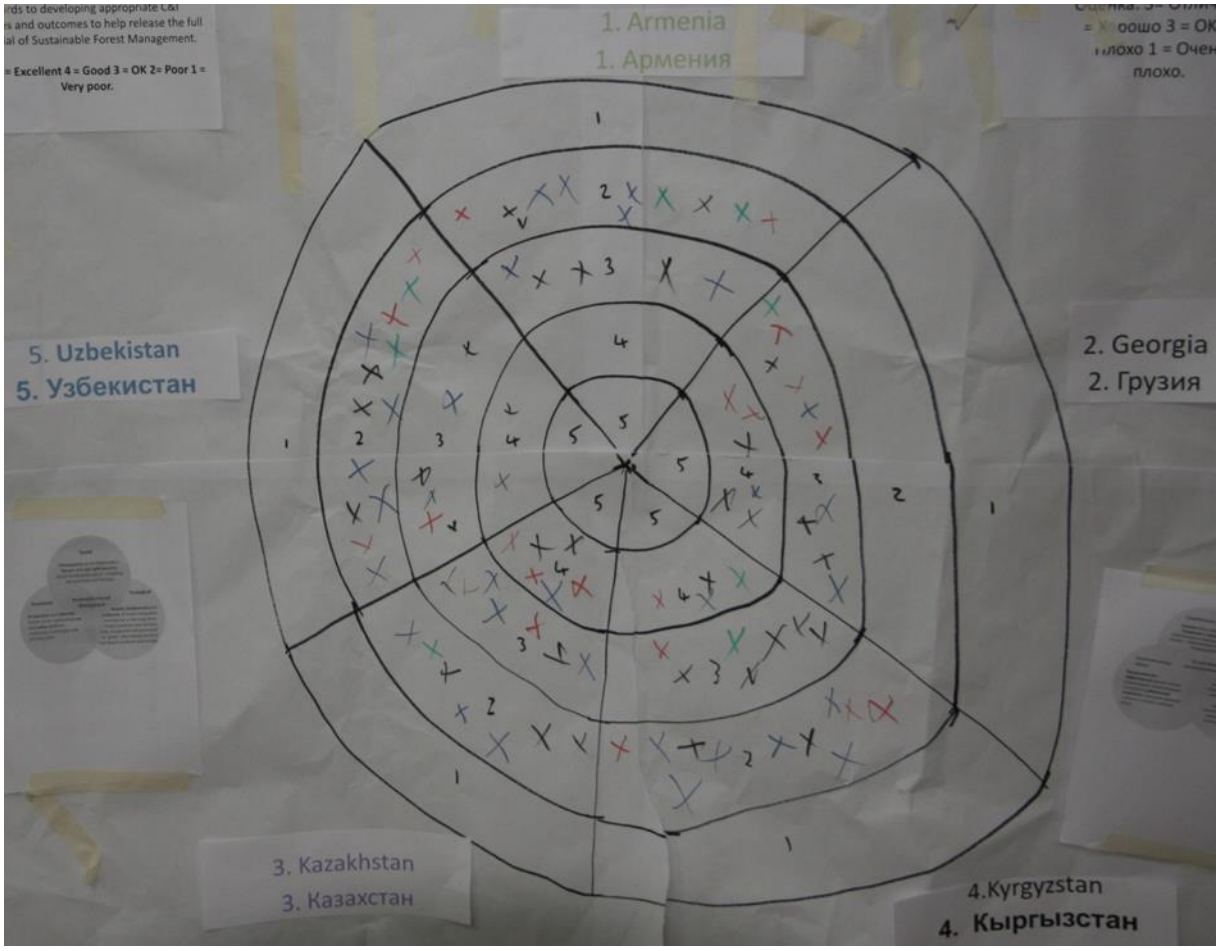


Figure 3.1: <u>Ranking:</u> Georgia>Kazakhstan>Kyrgyzstan>Uzbekistan>Armenia

As **Georgia** participates in the pan-European C&I Process since 2003 and has a reporting obligation for the 34 quantitative and 11 qualitative FOREST EUROPE indicators, Georgia was ranked highest (3-4 out of 5 with an accumulation at 3). However, the current forest inventory is based on the district level and should be extended to the national level and further barriers have to be overcome.

As **Kazakhstan** equalized the importance of social, economic and ecologic functions and analysed its current state of the forest management, and proposed clear directions to achieve SFM. Kazakhstan elaborated upon successful afforestation measures after the 1990 forest fires and around Aral Sea (supported by GIZ and the World Bank) to prevent it from shrinkage.

Forest inventories take place in a 5-year cycle and Kazakhstan plans to extend the sequence to 10 years. Kazakhstan works on its geo database and 6 of 14 provinces are covered already. In addition, the country provides a software programme (SOLI_N) to which forest owners can report. The country has 2 universities and 10 colleges that provide forestry education and new students are attracted by a study bonus of 25%. Kazakhstan wants to encourage private investors and thereby increase the GDP. The forests are managed by the Ministry of Forestry

and Agriculture. Illegal logging is classified as a criminal action and monitored through daily reports from private persons and entrepreneurs. However, the strong need to find alternative incomes for locals is recognized as a crucial remedy to combat illegal logging. Kazakhstan stressed, that they do not have a timber processing industry, but would like to build it up.

Kyrgyzstan plans to invest into a Russian Satellite/GIS product to track and quantify illegal logging. The country pointed out that it is possible to lease a forest property, however it is unknown how much wood is cut in these forests and how much money is earned. Non-timber products play a major role in the country, such as fruit trees (walnut, pistachio), honey production and medical plants. Moreover, the forest becomes important to attract eco-tourism.

Uzbekistan makes strong efforts to increase its forest area by afforestation of former agricultural land and pastures. It is a challenge to achieve sustainably managed forest pastures. There is not yet a clear idea if and how the timber could be used. The social, ecologic and economic functions of the existing and the newly growing forest need to be properly monitored and assessed to maintain the forest area and to achieve a sustainable forest management.

In **Armenia** the forest inventory was incomplete and last undertaken 1993, the Country Analysis Task showed gaps. Armenia also pointed out that the statistics about the private forest sector may be less precise than the ones of the national forest agency. Forest training schools were opened to improve the quality of forest data collection. Conflicting interests between the Forestry Sector and Agriculture Sector were named as another issue to be solved, to achieve SFM within sustainable land use management. The forest area is managed by two Ministries, the Ministry for the Forest Agency and Agriculture and the Ministry of Environment. Rules and laws about illegal logging are not enforced in practise. As Armenia identified crucial gaps and successfully outlined their future aims and the barriers to achieve SFM in the country showed great potential to progress strongly within the 3-year period of the project.

4 Applicability of C&I concepts to the countries

The invited experts presented three C&I processes "Montreal Process" (M. Palenova), "Pan-European Process" (S. Linser), "Low Forest Cover Country Process" (M. Jafari) and the "System for the Evaluation of the Management of Forests, SEMAFOR" (R. Michalak). It was pointed out, that the C&I processes are open for additional countries if they are suitable to the process. The C&I developed by the processes should be the basis for a national C&I set and can be complemented by sub-indicators or further indicators to satisfy the countries national needs. Specific policy questions and emerging issues (e.g. climate change, desertification, green economy, ecosystem services, health & well-being aspects etc.) are addressed in all sets. The processes differ in ecozones, the type of forest they cover and in some specific indicators they suggest. The Montreal Process covers 12 countries but 90% of the temperate and boreal forests of the world and identified 7 criteria and 54 indicators. The Pan-European Process covers 46 European countries with a wide range of forest ecosystems. It contains 6 criteria and 45 indicators. The Near East Process covers the needs of 56 Low Forest Cover Countries with 7 criteria and 93 indicators. Their results should facilitate increased country capacities.

THE PROCESSES AIM TO SERVE AS:

- platform for dialogue and information exchange
- monitoring and reporting tool
- tool for assessing the progress towards SFM
- formation of forest policy
- providing information to public
- inter and cross-sectoral information exchange

4.1 Group work – Review of process applicability to countries

After the introduction of the different processes and methods, the countries scored the applicability to their needs (Score out of 10).

C&I Process	Armenia	Georgia	Kazakhstan	Kyrgyzstan	Uzbekistan	Total Score
Montreal Process	10	5	9	8	8	40
Pan-European Process	8	10	3	9	8	38
LFCC, Near East Process	8	10	9	5	8	40
SEMAFOR	9	10	8	7	9	43

It was highlighted that the countries should elaborate well which process adapts to their needs, is practical and feasible.

Building on this, the country representatives from Austria (S. Linser), Estonia (M. Valgepea), Georgia (C. Amirgulashvili), Iran (M. Jafari) and Russia (M. Palenova) informed participants about their progress and challenges of practical C&I implementation at the national level (see presentations and related background documents at the workshop website).

4.2 Group work – Auction of priorities for C&I strengthening

A auction based prioritization method was used to develop a cross-country prioritization of where the need is greatest in terms of C&I process and outcome strengthening. The methods were used to promote cross-country discussion, simulate planning process as well as to provide a rough idea of the collective priorities for support from the perspective of the workshop participants.

Most needed forest information on:	Payment
Ecological condition of the forest	68
Promoting forest products as renewable resources (“green” materials and energy)	67
Forest inventories	60
Productive forestry, improved forest based livelihoods, enterprises, jobs etc.	33
Participatory approach in C&I processes and defining outcome development – ensuring more stakeholders engaged	25
Better and more user friendly legislation, policies and regulations that support more user rights, more transparency, more fairness in forest sectors	21
Better data management systems	13

The ranking of the auction clearly showed that the ecological function is most important to most countries, especially because of their low forest cover. Moreover, the use of wood for energy or as fuelwood seems important for the local population.

The assessment of the forest is in third position, because it was considered as more important to first build up a healthy forest and providing the local population with their basic resources from the forest, before financing forest monitoring.

Greater economic factors, investment, ownership and policy issues can be considered built upon the forest monitoring results and the assessed possibilities of the use of timber and non-timber products.

4.3 Group work –country specific process planning

Each country developed and presented its own process plan defining the structure and the activities that they plan to undertake in the 3-year period of the project 2016 – 2019.

The participating experts evaluated the process plan (score out of 10) of each country based on the quality of the plan taking the following criteria into account (see table beneath).

Criteria for the experts	Armenia	Georgia	Kazakhstan	Kyrgyzstan	Uzbekistan	Total Score
Have lessons from the workshop been fully harnessed in the process plan?	9	7	10	7	9	42
Is it relevant to the gaps identified in the country analysis on Day 1 of the workshop?	5	5	6	7	7	30
Is it innovative – adding a new dimension to forest information systems and C&I?	8	9	8	8	8	41
Is it a realistic, feasible and practical plan?	9	9	9	9	8	44
Total Score per Country	31	30	33	31	32	

5 Conclusions, gaps and recommendations for follow-up for national C&I development

What has been done in all countries	
• Many actions towards a sustainable forest management were taken since independence • Each country makes efforts in establishing national forest inventories and other data collection systems • High focus on forest biodiversity / protected forest areas • Protective functions of forests are recognized • Establishment of training and education systems for staff	
Gaps and Problems identified	
Social	• Political support is often lacking to initiate or complete necessary reforms • Cross sectoral cooperation is weak (e.g. forestry - energy) • Forest tenure rights to be strengthened, to incentivize SFM • Collecting firewood and non-timber forest products is illegal but important for livelihoods of local people • Confusion with forest related terms and definitions
Ecological	• Uncontrolled grazing • Erosion • Desertification, shrinking of lakes and salinization • Need for afforestation and erosion control • Concessionaires exploit the forests
Economic	• Weak continuous funding for SFM related activities • Low visibility of forest sector in the overall economy • Timber harvesting is unplanned and value not recognized as non-timber forest products are most important for local population to improve the livelihood • Illegal logging • Timber industry is missing, value-adding on forest products within the countries is mostly lacking • Picture is different if ecosystem services are included • Eco-tourism is not developed, but seen as potential for income generation
Recommendations for all countries	
	• Be very clear on the function and process for C&I development for each of the countries. Why are C&I needed for this country? What will it be used for and by who? And what will be the best but also feasible process for C&I development, with clear process milestones, methods, stakeholder engagement etc. • It is clear that as in Soviet times, environmental aspects of the forest are a priority for foresters from the participating countries, however the ecological benefits will not be maximized without addressing governance (including increased devolution and stakeholder engagement), social and economic aspects of forestry

	and there should be a stronger emphasis in C&I processes and outcomes that promote such aspects. • Consider to join one of the regional C&I processes for methodological and technical support and mutual exchange of information. • Establish practical and purpose driven national forest inventories and related databases that are feasible with regards to the financial, material and human resources available in the country. • Use internationally applied terms and definitions and guidelines on how to collect the data, particularly for "Forest area" related data, as there are related reporting obligations towards FAO and UNECE questionnaires: ➢ Global Forest Resources Assessment http://www.fao.org/forest-resources-assessment/en/ ➢ Joint Forest Sector Questionnaire http://www.fao.org/forestry/32128-0fc2c643db68b88404ad679a85b96da46.pdf ➢ Joint Forest Sector Questionnaire definitions 2015 http://www.fao.org/forestry/7800-0f19180a024d41312ba3e482388a4b99a.pdf ➢ FAOSTAT-Forest products definitions http://www.fao.org/forestry/34572-02d9152c9571f5e09b9b54a76d37d47f3.pdf • Involve all relevant stakeholders in the national C&I process (government, scientists, NGOs, foresters and forestry sector, private owners/users, forest industry, other stakeholders like tourism) • Be aware that these kind of participatory processes should be supported by science but not be science-driven, as the final selection of indicators is a political negotiation process between the involved stakeholders • Exchange experiences with the other involved Caucasian and Central Asian countries and learn from their failure or progress. • Reduce concessions where applicable • Make forestry more attractive for the private sector and local populations to engage in forest related businesses and the creation of jobs and improved livelihoods. Need to change mindsets to increasingly view forestry in the long term as a potential source of renewable materials and energy, to enable forestry to play a key role in the transition to green economies. • Sustainable harvesting of the timber, value adding in the country, export to neighboring countries
Country specific recommendations	
Armenia	• As long as there is no national forest inventory strengthen your (already existing) capacities to obtain forest related data from Earth Observation. • Take actions to combat illegal logging and related forest devastation
Georgia	• Clearly distinguish between indicators for biodiversity monitoring at management unit level and national level criteria and indicators for sustainable forest management.

Kazakhstan	• Use the manifold data that is collected already, but adapt to international used terms and definitions (see above)
Kyrgyzstan	• Build on NFI that has been done so far • Build on experiences gained in i.e. the case studies on C&I for juniper forest and for walnut forests: ➢ Cornet, J.G., Rajapbaev, M. (2004): CI&for SFM of juniper forests in Southern-Kyrgyzstan. Nancy, Laboratoire de Politique Forestiere de l'Ecole Nationale du Genie Rurale, des Eaux et des Forets, Commission of the European Communities, pp. 1-96 ➢ Jalilova, G; Khadka, C; Vacik, H (2012) Developing criteria and indicators for evaluating sustainable forest management: A case study in Kyrgyzstan. FOREST POLICY ECON. 2012; 21: 32-43)
Uzbekistan	• Even though the protective function of the forest is of great importance, also the economic and socio-cultural functions of SFM should be part of all further considerations. Income from sustainable harvesting and services can be the basis for further protection activities.

6 Annexes

6.1 Program

	Tues the 15th of Nov	Wed the 16th of Nov	Thurs the 17th of November
MORNING SESSION	**Start sharp at 9.00.** **1. Preliminaries, objectives, background to SFM C&I.** 9.00 – 9.45 1.1 Welcome and short opening remarks by host country representative and overview of the project. Martun Matevosyan GNKO "Armles", Roman Michalak and Theresa Loeffler, UNECE *Presentation.* 9.45-10.25. 1.2 Participant introductions, workshop objectives, needs assessment synthesis, rules and norms. Peter O'Hara (Facilitator) *Presentation* 10.25 Logistics Announcements.	**Start sharp at 8.30.** 8.30 - 8.45 Recap of previous day. P*resentation by participants.* **3. Case study analysis of Forest Information Systems and C&I processes and outcomes.** 3.1 International/ Regional case studies of C&I for SFM processes, function, form, lessons, recommendations related to both process and outcomes, Montreal Process (Maria Palenova), SEMAFOR (Roman Michalak), Pan-European Indicators for SFM (Stefanie Linser) and C&I for Low Forest Cover Countries(LFCCs) (Mostafa Jafari). *Presentations (Each 10 minutes), Q&A rotating panel.*	**Start sharp at 8.30.** 8.30 - 8.45 Recap of previous day. *Presentation by participants* 4.3 Global Forest Resources Assessment (FRA). Roman Michalak UNECE *Presentation Q&A 20 min.* **5. Prioritisation and process planning** 5.1 Workshop Recap through a prioritisation exercise of most needed C&I processes and outcomes (identified on day 2) for SFM challenges in the target countries (identified on Day 1). *Exercise.* 5.2 Introducing format for country team process planning to enhance C&I development. *Exercise*
	Break 10.30-11.00	**Break 10.30 -11.00**	**Break 10.30 – 11.00**
	1.3 Overview of the evolving concept of SFM and as a result, forest information systems, and the rationale for, evolution, function/rationale/purpose of C&I for SFM, rationale, definitions and general principles (tbc*). Presentation, Q&A. 20 minutes* **2. Country sharing. Context and gap analysis related to SFM C&I.** 2.1 Visioning of ideal SFM for each country and related policy objectives. *Exercise*	3.2 National case studies of SFM C&I processes and outcomes, lessons and recommendations, Austria (Stefanie Linser), Estonia (Mati Valgepea), Russia (Maria Palenova), Georgia(tbc). *Presentations (each 15) minutes), Q&A and rotating panel.*	5.3 Country team preparation of the process plan for the duration of the project with resource persons 'kiosks' set up to act as information centres for teams as they prepare. *Development of a tailored and realistic draft process, including a schedule and concrete next steps.*
	Lunch 12.30 to 13.30	**Lunch 12.30 – 13.30**	**Lunch 12.30-13.30**
AFTERN	2.2 Country sharing of pre-prepared analysis and visions on posters. *Exercise*	**4. Justifying C&I for SFM in target countries.** 4.1 Preparing for and justifying C&I development/enhancement – linking key challenges with SFM development to C&I functions. *Exercise*	5.3 Continued 5.4 Rapid presentation of country process plans for peer review against key criteria. *Presentation with peer review exercise.*
	Break 15.00- 15.30	**Break 15.00-15.30**	**Break 15.00-15.30**

O O N	2.3 Country sharing continued. *Exercise* 1.4 Cross country collective assessment exercise. *Exercise*	4.2 Debate – Key SFM challenges and C&I needs of target countries. *Exercise* 4.3. International information needs and availability (forest products and wood energy). Alex McCusker UNECE *Presentation Q&A 20 min.*	5.4 continued **6. Wrap up and next steps** Next steps, wrap-up. Closing remarks. Workshop evaluation, explanation on field trip. *Presentation.*
	Close 17.30	**Close 17.30**	**Close 17.30**

Field Trip

Friday 18 November 2016

Time	**Activity**
09.00	Departure from Yerevan (Bus in front of Hotel Europe), address: 38 Hanrapetutyan St, Yerevan 0010
09.00 - 10.00	Travel by Bus to Hrazdan
10.00 - 12.00	Guided tour through Hrazdan Enterprise; Tree nursery *(Guide: Ruben Petrosyan, Chief Forester of "Hayantar" SNCO)*
12.00 - 13.00	Visit of "Kecharis Monastery "
13.00 - 14.00	Lunch in Tsaghkadzor
14.00 - 14.30	Cable car ride to a higher point of Mount Teghenis
14.30 - 15.00	Guided tour on the Mount Teghenis with explanations about the native oak forests *(Guide: Ruben Petrosyan, Chief Forester of "Hayantar" SNCO)*
15.00 - 15.30	Cable car ride back to the valley
15.30 - 16.30	Travel by Bus to Lake Sevan
16.30 - 17.00	Guided tour at Lake Sevan, its shrinkage and afforestation measures taken to rise its level
17.00 - 18.00	Visit of "Sevanavank" Monastery
18.00	Departure
19.00	Arrival in Yerevan (Hotel Europe)

6.2 List of Participants

List of participants

Criteria and Indicators for Sustainable Forest Management in the Caucasus and Central Asia

Start Date: Tuesday, November 15, 2016 **End Date:** Friday, November 18, 2016

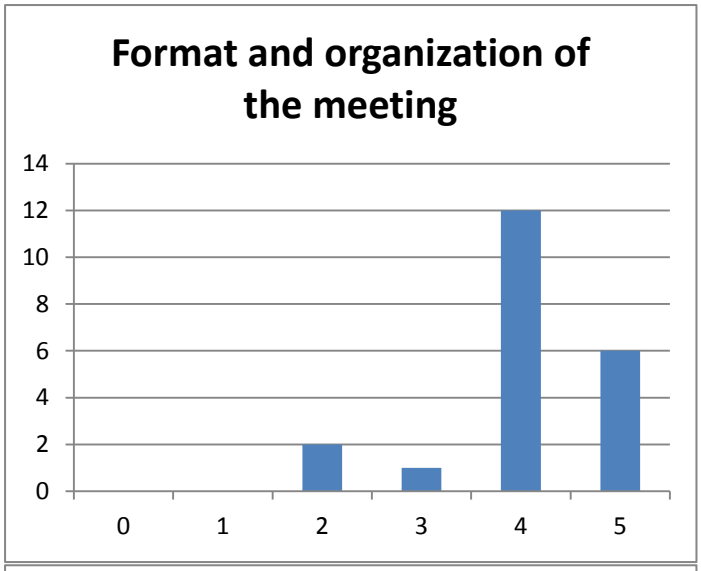
Participants: 36

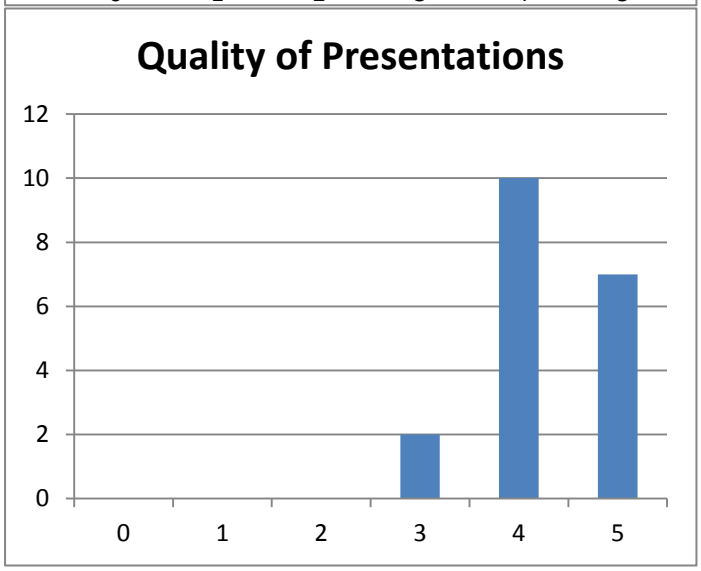
No	Title	Last name	First name	Organization	Nationality
1	Mr.	Abashidze	Besarion	MINISTRY OF ENVIRONMENT AND NATURAL RECOURSES PROTECTION	Georgia
2	Mr.	Abdykadyrov	Turdakun	State Agency on Environment Protection and Forestry of the Republic of Kyrgyzstan	Kyrgyzstan
3	Mr.	Akulov	Ruslan	State Agency on Environment Protection and Forestry of the Republic of Kyrgyzstan	Kyrgyzstan
4	Mr.	Aleksidze	Gigia	Ministry of Environment and Natural Resources Protection of Georgia	Georgia
5	Mr.	Amirgulashvili	Carl	Ministry of Environment and Natural Resources Protection of Georgia	Georgia
6	Mr.	Avagyan	Samvel	Ministry of Agriculture, “Hayantar” SNCO	Armenia
7	Ms.	Bunina	Yulia	UNECE/FAO Forestry and Timber Section	Russian Federation
8	Ms.	Coker	Anna-Katharina	UNECE/FAO Forestry and Timber Section	Germany
9	Mr.	Dzadzamia	Lasha	Ministry of Environment and Natural Resources Protection	Georgia
10	Mr.	Ermatov	Askarli	State Agency on Environment Protection and Forestry of the Republic of Kyrgyzstan	Kyrgyzstan
11	Mr.	Eshankulov	Zafar	Ministry of Agriculture and Water Resources	Uzbekistan
12	Ms.	Fischer	Antje	Ministry of Environment and Natural Resources Protection Georgia	Germany
13	Mr.	Geldbach	Juergen	GIZ programme "Integrated Biodiversity Management in the South Caucasus"	Germany
14	Ms.	Iordanishvili	Natia	National Forestry Agency	Georgia
15	Mr.	Jafari	Mostafa	Tehran Processes Secretariat for Low Forest Cover Countries	Iran (Islamic Republic of)
16	Mr.	Latipov	Muzaffar	Main Department of Forestry under the Ministry of Agriculture and Water Resources	Uzbekistan
17	Ms.	Linser	Stefanie	European Forest Institute – Central-East European Regional Office EFICEEC c/o University of Natural Resources and Life Sciences, Vienna (BOKU)	Germany

18	Ms.	Loeffler	Theresa	UNECE/FAO Forestry and Timber Section	Germany
19	Mr.	Martirosyan	Vahe	Armenia Tree Project	Armenia
20	Mr.	Matsakyan	Vahe	Ministry of Agriculture, “Hayantar” SNCO	Armenia
21	Mr.	Mccusker	Alex	UNECE/FAO Forestry and Timber Section	United States of America
22	Mr.	Melikyan	Vardan	UNDP Armenia	Armenia
23	Mr.	Michalak	Roman	UNECE/FAO Forestry and Timber Section	Poland
24	Mr.	O'Hara	Peter		Ireland
25	Ms.	Palenova	Maria	All-Russian Research Institute of Silviculture & Forest Mechanization	Russian Federation
26	Mr.	Petrosyan	Ruben	"Hayantar" SNCO, Ministry of Agriculture of the Republic of Armenia	Armenia
27	Ms.	Sahakyan	Meri	UN/FAO Armenia	Armenia
28	Mr.	Sayadyan	Hovik	United Nations Development Programme Armenia	Armenia
29	Mr.	Shojalilov	Mukhtarjon	Ministry of Agriculture and Water Resources of Uzbekistan	Uzbekistan
30	Mr.	Slessarenko	Alexandr	Forestry and Wildlife Ministry of Agriculture Republic of Kazakhstan	Kazakhstan
31	Mr.	Suleimenov	Nurlan	Forestry and Wildlife Ministry of Agriculture Republic of Kazakhstan	Kazakhstan
32	Mr.	Termeev	Ruslan	State Agency on Environment Protection and Forestry of the Republic of Kyrgyzstan	Kyrgyzstan
33	Mr.	Valgepea	Mati	Estonian Ministry of the Environment	Estonia
34					
35	Mr.	Yelemessov	Maxat	Forestry and Wildlife Committee of the Ministry of Agriculture of the Republic of Kazakhstan	Kazakhstan
36	Mr.	Yeritsyan	Armen	Ministry of Agriculture, “Hayantar” SNCO	Armenia

6.3 Evaluation of the workshop

Scores out of 5, 5 is the highest.





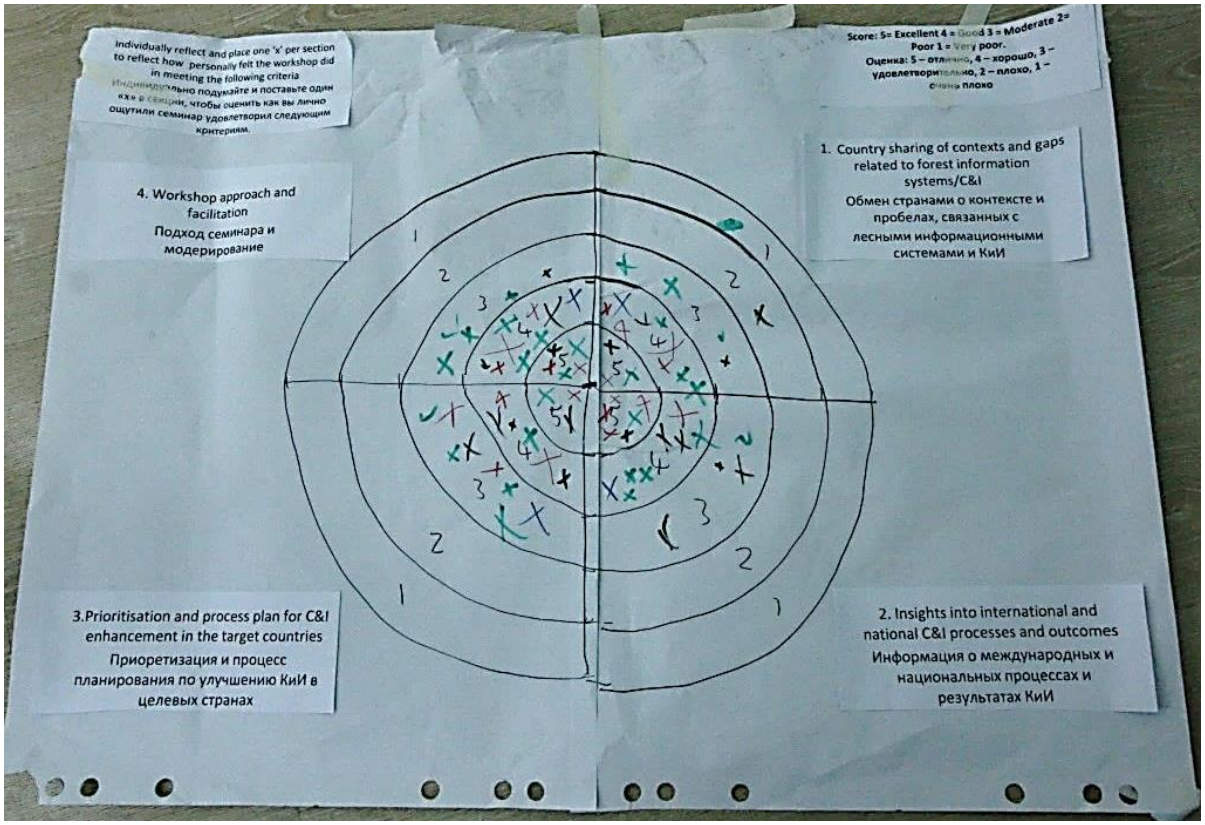


Figure 6.1: Workshop Evaluation: Participants were asked to evaluate the 4 aspects of the workshop (1: Country sharing of contexts and gaps related to forest information systems/C&I; 2: Insights into international and national C&I processes and outcomes; 3: Prioritisation and process plan for C&I enhancement in the target countries; 4: Workshop approach and facilitation) on a scale 1 to 5 (5=excellent, 4=good, 3=moderate, 2=poor, 1=very poor)

6.4 Questions about the Country Analysis Task

- Management:
  - Which activities have been undertaken to solve problems?
  - What are the examples of best practices in forestry?
  - 1. Percentage of protected areas? – Of the whole territory?; 2. Management plans?; 3. How do you protect biodiversity in managed forests?

- Policy and Participation:
  - What is the structure of Institutions, Forestry
  - What is the source of funding?
  - Forest ownership? Public, private, municipal → Tenure rights?
  - Illegal logging – an issue in municipal forests?
  - Protection of infrastructure and settlements no issue in mountainous areas?
  - Is the forest administration also responsible for the municipal forests? Public forest owners? Municipal forest owners? Private owners?
  - Protected forests only public forests? How much is protected in municipal forests?
  - What is the interest of your rural population in forests in their area? Do they use / depend on forests and / or their resources?
  - What institutional barriers are there regarding the information supply – Who is authorized to provide?

- Data monitoring:
  - What is the frequency of monitoring activities?
  - No proper forest biodiversity inventory, despite of its crucial importance
  - Also to improve knowledge of "other wooded land"
  - How do you assess the capacity for proper forest management in your country?
  - Are you monitoring forest health?
  - Is it managed by municipalities? How do you assess the capacity of the municipalities to manage forests?
  - How do you monitor illegal logging?
  - No information supplied on afforestation
  - Communication with statistical institution on use of wood, under reporting of small users
  - How do you visualize the inventory results? Is it mandatory to have inventories before planning the management measures?
  - Why can the "state forest inventory" not fully show the state of forests? Are there any indicators / variables which are useless? What indicators do you need to be taken into consideration while monitoring the forests?
  - What knowledge about the use of forest is there? removals / felling; firewood; other purposes
  - No data reported on "afforestation" or "natural regeneration"
  - Number of forest workers? Green jobs?
  - Non-wood-goods, hunting

6.5 Country Analysis Tasks

The following questionnaires were answered by the countries in advance of the workshop.

6.5.1 Armenia

Analysis of the forest sector in relation to sustainable forest management (SFM)
Анализ лесного сектора в области устойчивого лесопользования (УЛП)

1. How would you rate the overall current forest management in your country with regards to maximising the potential of sustainable forest management?
Как бы вы оценили общее текущее управление лесными ресурсами в вашей стране в отношении максимизации потенциала устойчивого лесопользования?

Very poor *Очень плохо*	*Poor* *Плохо*	*OK* *OK*	*Good* *Хорошо*	*Excellent* *Отлично*
☐	☐	✓	☐	☐

2. In the table below please rank which issues are addressed well and not so well by forest management at present?
2. В приведенной ниже таблице, пожалуйста, проранжируйте, какие вопросы решаются хорошо и не так хорошо руководством лесного хозяйства в настоящее время?

	Score 5 excellent, down to 1 extremely poorly Оценка 5 отлично, вплоть до 1 очень плохо	Please briefly explain why? Просьба кратко объяснить, почему?
1. Biodiversity Maintenance, conservation and enhancement of biodiversity **Биоразнообразие** Поддержание, сохраненеи и увеличение биоразнообразия	3	
2. Forest resources Maintenance or increase of forest area, growing stock, carbon stock **Лесные ресурсы** Поддержание или увеличение площади лесов, древостоя, запас углерода	3	
3. Forest health Soil condition, defoliation, forest damages, desertification **Состояние лесов** Состяние почвы, обезлиствление лесные повреждения, опустынивание	2	
4. Maintenance of productive functions Ratio of increment & felling, illegal logging, non-wood goods, services **Обеспечение производственных функций** Коэффициент прироста и вырубок, незаконные рубки леса, недревесные товары, услуги	3	
5. Protective functions Water quality, soil quality, erosion, floods, mudslides **Защитные функции** Качество воды, качество почвы, эрозия, наводнения, сели	4	
6. Socio-economic functions Contribution to GDP, workforce, wood consumption, wood trade, wood energy for heating and cooking **Социально-экономические функции** Вклад в ВВП, рабочей силы, потребления древесины, древесины торговля, энергетика древесины для отопления и приготовления пищи	3	
7. Enabling environment Forest tenure, governance, enabling bureaucracy **Создание благоприятных условий** Лесовладение, управление, бюрократия	3	
8. Capacity Forest institutions, capacities and resources	3	

Потенциал Учреждения лесного хозяйства, а также потенциал и ресурсы		
9. Monitoring Appropriate forest monitoring and information systems **Мониторинг** Системы соответствующего мониторинга и информации о лесах	3	
10. Other (please specify): **Другое** (пожалуйста, укажите):		

Analysis of forest monitoring and information systems with regards to sustainable forest management (SFM)
Анализ систем лесного мониторинга и информации в отношении устойчивого лесопользования (УЛП)

3. What forest monitoring and information systems have been used in your country to your knowledge in the past and currently, including any criteria and indicators for SFM that have been developed (please submit these along with this questionnaire if you have the documents). Please list all you know.
Какой мониторинг и лесные информационные системы используются в вашей стране по вашим знаниям в прошлом и в настоящее время, в том числе любые критерии и индикаторы УЛП, которые были разработаны (просьба представить их вместе с этой анкете, если у вас есть документы). Просьба перечислить все, что вы знаете.

3.1. Do you report forest related indicators/data to FAO, CBD, UNFCCC, UNCCD, others?
Подаете ли вы показатели / данные, связанные с лесами в ФАО, КБР, РКИК ООН, КБО ООН, другие?

4. How would you rate the current forestry sector performance in your country with regards to appropriate and useful forest monitoring and information systems?
Как бы вы оценили текущую деятельность сектора лесного хозяйства в вашей стране в отношении надлежащих и полезных систем мониторинга леса и информационых систем?

Very poor *Очень плохо*	*Poor* *Плохо*	*OK* *OK*	*Good* *Хорошо*	*Excellent* *Отлично*
☐	✓	☐	☐	☐

5. In the table below please rank the performance of forest monitoring and information systems in your country against the specific criteria.
В таблице ниже, пожалуйста оцените деятельность систем мониторинга и информации о лесах в вашей стране в отношении конкретных критериев.

	Score 5 excellent, down to 1 extremely poorly Оценка 5 отлично, вплоть до 1 очень плохо	Please briefly explain why? Просьба кратко объяснить, почему?
1. Biodiversity **Биоразнообразие**	3	
2. Forest resources **Лесные ресурсы**	3	
3. Forest health **Состояние лесов**	3	
4. Maintenance of productive functions **Обеспечение производственных функций**	3	
5. Protective functions **Защитные функции**	3	
6. Socio-economic functions **Социально-экономические функции**	3	
7. Enabling environment **Создание благоприятных условий**	3	

8. Capacity **Потенциал**	3	
9. Other (please specify): **Другое** (пожалуйста, укажите):		

6. Looking ahead to the next 10 to 20 years with developments in sustainable forest management and broadening demands for forest products and services, changing ecological, governance and economic environments, please articulate what the most important functions of a useful and appropriate forest information system should be in your country? Please rank them in order of priority?
Заглядывая вперед в следующие 10 до 20 лет с развитием устойчивого лесопользования и расширением спроса на лесные товары и услуги, изменением экологических, управленческих и экономических условий, пожалуйста, определите, каковы наиболее важные функции полезной и целесообразной лесной информационной системы должны быть в вашей стране? Пожалуйста, проранжируйте их в порядке приоритета?

	Score 5 excellent, down to 1 extremely poorly Оценка 5 отлично, вплоть до 1 очень плохо	Please briefly explain why? Просьба кратко объяснить, почему?
1. Describe, monitor, and report on the national forest trends and changes Описывать, отслеживать и сообщать о тенденциях и изменениях национальных лесов	3	
2. Assess progress towards sustainable forest management and identify emerging threats and weaknesses; Оценивать прогресс в обеспечении устойчивого лесопользования и выявлять возникающие угрозы и слабые стороны;	3	
3. Assist in the development and evaluation of national and/or sub-national forest policies, strategies, plans and programmes Оказывать помощь в разработке и оценке национальных и / или субнациональных лесных политик, стратегий, планов и программ	3	
4. Serve as a basis for cross-sectoral forest related data collection Служить основой для кроссекторального сбора данных, связанных с лесом	3	
5. Focus research efforts where knowledge is still inadequate Направлять научно-исследовательские работы, где знаний по-прежнему недостаточно	2	
6. Provide a common understanding of what is meant by and the status of sustainable forest management for other sectors and the society Обеспечивать общее понимание того, что подразумевается под и статус устойчивого лесопользования для других отраслей и общества	3	
7. Serve as a basis for international cooperation and collaboration on SFM and reporting Служить в качестве основы для международного сотрудничества и кооперации в области устойчивого лесопользования и отчетности	4	
8. Other (please specify) **Другое** (пожалуйста, укажите):		

8. What would be the best form, of an appropriate forest information system, what kind of information should be collected, how and by whom?
Что было бы лучшей формой, подходящей лесной информационной системы, какого рода информация должна быть собрана, как и кем?

Forest inventory Инвентаризация лесов.

Какого рода Критерии и Индикаторы необходимы? Для:

• Sustainable Forest Management: Устойчивого лесопользования	Reliable information on forest conditions. The use of modern environmentally sound technologies during forest management. Достоверная информация о состояния лесов. Использование современных экологическо безопасных технологий при лесопользовании.
• The whole forest sector: Лесного сектора в целом	The development of forest resources, increasing productivity of forests and their contribution to the global carbon cycle. Woodland rehabilitation. Providing adequate forest health and vitality of forest ecosystems. Preservation and enhancement of protective functions of forests. Preservation and restoration of biological diversity in forest ecosystems Развитие лесных ресурсов, повышение продуктивности лесов и их вклада в глобальный круговорот углерода. Реконструкция редколесия. Обеспечение надлежащего санитарного состояния лесов и жизнеспособности лесных экосистем. Сохранение и усиление защитных функций лесов. Сохранение и восстановление биологического разнообразия лесных экосистем.
• The forest-based bio-economy: Био-экономики, основанной на лесах	The development of alternative energy sources in the forestry sector Развитие источников альтернативной энергии в лесном секторе
• For international processes (Forest Europe, FAO, UNFCCC, CBD, UNCCD, …): Международных процессов: (Леса Европы, ФАО, РКИК ООН, КБР, КБО ООН, ...):	

9. Finally what are the bottlenecks to achieving this ideal system? And within the current financial resource and material constraints, how would you recommend that a feasible/practical system be developed that best suits the needs of yours?
И, наконец, каковы ограничения для достижения этой идеальной системы? И в рамках текущих финансовых ресурсов и материальных ограничений, как бы вы рекомендовали разработать осуществимую / практическую систему, которая наилучшим образом отвечала бы вашим потребностям?

To achieve this objective in the forestry sector in Armenia there is a shortage of specialists, as well as the lack of financial means to achieve this ideal goal.Для достижения этой цели в лесном секторе Армении есть нехватка соответсвенных специалистов, а так же отсутствие финансовых средств ля достижения этой идеальной цели.

6.5.2 Georgia

Analysis of the forest sector in relation to sustainable forest management (SFM)
Анализ лесного сектора в области устойчивого лесопользования (УЛП)

1. How would you rate the overall current forest management in your country with regards to maximising the potential of sustainable forest management?
Как бы вы оценили общее текущее управление лесными ресурсами в вашей стране в отношении максимизации потенциала устойчивого лесопользования?

Very poor *Очень плохо*	*Poor* *Плохо*	*OK* *OK*	*Good* *Хорошо*	*Excellent* *Отлично*
☐	☐	✓	☐	☐

2. In the table below please rank which issues are addressed well and not so well by forest management at present?
2. В приведенной ниже таблице, пожалуйста, проранжируйте, какие вопросы решаются хорошо и не так хорошо руководством лесного хозяйства в настоящее время?

	Score 5 excellent, down to 1 extremely poorly Оценка 5 отлично, вплоть до 1 очень плохо	Please briefly explain why? Просьба кратко объяснить, почему?
1. Biodiversity Maintenance, conservation and enhancement of biodiversity **Биоразнообразие** Поддержание, сохраненеи и увеличение биоразнообразия	4	No National Forest Inventory has been conducted yet (preparation underway), in which the country would get information on biodiversity variables nationwide. Data according to the biodiversity variables are collected/assessed and fulfilled during the forest management level inventories. Up to 9% of country territory is represented as protected areas managed by the Agency of Protected Areas, with a potential to be increased up to 12% (already planned). Biodiversity and relevant circumstances are always considered during the forest management planning, as well as during the reforestation/afforestation/natural regeneration planning. Georgia is a signature of "Emerald Network".
2. Forest resources Maintenance or increase of forest area, growing stock, carbon stock **Лесные ресурсы** Поддержание или увеличение площади лесов, древостоя, запас углерода	3	Forest areas have a tendency to decrease near the populated areas, but shows the increase tendency in mountainous regions with less populated areas. Lack of sufficient funds for afforestation/reforestation.
3. Forest health Soil condition, defoliation, forest damages, desertification **Состояние лесов** Состяние почвы, обезлиствление лесные повреждения, опустынивание	3	Relevant laboratories are being established for research and planning activities. Forest management units react according to the management and operational plans.
4. Maintenance of productive functions Ratio of increment & felling, illegal logging, non-wood goods, services **Обеспечение производственных функций** Коэффициент прироста и вырубок, незаконные рубки леса, недревесные товары, услуги	2	As the country does not have updated inventories and management plans on the most territories of the forests, the management units have to deal with management planning with limited data. The increment and growing stock are considered

		during the timber utilization planning/harvest, but the population is significantly dependent on timber resources (firewood, economic benefit) and the illegal logging is taking place. The development of regulation on non-timber forest products is under elaboration and the government is taking steps forward to support the rational use of forests.
5. Protective functions Water quality, soil quality, erosion, floods, mudslides **Защитные функции** Качество воды, качество почвы, эрозия, наводнения, сели	3	Protective forests are strictly
6. Socio-economic functions Contribution to GDP, workforce, wood consumption, wood trade, wood energy for heating and cooking **Социально-экономические функции** Вклад в ВВП, рабочей силы, потребления древесины, древесины торговля, энергетика древесины для отопления и приготовления пищи	2	Considering the high dependency of public on timber resources, 65% of harvested timber is allocated for fuel-wood and 35% is for wood trade/processing. The state forest management units lack abilities/capacities to plan the economic use of forests effectively.
7. Enabling environment Forest tenure, governance, enabling bureaucracy **Создание благоприятных условий** Лесовладение, управление, бюрократия	3	National Forest Concept was adopted by the Parliament in 2013. Forest Sector Reform Strategy and action plan was finalized and ready for adopting during 2017 spring parliament session. New forest code was drafted and is expected to be approved during 2017 spring parliament session. The TWINNING project – "Strengthening Sustainable Management of Forests in Georgia" was approved by the European Commission". The project has 3 components: 1. Improvement of regulatory framework; 2. Capacity building of State forest institutions; 3. Improvement of communication and forest information and monitoring system.
8. Capacity Forest institutions, capacities and resources **Потенциал** Учреждения лесного хозяйства, а также потенциал и ресурсы	3	The capacity building trainings and seminars are supported by the partner organizations/donors and conducted regularly. Strategy document on forestry education and capacity building is being elaborated.
9. Monitoring Appropriate forest monitoring and information systems **Мониторинг** Системы соответствующего мониторинга и информации о лесах	3	Georgia is receiving substantial support from GIZ and WRI/GFW to develop and establish of National Forest Monitoring System (NFMS), Forest Information Management System (FIMS) and Forest and

		Land-use Information and Decision Support (FLUIDS) Web Based Portal in Georgia.
10. Other (please specify): **Другое** (пожалуйста, укажите):		

Analysis of forest monitoring and information systems with regards to sustainable forest management (SFM)
Анализ систем лесного мониторинга и информации в отношении устойчивого лесопользования (УЛП)

3. What forest monitoring and information systems have been used in your country to your knowledge in the past and currently, including any criteria and indicators for SFM that have been developed (please submit these along with this questionnaire if you have the documents). Please list all you know.
Какой мониторинг и лесные информационные системы используются в вашей стране по вашим знаниям в прошлом и в настоящее время, в том числе любые критерии и индикаторы УЛП, которые были разработаны (просьба представить их вместе с этой анкете, если у вас есть документы). Просьба перечислить все, что вы знаете.

The basis of forest monitoring (existing practice):
The data derived from state forest fund management and forest use plans serve as the basis for forest monitoring.

1. The information, submitted to the administrative bodies.
2. The significant changes, reflected annually to the forest management and forest use plans.

Methods of forest monitoring (existing practice):
The forest monitoring can be implemented with air and ground methods.
Air monitoring shall be implemented by means of special observation and airphotos (orthophoto plans).
The ground monitoring shall be implemented by means of physical inspection-study of the actual condition of the object(s) of study, and by means of remote inspection or data actualization for the territories difficult to access, or by means of permanent sample area arrangement for targeted researches.

3.1. Do you report forest related indicators/data to FAO, CBD, UNFCCC, UNCCD, others?
Подаете ли вы показатели / данные, связанные с лесами в ФАО, КБР, РКИК ООН, КБО ООН, другие?

On forest related indicators, Georgia reports to the following: FAO, CBD, UNFCCC, UNCCD and "Forest Europe".

4. How would you rate the current forestry sector performance in your country with regards to appropriate and useful forest monitoring and information systems?
Как бы вы оценили текущую деятельность сектора лесного хозяйства в вашей стране в отношении надлежащих и полезных систем мониторинга леса и информационых систем?

Very poor *Очень плохо*	*Poor* *Плохо*	*OK* *OK*	*Good* *Хорошо*	*Excellent* *Отлично*
☐	☐	✓	☐	☐

5. In the table below please rank the performance of forest monitoring and information systems in your country against the specific criteria.
В таблице ниже, пожалуйста оцените деятельность систем мониторинга и информации о лесах в вашей стране в отношении конкретных критериев.

	Score 5 excellent, down to 1 extremely poorly Оценка 5 отлично, вплоть до 1 очень плохо	Please briefly explain why? Просьба кратко объяснить, почему?
1. Biodiversity **Биоразнообразие**	3	Biodiversity related indicators are accounted during the forest inventories according to the "guideline of taxation filling forms", as well as with the Ministerial order on biodiversity indicators under the whole biodiversity monitoring system. Appropriate regular studies are conducted for priority/selected species supported by the state as well as from partner and donor organizations. The Agency of Protected Areas

		(APA) also conducts regular observation and studies and plan activities accordingly on protected forests (around 20% of whole forested area) under their responsibility/management.
2. Forest resources **Лесные ресурсы**	3	National Forest Inventory has never been conducted (elaboration of methodology and preparatory works are taking place supported by GIZ). The development and establishment of Forest Information Management System (FIMS) and web based Forest and Land Use Information and Decision Support (FLUIDS) system are taking place, supported by GIZ and WRI/Global Forest Watch.
3. Forest health **Состояние лесов**	3	According to the inventory and observation results, the management unit (NFA) elaborates annual and long term plans, for needed afforestation/reforestation/natural regeneration activities. The relevant activities are conducted by state and external support.
4. Maintenance of productive functions **Обеспечение производственных функций**	2	7% (182,197 ha) of the whole forest fund/territory (2,659,123 ha) is allocated under the private companies for timber utilization through long-term licences. The companies provide annual operational plans for timber harvest and state control and monitoring are conducted accordingly (annually) as well. On the other parts of the state forest fund, the management unit (NFA) lacks capacity for planning the utilization of forest productive functions, on the other hand, the NFA through its sources conducts the maintenance and thinning activities of productive forest zones, as well as projecting/rehabilitating the forest roads.
5. Protective functions **Защитные функции**	4	The practice of forest zoning according to "areas designated with special functions" (legal regulation) is considered during the inventories and elaboration of forest management plans and annual forest use operational plans, and the monitoring/state control is conducted according to the forest use plans.
6. Socio-economic functions **Социально-экономические функции**	2	The state forest management unit (NFA) mostly deals with allocating the harvest areas, including projecting new and/or rehabilitating the forest roads for social purposes, which mainly serve for fuel-wood. The monitoring and controlling the activities of timber harvest lacks relevant human resources, as well as the timber tracking system seems to be inefficient and requires technological upgrade to become more transparent, web based and easy to operate and conduct monitoring.
7. Enabling environment **Создание благоприятных условий**	4	In December 2013 the Parliament of Georgia adopted the National Forest Concept, which was developed with strong stakeholder participation. The National Forest Concept defines the State's perspective on the forests of Georgia considering their main functional importance and values and the goal is to establish a system of sustainable forest management. Forest Sector Reform Strategy and Action Plan to achieve the government's goals and ensure sustainable forest management, is under elaboration and is expected to be adopted by the 1st quarter of 2017.
8. Capacity **Потенциал**		Through the support of GIZ and WRI/Global Forest Watch, the development and establishment of Forest Information Management system (FIMS), National Forest Monitoring System (NFMS) including National forest Inventory (NFI) and Forest and Land Use Information Decision Support (FLUIDS) web based system is taking place under the Ministry/MoENRP.
9. Other (please specify): **Другое** (пожалуйста, укажите):		

7. Looking ahead to the next 10 to 20 years with developments in sustainable forest management and broadening demands for forest products and services, changing ecological, governance and economic environments, please articulate what the most important functions of a useful and appropriate forest information system should be in your country? Please rank them in order of priority?
Заглядывая вперед в следующие 10 до 20 лет с развитием устойчивого лесопользования и расширением спроса на лесные товары и услуги, изменением экологических, управленческих и экономических условий, пожалуйста, определите, каковы наиболее важные функции полезной и целесообразной лесной информационной системы должны быть в вашей стране? Пожалуйста, проранжируйте их в порядке приоритета?

	Score 5 excellent, down to 1 extremely poorly Оценка 5 отлично, вплоть до 1 очень плохо	Please briefly explain why? Просьба кратко объяснить, почему?
1. Describe, monitor, and report on the national forest trends and changes Описывать, отслеживать и сообщать о тенденциях и изменениях национальных лесов	5	Contributes to the sustainable management of forests and trees outside forests by providing national decision makers and stakeholders with the means of acquiring accurate, relevant and cost-effective information on the state, uses, management of the forestry resources and land use changes. Such information is particularly relevant for national and international dialogue on forestry related policy issues and socio-economic development.
2. Assess progress towards sustainable forest management and identify emerging threats and weaknesses; Оценивать прогресс в обеспечении устойчивого лесопользования и выявлять возникающие угрозы и слабые стороны;	5	Supports for better planning of resources (human, financial, technical) for improving institutional structures dealing with forest management planning, management/forest use and monitoring, as well as to assess priorities, challenges and identify the needed changes to be made.
3. Assist in the development and evaluation of national and/or sub-national forest policies, strategies, plans and programmes Оказывать помощь в разработке и оценке национальных и / или субнациональных лесных политик, стратегий, планов и программ	5	Good Forest Information Systems and analysis/results provided (through technology, analytical tools and expert judgment) should assist decision makers and implementers on timely and effective development/improvement of policies/strategies and plans considering present and future challenges.
4. Serve as a basis for cross-sectoral forest related data collection Служить основой для кроссекторального сбора данных, связанных с лесом	5	Good Forest Information Systems and nationally developed - National Spatial Data Infrastructure (NSDI) standards and relevant technological systems will strongly support the data collection, relevant processing and visualization of the data and that the same data is used cross-sectorally, espacially while developing strategies/action plans or the activities on management levels.
5. Focus research efforts where knowledge is still inadequate Направлять научно-исследовательские работы, где знаний по-прежнему недостаточно	5	Good Forest Information Systems should provide information on bottlenecks and additional data needs, including the knowledge requirements and further efforts for continuous research for advancing the systems and better address challenges.
6. Provide a common understanding of what is meant by and the status of sustainable forest management for other sectors and the society Обеспечивать общее понимание того, что подразумевается под и статус устойчивого лесопользования для других отраслей и общества	5	Web tools and better visualization of forest related data, including the elaboration of relevant national and sub-national standards/regulations should be performed and awareness raising and educational development activities have to be strengthened for better understanding of status of SFM and the role of forests in general, including its ecological, economic and social functions.
7. Serve as a basis for international cooperation and collaboration on SFM and reporting Служить в качестве основы для международного сотрудничества и кооперации в области устойчивого лесопользования и отчетности	5	This is very relevant for national and international dialogue on forestry related policy issues and socio-economic development, as well as for mobilizing the external support/cooperation and donor/partner organizations engagement.

8. Other (please specify) **Другое** (пожалуйста, укажите):		

8. What would be the best form, of an appropriate forest information system, what kind of information should be collected, how and by whom?
Что было бы лучшей формой, подходящей лесной информационной системы, какого рода информация должна быть собрана, как и кем?

Data to be collected according to the priority sequence:
Forest cover map (preferably with functional zoning)
Map/database of Forest Functional zoning

- Results of Forest inventories/taxation
- Forest districts under management/forest use plans
- Timber harvest areas and timber flow/utilization plans and their implementation
- Aerial images and "orthophoto maps"
- Geo-database on areas under license holders (mining, groundwater, spring water, etc.), as well as for the pre-assessed areas for future allocation to license applications
- Hydrological network
- Roads network
- Sites of "Emerald Network" (Natura 2000) and areas for special designation (protective, protected, etc.)
- Data on natural hazards/risks zones
- Agricultural lands

Data should be collected by the responsible/management bodies of forests according to the national standards/protocols (standardized guideline/order) of the established Forest Information System. Data/information of forest conditions can also be collected by the academia/research and NGO organizations for added value and special purposes relevant to the case studies and research basis.

8.1. What kind of Criteria and Indicators are needed? For:
Какого рода Критерии и Индикаторы необходимы? Для:

• Sustainable Forest Management: Устойчивого лесопользования	<u>Indicators:</u> 1. Forest area 2. Growing stock 3. Age structure and/or diameter distribution 4. Increment and felling 5. Forest damage and forest land degradation 6. Round-wood 7. Non-wood goods 8. Services 9. Diversity of tree species 10. Regeneration 11. Naturalness 12. Protected forests and Genetic resources 13. Protective forests 14. Threatened forest species
• The whole forest sector: Лесного сектора в целом	<u>Indicators:</u> 1. Relevant institutional frameworks 2. Legal/regulatory framework: National and international commitments 3. Financial and economic instruments 4. Information, communication and transparency

• The forest-based bio-economy: Био-экономики, основанной на лесах	Indicators: 1. Forest management bodies/holdings/enterprises 2. Contribution of forest sector to GDP 3. Net revenue from timber utilization 4. Investments in forests and forestry 5. Forest sector workforce and occupational safety 6. Wood energy 7. Trade in wood 8. Forest ecosystem services 9. Trade and utilization of non-wood forest products
• For international processes (Forest Europe, FAO, UNFCCC, CBD, UNCCD, …): Международных процессов: (Леса Европы, ФАО, РКИК ООН, КБР, КБО ООН, ...):	Indicators: 1. Forest area 2. Growing stock 3. Age structure and/or diameter distribution 4. Increment and felling 5. Forest damage and forest land degradation 6. Round-wood 7. Non-wood goods 8. Services 9. Diversity of tree species 10. Regeneration 11. Naturalness 12. Protected forests and Genetic resources 13. Protective forests 14. Threatened forest species 15. Contribution of forest sector to GDP 16. Net revenue from timber utilization 17. Investments in forests and forestry 18. Wood energy 19. Trade in wood 20. Recreation in forests 21. Trade and utilization of non-wood forest products 22. Relevant institutional frameworks 23. Legal/regulatory framework: National and international commitments 24. Financial and economic instruments 25. Information and communication

9. Finally what are the bottlenecks to achieving this ideal system? And within the current financial resource and material constraints, how would you recommend that a feasible/practical system be developed that best suits the needs of yours?
И, наконец, каковы ограничения для достижения этой идеальной системы? И в рамках текущих финансовых ресурсов и материальных ограничений, как бы вы рекомендовали разработать осуществимую / практическую систему, которая наилучшим образом отвечала бы вашим потребностям?

- Initial steps to be taken could be the identification of and capacity building of relevant stakeholders/responsible units under the state forest institutions, who are/will be involved in the development and operational processes of forest information systems.
- Close cooperation with the ongoing initiatives and projects related to forest information systems, find synergies and plan/coordinate relevant support according to the identified shortcomings
- Together with partner stakeholders, evaluate and propose/develop recommendations on possible development and adjustment of forest information systems, including the systematic deployment of C&I for SFM, based on good practice of EU member countries with different structures of forest information and monitoring systems, in order to support the effective alignment and development of the system considering the country specific circumstances.

6.5.3 Kazakhstan

Analysis of the forest sector in relation to sustainable forest management (SFM)
Анализ лесного сектора в области устойчивого лесопользования (УЛП)

1. How would you rate the overall current forest management in your country with regards to maximising the potential of sustainable forest management?
Как бы вы оценили общее текущее управление лесными ресурсами в вашей стране в отношении максимизации потенциала устойчивого лесопользования?

Very poor *Очень плохо*	*Poor* *Плохо*	*OK* *OK*	*Good* *Хорошо*	*Excellent* *Отлично*
☐	☐	✓	☐	☐

2. In the table below please rank which issues are addressed well and not so well by forest management at present?
2. В приведенной ниже таблице, пожалуйста, проранжируйте, какие вопросы решаются хорошо и не так хорошо руководством лесного хозяйства в настоящее время?

	Score 5 excellent, down to 1 extremely poorly Оценка 5 отлично, вплоть до 1 очень плохо	Please briefly explain why? Просьба кратко объяснить, почему?
1. Biodiversity Maintenance, conservation and enhancement of biodiversity **Биоразнообразие** Поддержание, сохраненеи и увеличение биоразнообразия	4	Kazakhstan has established an extensive network of protected areas 10 reserves, 12 national parks, 5 reserves, 50 state natural reserves, 5 of public protected areas, 120 forest institutions, there is the air base of forest protection works RSE "Ohotzooprom" for wildlife conservation efforts aimed at maintaining maintain and increase biodiversity В Казахстане создана разветвленная сеть ООПТ 10 заповедников, 12 национальных парков, 5 резерватов, 50 государственный природных заказников, 5 государственных заповедных зон, 120 лесных учреждений, имеется авиационная база охраны лесов, работает РГКП «Охотзоопром» по охране животного мира все усилия направлены на поддержание сохранение и увеличение биоразнообразия
2. Forest resources Maintenance or increase of forest area, growing stock, carbon stock **Лесные ресурсы** Поддержание или увеличение площади лесов, древостоя, ~~запас углерода~~	4	According to the state register of forest fund on 01.01.2016, the forested land area is 12 652.1 thousand. Ha compared based on 01.01.2015 - 12 627.0 increase of 25.0 thousand. Ha Согласно государственному учету лесного фонда на 01.01.2016 года площадь покрытых лесом угодий составляет 12 652,1 тыс. га по сравнению с учетом на 01.01.2015года 12 627,0 прирост составляет 25,0 тыс. га
3. Forest health Soil condition, defoliation, forest damages, desertification **Состояние лесов** Состяние почвы, обезлиствление лесные повреждения, опустынивание		In the fight against desertification on the dried bottom of the Aral Sea 10 plantations established on an area of over 70.0 thousand. Ha. Since 2015, a three-year ban on the felling of saxaul; В рамках борьбы с опустыниванием на осушенном дне Аральского моря за 10 создано лесных культур на площади более 70,0 тыс. га. С 2015 года, сроком на три года введен запрет на рубку саксаульников;
4. Maintenance of productive functions Ratio of increment & felling, illegal logging, non-wood goods, services **Обеспечение производственных функций** Коэффициент прироста и вырубок, незаконные рубки леса, недревесные товары, услуги		Average annual timber growth is 7.36 million. M3 (actual for 2008-2013 amounted to 31.51 million m3). Illegal logging in the territory of the state forest fund tend to decrease as the volume of illegal logging amounted to 3761 m3 in 2010, losses amounted to - 38.8 million tenge for 10 months of 2016 amounted to 2378 m3, the damage -. 26.6 million tenge. Средний ежегодный прирост древесины составляет 7,36 млн. м3 (фактический за 2008-2013 составил 31,51 млн.м3). Незаконные рубки на территории государственного лесного фонда имеют тенденцию уменьшения, так объем незаконных рубок в 2010 году составил 3761 м3, ущерб составил – 38,8 млн. тенге, за 10 месяцев 2016 году объем составил 2378 м3, ущерб – 26,6 млн. тенге
5. Protective functions Water quality, soil quality,		No data Данные отсутствуют

erosion, floods, mudslides **Защитные функции** Качество воды, качество почвы, эрозия, наводнения, сели		
6. Socio-economic functions Contribution to GDP, workforce, wood consumption, wood trade, wood energy for heating and cooking **Социально-экономические функции** Вклад в ВВП, рабочей силы, потребления древесины, древесины торговля, энергетика древесины для отопления и приготовления пищи		
7. Enabling environment Forest tenure, governance, enabling bureaucracy **Создание благоприятных условий** Лесовладение, управление, бюрократия		In accordance with the Constitution of the Republic of Kazakhstan forests are exclusively state-owned. In 2002, the decision of the Government of the Republic of Kazakhstan of the territory of the State Forest Fund (79%) transferred to the municipal property В соответствии с Конституцией Республики Казахстан леса находятся исключительно в государственной собственности. В 2002 году решением Правительства Республики Казахстан часть территории государственного лесного фонда (79%) передана в коммунальную собственность
8. Capacity Forest institutions, capacities and resources **Потенциал** Учреждения лесного хозяйства, а также потенциал и ресурсы		The capacity of forestry institutions - is the comprehensive forestry development, harvesting and primary processing of forest resources by forest owners, the development of timber industry (formation of the forest resources processing enterprises), development of forest plantations. Потенциал учреждений лесного хозяйства - в полноценном развитии лесного хозяйства, заготовки и первичной переработки лесных ресурсов лесовладельцами, в развитии лесоперерабатывающей промышленности (образовании предприятий по переработке лесных ресурсов), развитии плантационного лесовыращивания.
9. Monitoring Appropriate forest monitoring and information systems **Мониторинг** Системы соответствующего мониторинга и информации о лесах		Work of forest management organization performing accounting, inventory and monitoring of forests (electronic reporting program is being developed associated with the program of continuous forest inventory and forest monitoring) Функционирование лесоустроительной организации, ведущей учет, кадастр и мониторинг лесов (ведется разработка программы электронной отчетности, связанной с программой непрерывного лесоустройства и мониторинга лесов)
10. Other (please specify): **Другое** (пожалуйста, укажите):		

Analysis of forest monitoring and information systems with regards to sustainable forest management (SFM)
Анализ систем лесного мониторинга и информации в отношении устойчивого лесопользования (УЛП)

3. What forest monitoring and information systems have been used in your country to your knowledge in the past and currently, including any criteria and indicators for SFM that have been developed (please submit these along with this questionnaire if you have the documents). Please list all you know.
Какой мониторинг и лесные информационные системы используются в вашей стране по вашим знаниям в прошлом и в настоящее время, в том числе любые критерии и индикаторы УЛП, которые были разработаны (просьба представить их вместе с этой анкете, если у вас есть документы). Просьба перечислить все, что вы знаете.

Currently "Forest Fund of Kazakhstan" is used – an information system designed to maintain a record of forest, SOLI_N - the system is designed for the processing of forest inventory information, moreover there is a Biodiversity monitoring information system at the 4 pilot protected areas and "Geoportal Forestry and fauna Committee" in the trial operation forest monitoring is carried out in forest management and forest inventory these are quantitative and qualitative changes that take place in the forest fund
В настоящее время используется «Лесной фонда РК» информационная система предназначенная для ведения учета лесного фонда, SOLI_N – система предназначена для обработки лесоустроительной информации, кроме того имеется Информационная система мониторинга биоразнообразия на 4 пилотных ООПТ и «Геопортал Комитета лесного хозяйства и животного мира» в опытной эксплуатации№ лесной мониторинг ведется при лесоустройстве и при проведении учета лесного фонда это количественные и качественные изменения которые проходят в лесном фонде

4. How would you rate the current forestry sector performance in your country with regards to appropriate and useful forest monitoring and information systems?
Как бы вы оценили текущую деятельность сектора лесного хозяйства в вашей стране в отношении надлежащих и полезных систем мониторинга леса и информационых систем?

Very poor *Очень плохо*	*Poor* *Плохо*	*OK* *OK*	*Good* *Хорошо*	*Excellent* *Отлично*
☐	☐	✓	☐	☐

5. In the table below please rank the performance of forest monitoring and information systems in your country against the specific criteria.
В таблице ниже, пожалуйста оцените деятельность систем мониторинга и информации о лесах в вашей стране в отношении конкретных критериев.

	Score 5 excellent, down to 1 extremely poorly Оценка 5 отлично, вплоть до 1 очень плохо	Please briefly explain why? Просьба кратко объяснить, почему?
1. Biodiversity **Биоразнообразие**	3	Monitoring is carried out in protected areas, Chronicles of Nature is carried out, but these activities do not cover forest offices of the regional akimat Мониторинг ведется на ООПТ, ведется Летопись природы однако этими мероприятиями не охвачены лесные учреждения Акиматов областей
2. Forest resources **Лесные ресурсы**	5	State forest inventory covers all forest institutions and Protected areas Государственным учетом лесного фонда охвачены все лесные учреждения и ООПТ
3. Forest health **Состояние лесов**	4	State forest inventory cannot fully show the state of forests, annual monitoring is needed Государственный учет лесного фонда не может в полной мере передать истинную картину состояния лесов требуется проведение ежегодного мониторинга
4. Maintenance of productive functions **Обеспечение производственных**		

функций		
5. Protective functions **Защитные функции**		
6. Socio-economic functions **Социально-экономические функции**		
7. Enabling environment **Создание благоприятных условий**		
8. Capacity **Потенциал**		
9. Other (please specify): **Другое** (пожалуйста, укажите):		

8. Looking ahead to the next 10 to 20 years with developments in sustainable forest management and broadening demands for forest products and services, changing ecological, governance and economic environments, please articulate what the most important functions of a useful and appropriate forest information system should be in your country? Please rank them in order of priority?
Заглядывая вперед в следующие 10 до 20 лет с развитием устойчивого лесопользования и расширением спроса на лесные товары и услуги, изменением экологических, управленческих и экономических условий, пожалуйста, определите, каковы наиболее важные функции полезной и целесообразной лесной информационной системы должны быть в вашей стране? Пожалуйста, проранжируйте их в порядке приоритета?

	Score 5 excellent, down to 1 extremely poorly Оценка 5 отлично, вплоть до 1 очень плохо	Please briefly explain why? Просьба кратко объяснить, почему?
1. Describe, monitor, and report on the national forest trends and changes Описывать, отслеживать и сообщать о тенденциях и изменениях национальных лесов	5	The information system should contribute fully to the facilitation of forest management in a timely manner ИС должна в полной мере способствовать возможностям ведения лесного хозяйства, своевременно
2. Assess progress towards sustainable forest management and identify emerging threats and weaknesses; Оценивать прогресс в обеспечении устойчивого лесопользования и выявлять возникающие угрозы и слабые стороны;	5	The information system should fully reflect the true picture of the state forest fund and allow to fully respond promptly to emerging threats ИС должна в полной мере отражать истинную картину состояния лесного фонда и позволять в полной мере своевременно реагировать на возникающие угрозы
3. Assist in the development and evaluation of national and/or sub-national forest policies, strategies, plans and	5	Current information on the state of forest is the most important for national forest policy making therefore information system should meet these criteria Актуальная информация о состоянии лесного фонда это самое необходимое для ведения национальной лесной политики поэтому \ИС должна соответствовать этим критериям

programmes Оказывать помощь в разработке и оценке национальных и / или субнациональных лесных политик, стратегий, планов и программ		
4. Serve as a basis for cross-sectoral forest related data collection Служить основой для кроссекторального сбора данных, связанных с лесом	5	Undoubtedly Information System should allow in the first place to collect and process data by sections: recreation or side forestry or tree felling Несомненно ИС должна позволять в первую очередь собирать и обрабатывать данные по секциям будь то рекреация, либо побочное лесопользование, либо рубка леса
5. Focus research efforts where knowledge is still inadequate Направлять научно-исследовательские работы, где знаний по-прежнему недостаточно	Непонятный вопрос	
6. Provide a common understanding of what is meant by and the status of sustainable forest management for other sectors and the society Обеспечивать общее понимание того, что подразумевается под и статус устойчивого лесопользования для других отраслей и общества	5	Information system should be intelligible and understandable for all users ИС должна быть доступной и понятной для всех пользователей
7. Serve as a basis for international cooperation and collaboration on SFM and reporting Служить в качестве основы для международного сотрудничества и кооперации в области устойчивого лесопользования и отчетности	5	Same То же
8. Other (please specify) **Другое** (пожалуйста, укажите):		

8. What would be the best form, of an appropriate forest information system, what kind of information should be collected, how and by whom?
Что было бы лучшей формой, подходящей лесной информационной системы, какого рода информация должна быть собрана, как и кем?

Forest Information System should primarily be based on forest inventory data and the organization suschestvyuschey forest area. It will be a kind of backbone for further development of the data bank in a certain area.
Лесная информационная система в первую очередь должна базироваться на данных лесоустройства и существующей организации территории лесов. Это будет своеобразный костяк для дальнейшего формирования банка данных на определенной территории.

Какого рода Критерии и Индикаторы необходимы? Для:

• Sustainable Forest Management: Устойчивого лесопользования	Актуальные данные по лесным ресурсам
• The whole forest sector: Лесного сектора в целом	
• The forest-based bio-economy: Био-экономики, основанной на лесах	
• For international processes (Forest Europe, FAO, UNFCCC, CBD, UNCCD, …): Международных процессов: (Леса Европы, ФАО, РКИК ООН, КБР, КБО ООН, ...):	

9. Finally what are the bottlenecks to achieving this ideal system? And within the current financial resource and material constraints, how would you recommend that a feasible/practical system be developed that best suits the needs of yours?
И, наконец, каковы ограничения для достижения этой идеальной системы? И в рамках текущих финансовых ресурсов и материальных ограничений, как бы вы рекомендовали разработать осуществимую / практическую систему, которая наилучшим образом отвечала бы вашим потребностям?

6.5.4 Kyrgyzstan

Analysis of the forest sector in relation to sustainable forest management (SFM)
Анализ лесного сектора в области устойчивого лесопользования (УЛП)

1. How would you rate the overall current forest management in your country with regards to maximising the potential of sustainable forest management?
Как бы вы оценили общее текущее управление лесными ресурсами в вашей стране в отношении максимизации потенциала устойчивого лесопользования?

Very poor *Очень плохо*	*Poor* *Плохо*	*OK* *OK*	*Good* *Хорошо*	*Excellent* *Отлично*
☐	☐	☐	✓	☐

2. In the table below please rank which issues are addressed well and not so well by forest management at present?
2. В приведенной ниже таблице, пожалуйста, проранжируйте, какие вопросы решаются хорошо и не так хорошо руководством лесного хозяйства в настоящее время?

	Score 5 excellent, down to 1 extremely poorly Оценка 5 отлично, вплоть до 1 очень плохо	Please briefly explain why? Просьба кратко объяснить, почему?
1. Biodiversity Maintenance, conservation and enhancement of biodiversity **Биоразнообразие** Поддержание, сохраненеи и увеличение биоразнообразия	3	Financing is not done on a proper level Не на должном уровне ведется финансирование
2. Forest resources Maintenance or increase of forest area, growing stock, carbon stock **Лесные ресурсы** Поддержание или увеличение площади лесов, древостоя, запас углерода	3	Forest plantation is done based on own funding and the forest area is increasing За счет собственных средств ведется работа по посадке леса и площадь лесов увеличивается
3. Forest health Soil condition, defoliation, forest damages, desertification **Состояние лесов** Состяние почвы, обезлиствление лесные повреждения, опустынивание	4	There is a pressure on forest pastures, there is degradation of land and pastures. Идет нагрузка на лесные пастбищ, идет деградации земель и пастбищ.
4. Maintenance of productive functions Ratio of increment & felling, illegal logging, non-wood goods, services **Обеспечение производственных функций** Коэффициент прироста и вырубок, незаконные рубки леса, недревесные товары, услуги	3	
5. Protective functions Water quality, soil quality, erosion, floods, mudslides **Защитные функции** Качество воды, качество почвы, эрозия, наводнения, сели	4	Water quality is good, erosion and degradation are big problems Качество воды хорошее, эрозия и деградация большая угроза
6. Socio-economic functions Contribution to GDP, workforce, wood consumption, wood trade, wood energy for heating and cooking **Социально-экономические функции** Вклад в ВВП, рабочей силы, потребления древесины, древесины торговля, энергетика древесины для отопления и приготовления пищи	2	0,09% of the GDP 0,09% от ВВП
7. Enabling environment Forest tenure, governance, enabling bureaucracy		

Создание благоприятных условий Лесовладение, управление, бюрократия		
8. Capacity Forest institutions, capacities and resources **Потенциал** Учреждения лесного хозяйства, а также потенциал и ресурсы	3	Staff turnover and poor funding Текучести кадров и слабое финансирование
9. Monitoring Appropriate forest monitoring and information systems **Мониторинг** Системы соответствующего мониторинга и информации о лесах	3	
10. Other (please specify): **Другое** (пожалуйста, укажите):		

Analysis of forest monitoring and information systems with regards to sustainable forest management (SFM)
Анализ систем лесного мониторинга и информации в отношении устойчивого лесопользования (УЛП)

3. What forest monitoring and information systems have been used in your country to your knowledge in the past and currently, including any criteria and indicators for SFM that have been developed (please submit these along with this questionnaire if you have the documents). Please list all you know.
Какой мониторинг и лесные информационные системы используются в вашей стране по вашим знаниям в прошлом и в настоящее время, в том числе любые критерии и индикаторы УЛП, которые были разработаны (просьба представить их вместе с этой анкете, если у вас есть документы). Просьба перечислить все, что вы знаете.

Yes, we provide requested data on forests

Да, предоставляем запрашиваемые данные по лесу

Подаете ли вы показатели / данные, связанные с лесами в ФАО, КБР, РКИК ООН, КБО ООН, другие?

4. How would you rate the current forestry sector performance in your country with regards to appropriate and useful forest monitoring and information systems?
Как бы вы оценили текущую деятельность сектора лесного хозяйства в вашей стране в отношении надлежащих и полезных систем мониторинга леса и информационых систем?

Very poor *Очень плохо*	*Poor* *Плохо*	*OK* *OK*	*Good* *Хорошо*	*Excellent* *Отлично*
☐	✓	☐	☐	☐

5. In the table below please rank the performance of forest monitoring and information systems in your country against the specific criteria.
В таблице ниже, пожалуйста оцените деятельность систем мониторинга и информации о лесах в вашей стране в отношении конкретных критериев.

	Score 5 excellent, down to 1 extremely poorly Оценка 5 отлично, вплоть до 1 очень плохо	Please briefly explain why? Просьба кратко объяснить, почему?
1. Biodiversity **Биоразнообразие**	3	We follow forestry materials on the territory of the state forest fund На территории государственного лесного фонда руководствуемся материалами лесоустройства
2. Forest resources **Лесные ресурсы**	3	Forest inventory is carried out once in 5 years 5 лет один раз ведется инвентаризация лесов.

3. Forest health **Состояние лесов**	3	Satisfactory, the monitoring is done visually Удовлетворительное, мониторинг ведется визуально
4. Maintenance of productive functions **Обеспечение производственных функций**	3	
5. Protective functions **Защитные функции**	3	Planting of forest plantations, promoting natural regeneration and protection Посадка лесных культур, содействия естественному возобновлению и охрана
6. Socio-economic functions **Социально-экономические функции**	4	We started work on ecosystem services Начали работу по экосистемным услугам
7. Enabling environment **Создание благоприятных условий**	3	Made economic calculations taking into account the pressure on natural resources Сделаны экономические расчеты с учетом нагрузки на природные ресурсы
8. Capacity **Потенциал**	4	The role of forestry sector increased in the country`s economy Роль лесного сектора повысилась в экономике страны
9. Other (please specify): **Другое** (пожалуйста, укажите):		

9. Looking ahead to the next 10 to 20 years with developments in sustainable forest management and broadening demands for forest products and services, changing ecological, governance and economic environments, please articulate what the most important functions of a useful and appropriate forest information system should be in your country? Please rank them in order of priority?
Заглядывая вперед в следующие 10 до 20 лет с развитием устойчивого лесопользования и расширением спроса на лесные товары и услуги, изменением экологических, управленческих и экономических условий, пожалуйста, определите, каковы наиболее важные функции полезной и целесообразной лесной информационной системы должны быть в вашей стране? Пожалуйста, проранжируйте их в порядке приоритета?

	Score 5 excellent, down to 1 extremely poorly Оценка 5 отлично, вплоть до 1 очень плохо	Please briefly explain why? Просьба кратко объяснить, почему?
1. Describe, monitor, and report on the national forest trends and changes Описывать, отслеживать и сообщать о тенденциях и изменениях национальных лесов	4	
2. Assess progress towards sustainable forest management and identify emerging threats and weaknesses; Оценивать прогресс в обеспечении устойчивого лесопользования и выявлять возникающие угрозы и слабые стороны;	4	
3. Assist in the development and evaluation of national and/or sub-national forest policies, strategies, plans and programmes Оказывать помощь в разработке и оценке национальных и / или субнациональных лесных политик, стратегий, планов и программ	4	
4. Serve as a basis for cross-sectoral forest related data collection Служить основой для кроссекторального сбора данных, связанных с лесом	3	

5. Focus research efforts where knowledge is still inadequate Направлять научно-исследовательские работы, где знаний по-прежнему недостаточно	3	
6. Provide a common understanding of what is meant by and the status of sustainable forest management for other sectors and the society Обеспечивать общее понимание того, что подразумевается под и статус устойчивого лесопользования для других отраслей и общества	4	
7. Serve as a basis for international cooperation and collaboration on SFM and reporting Служить в качестве основы для международного сотрудничества и кооперации в области устойчивого лесопользования и отчетности	4	
8. Other (please specify) **Другое** (пожалуйста, укажите):		

8. What would be the best form, of an appropriate forest information system, what kind of information should be collected, how and by whom?
Что было бы лучшей формой, подходящей лесной информационной системы, какого рода информация должна быть собрана, как и кем?

United by forestries database separately. The centralized database is missing. Territorial forestry and at the level of the national body. All the materials we are scattered across departments and divisions.Единая база данных по лесхозам отдельно. Централизованной базы отсутствует. Территориальном лесхозе и на уровне республиканского органа. Все материалы у нас разбросаны по отделам и структурным подразделениям.

8.1. What kind of Criteria and Indicators are needed? For:
Какого рода Критерии и Индикаторы необходимы? Для:

• Sustainable Forest Management: Устойчивого лесопользования	Разработанные и адаптированные на национальном уровне.
• The whole forest sector: Лесного сектора в целом	Простой и удобный для определения
• The forest-based bio-economy: Био-экономики, основанной на лесах	
• For international processes (Forest Europe, FAO, UNFCCC, CBD, UNCCD, …): Международных процессов: (Леса Европы, ФАО, РКИК ООН, КБР, КБО ООН, ...):	

9. Finally what are the bottlenecks to achieving this ideal system? And within the current financial resource and material constraints, how would you recommend that a feasible/practical system be developed that best suits the needs of yours?
И, наконец, каковы ограничения для достижения этой идеальной системы? И в рамках текущих финансовых ресурсов и материальных ограничений, как бы вы рекомендовали разработать осуществимую / практическую систему, которая наилучшим образом отвечала бы вашим потребностям?

Для Кыргызстана нужно разработать отдельно по каждому региону критерий индикаторов

6.5.5 Uzbekistan

Analysis of the forest sector in relation to sustainable forest management (SFM)
Анализ лесного сектора в области устойчивого лесопользования (УЛП)

1. How would you rate the overall current forest management in your country with regards to maximising the potential of sustainable forest management?
Как бы вы оценили общее текущее управление лесными ресурсами в вашей стране в отношении максимизации потенциала устойчивого лесопользования?

Very poor *Очень плохо*	*Poor* *Плохо*	*OK* *OK*	*Good* *Хорошо*	*Excellent* *Отлично*
☐	☐	☐	✓	☐

2. In the table below please rank which issues are addressed well and not so well by forest management at present?
2. В приведенной ниже таблице, пожалуйста, проранжируйте, какие вопросы решаются хорошо и не так хорошо руководством лесного хозяйства в настоящее время?

	Score 5 excellent, down to 1 extremely poorly Оценка 5 отлично, вплоть до 1 очень плохо	Please briefly explain why? Просьба кратко объяснить, почему?
1. Biodiversity Maintenance, conservation and enhancement of biodiversity **Биоразнообразие** Поддержаниесохранение иувеличение биоразнообразия	4	Currently in Uzbekistan there are 9 reserves, 3 national parks, 1 natural nursery, 1 biosphere reserve, 10 nature reserves and natural monuments 5. Currently, the area of protected natural territories (OPT) is 1% of the total area of the country. It is planned to increase the area of protected areas to 10% В данный момент в Узбекистане имеется 9 заповедников, 3 природных парков, 1 природный питомник, 1 биосферный резерват, 10 заказников и 5 памятников природы. В настоящее время площадь охраняемых природных территорий (ОПТ) составляет 1 % от общей площади республики.В перспективе планируется довести площадь ОПТ до 10 %
2. Forest resources Maintenance or increase of forest area, growing stock, carbon stock **Лесные ресурсы** Поддержание увеличение площади лесов, древостоя, запас углерода	4	In 1990, the total area of the State Forest Fund (SFF) amounted to 2.5 mln. Ha, including forest 1.4 million. Ha. In 2015, the total area of the state forest fund is 9.8 million. Ha, of which forests 3.2 million. Ha. In the future, in 2020 the forest area is expected to reach 3.4 million. Ha. В 1990 году общая площадь Государственного Лесного Фонда (ГЛФ) составляла 2,5 млн. га, в том числе леса 1,4 млн. га. В 2015 году общая площадь Государственного Лесного Фонда составляет 9,8 млн. га, из них леса 3,2 млн. га. В перспективе 2020 году площадь лесов планируется довести до 3,4 млн. га.
3. Forest health Soil condition, defoliation, forest damages, desertification **Состояние лесов** Состояние почвы, обезлиствление лесные повреждения, опустынивание	4	Uzbekistan forests differ substantially in their natural composition, productivity and the functions they perform. Therefore, they are divided by natural zones of the mountain (16%), flood (1%), Vale (2%) and desert (81%) of the forest. Most desert plants are low-density 0.3 - 0.4 and have a small supply of wood: the average stock saxaul to 60 m³ / ha, cherkeznik - 30 m³ / ha, tamarisk - 3 - 4 cubic meters / ha. In Uzbekistan, the fight against desertification is a priority, about 10 million hectares of pastures require radical improvement. There is land degradation in irrigated arable areas, salinization has affected 65 percent of the irrigated area and the drying of the Aral Sea is an example of an ecological disaster on a global scale. At present, measures to combat pests and diseases are carried out on an area of 24 hectares of these, over an area of 14 hectares biological protection measures are used. Besides there is 1 biolaboratory operating in the country. Леса Узбекистана существенно различаются по своему природному составу, продуктивности и выполняемым функциям. Поэтому они разделены по природным зонам на горные (16%), пойменные (1%), долинные (2%) и пустынные (81%) леса. Большинство пустынных насаждений низкополнотны 0,3 – 0,4 и с небольшим запасом древесины: среднийзапас саксаульников до 60 куб.м/га, черкезников – 30 куб.м./га, гребенщика – 3 – 4 куб.м./га .

		В Узбекистане вопросы борьбы с опустыниванием являются приоритетными, примерно 10 миллионов гектаров пастбищ требуют коренного улучшения. Происходит деградация почв на орошаемых пахотных территориях, вторичное засоление затронуло 65 процентов орошаемых площадей, а усыхание Аральского моря является примером экологического бедствия в глобальном масштабе. В настоящее время меры борьбы против вредителей и болезней проводятся на площади 24 тыс.га. Из них на площади 14 тыс.га применяются биологические меры защиты. Кроме того в республике функционируют 1 биолаборатория
4. Maintenance of productive functions Ratio of increment & felling, illegal logging, non-wood goods, services **Обеспечение производственных функций** Коэффициент прироста и вырубок, незаконные рубки леса, недревесные товары, услуги	4	Industrial logging in Uzbekistan unavailable. Only thinning, sanitary and reforestation feelings take place. From all kinds of cuttings harvested 24 thousand cubic meters of timber. At the same time the annual felling volume does not exceed the annual increment. Cases of illegal logging of 300 pieces with a total reserve of timber 0.7 thousand cubic meters. Production of non-wood products in order to use the side of the State Forest Fund: - Preparation of a medicaments - 6847 tons, - Harvesting grains - 1673 tons, - Harvesting vegetables, 1048.2 tons, - Harvesting melons 1418.5 tons, - Harvesting potatoes 362.7 a ton, - Honey production 186 314 kg, - Egg production 811 thousand pieces. - The production of poultry meat 5216 kg, - manufacture of 45 tons of fish. Промышленная заготовка леса в Узбекистане отсутствует. В них проводятся только рубки ухода, санитарные и лесовосстановительные рубки. От всех видов рубок заготавливаются 24 тыс. куб м древесины. При этом ежегодный объём рубки не превышает годичный прирост. Случаи незаконной рубки леса составляет 300 штук с общим запасом древесины 0,7 тыс. куб.м. Производство не древесных товаров в порядке побочного пользования на гослесфонде составляет: - заготовка лекарственного сырья- 6847 тонн, - заготовка зерновых- 1673 тонн, - заготовка овощей-1048,2 тонн, - заготовка бахчи 1418,5 тонна, - заготовкакартошки 362,7 тонна, - производство меда 186 314 кг, - производство яиц 811 тыс. штук, - производство мясо птицы 5216 кг, -производство рыбы 45 тонн.
5. Protective functions Water quality, soil quality, erosion, floods, mudslides **Защитные функции** Качество воды, качество почвы, эрозия, наводнения, сели	4	In order to combat erosion, flooding, mudflows, sowing, planting of forests and measures to promote natural reforestation are held annually at the state forest fund area of over 42 hectares, Approximately 90% of the total creation of forests are carried out in the desert zone (38 thous. Ha), including 42% on the dried bottom of the Aral Sea (17 thousand. Ha). The main tree species in the desert are saxaul, Circassian (?) and Calligonum. In the mountainous area of juniper, walnut, almond, pistachio. In the valley of the poplar area, maple, sycamore, elm, honey locust and the fruit trees. The poplar tugai zone, willow, Loh et al. Besides forestry officers guard strictly natural and created forest. В целях борьбы с эрозией, наводнением, селевыми потоками ежегодно на ГЛФ проводятся посев, посадка лесов и меры содействия естественному возобновлению лесовна площади более 42 тыс.га, Около90% от общего объема создания лесов проводятся в пустынной зоне (38 тыс. га), в том числе 42 % на осушенном дне Аральского море (17 тыс. га). Основные лесообразующие пароды в песчаной зоне саксаул, черкес и кандым. В горной зоне арча, орех, миндаль, фисташка. В долинной зоне тополь, клён, чинар, вяз, гледичия и плодовые породы. В тугайной зоне тополь, ива, лох и др. Кроме этого сотрудники лесных хозяйствстрого охраняют естественные и созданные леса.
6. Socio-economic functions	4	Contribution to GDP in the country is small. Every year, reports on the development of forest management are taken by the government. Every

Contribution to GDP, workforce, wood consumption, wood trade, wood energy for heating and cooking **Социально-экономические функции** Вклад в ВВП, рабочей силы, потребления древесины, древесины торговля, энергетика древесины для отопления и приготовления пищи		year the production of forest products grows. Uzbekistan – is a low forest cover country, industrial logging is absent, therefore, timber trade is not involved. The primary function of forests in Uzbekistan is protective. Uzbekistan has a great demand for fuel wood. Therefore, starting in 2016 created a special fuel wood plantations over an area of 1500 hectares in order to meet the needs of the local population in the fuel timber. Вклад в ВВП в масштабе республике незначительное. Ежегодно правительством принимаются протоколы по развитию лесного хозяйства. С каждым годом увеличивается производства продукции лесного хозяйства. Узбекистан – малолесная республика, промышленная заготовка древесины отсутствует, поэтому торговлей древесины не занимается. Основная функция леса Узбекистана является защитным. В Узбекистане большой спрос на топливную древесину. Поэтому начиная с 2016 года создаются специальные плантации топливной древесины на площади 1500 га в целях удовлетворение потребности местного населения в топливной древесины.
7. Enabling environment Forest tenure, governance, enabling bureaucracy **Создание благоприятных условий** Лесовладение, управление, бюрократия	4	In Uzbekistan, all forests are state-owned. Main Forestry Department manages 94% of the forest, local authorities manage 5% other fund holders - 1%). В Узбекистане все леса являются государственными. В ведение Главного Управления лесного хозяйстванаходится 94% территории лесного фонда, в ведение местные органы власты 5% и у других фондодержателей 1%).
8. Capacity Forestinstitutions, capacitiesandresources **Потенциал** Учреждения лесного хозяйства, а также потенциал и ресурсы	4	There are 6 national and 60 forestry. In 5 forestry enterprises there is production for cultivation and marketing of non-timber forest products (manufacturing of medicinal and food plants). For wildlife conservation 7 state parks, 1 biosphere reserve. Meet the cultural and aesthetic needs of the population has two national natural park. Management of hunting farms engaged 5. For research activities are 6 forest experimental stations, 4 manufacturing plants, 3 forest enterprises, 5 forestries irrigation located in all corners of the country. And as there is potential for growth in forest area due to land inventory Функционируют 6 центральных и 60 лесныххозяйств. Налажено производство в 5-ти лесных хозяйствах по выращиванию и маркетинге недревесной лесной продукции (производство лекарственных и пищевых растений). Для сохранения дикой природы имеется 7 государственных заповедников, 1 биосферный резерват. Удовлетворению культурных и эстетических запросов населения оказывает 2 национальный природный парк. Ведением охотничьего хозяйства занимается 5 хозяйств. Для научно-исследовательской деятельности функционируют 6 лесных экспериментальных станций, 4 производственных предприятий, 3 лесохозяйственных предприятий, 5 ирригационный лесхозы находящихся во всех уголках республики. А так же имеется потенциал роста лесных площадей за счет инвентаризации земель
9. 5Monitoring Appropriate forest monitoring and information systems **Мониторинг** Системы соответствующего мониторинга и информации о лесах	4	Every year forest inventory work takes place in 5-6 forestry funded from the state budget. it includes: - State forest fund terriorty delimitation and organization whitih the territory; - Implementation of land works and special mapping of forest; - An inventory of the state forest funds; - Establishment of forest maturity age, determination of the annual allowable cut, cutting sizes; - Define the scope of work for the protection of the protection, reforestation and afforestation, as well as the volume of other forestry operations. Ежегодно из гос бюджета производится лесоустроительные работы в 5-6 лесных хозяйствах включающая в себя: - определение границ участков ГЛФ и внутрихозяйственную организацию территории;

		- выполнение топографо-геодезических работ и специальное картографирование лесов; - инвентаризацию ГЛФ; - установление возраста спелости леса определение расчетной лесосеки, размеров рубок; - определение объема работ по охране защите, восстановлению лесов и лесоразведению, а также объема других лесохозяйственных работ.
10. Other (please specify): **Другое** (пожалуйста, укажите):		……

Analysis of forest monitoring and information systems with regards to sustainable forest management (SFM)
Анализ систем лесного мониторинга и информации в отношении устойчивого лесопользования (УЛП)

3. What forest monitoring and information systems have been used in your country to your knowledge in the past and currently, including any criteria and indicators for SFM that have been developed (please submit the se along with this questionnaire if you have the documents). Please list all you know.
Какой мониторинг и лесные информационные системы используются в вашей стране по вашим знаниям в прошлом и в настоящее время, в том числе любые критерии и индикаторы УЛП, которые были разработаны (просьба представить их вместе с этой анкете, если у вас есть документы). Просьбаперечислитьвсе, чтовызнаете.

In the past, used accounting of forests in the paper (maps) and tabular form, today ispolzuyutsya geo-information systems. Also ongoing work on monitoring and assessment of forest resources in Uzbekistan in cooperation with FAO
В прошлом использовался учет лесов в бумажном (карты) и табличном виде, на сегодняшний день используются гео-информационные системы. Так же проводяться работы по мониторингу и оценке лесных ресурсов в Узбекистане в сотрудничестве с ФАО

3.1. Do you report forest related indicators/data to FAO, CBD, UNFCCC, UNCCD, others?
Подаете ли вы показатели / данные, связанные с лесами в ФАО, КБР, РКИК ООН, КБО ООН, другие?
Yes Да

4. How would you rate the current forestry sector performance in your country with regards to appropriate and useful forest monitoring and information systems?
Как бы вы оценили текущую деятельность сектора лесного хозяйства в вашей стране в отношении надлежащих и полезных систем мониторинга леса и информационых систем?

Very poor *Очень плохо*	*Poor* *Плохо*	*OK* *OK*	*Good* *Хорошо*	*Excellent* *Отлично*
☐	☐	☐	✓	☐

5. In the table below please rank the performance of forest monitoring and information systems in your country against the specific criteria.
В таблице ниже, пожалуйста оцените деятельность систем мониторинга и информации о лесах в вашей стране в отношении конкретных критериев.

	Score 5 excellent, down to 1 extremely poorly Оценка 5 отлично, вплоть до 1 очень плохо	Please briefly explain why? Просьба кратко объяснить, почему?
1. Biodiversity **Биоразнообразие**	4	Monitoring and data collection on biodiversity is performed Производиться мониторинг и сбор информации о биоразнобразии
2. Forest resources **Лесные ресурсы**	4	Monitoring and data collection on forest resources is performed Производиться мониторинг и сбор информации о лесных ресурсов

3. Forest health **Состояние лесов**	4	Monitoring and data collection on forest health is performed Производиться мониторинг и сбор информации о состоянии лесов
4. Maintenance of productive functions **Обеспечение производственных функций**	4	Monitoring and data collection on achievement of productive indicators on forestry Производиться мониторинг и сбор информации о выполнении производственных показателей по лесному хозяйству.
5. Protective functions **Защитные функции**	4	Monitoring and data collection regarding protective functions of forests is performed Производиться мониторинг и сбор информации о состоянии лесов с защитыми функциями
6. Socio-economic functions **Социально-экономические функции**	4	Monitoring and data collection regarding socio economic indicators is performed Производиться мониторинг и сбор информации по социально экономическим показателям
7. Enabling environment **Создание благоприятных условий**	4	Enabling environment is created Созданы блогоприятные условия.
8. Capacity **Потенциал**	4	Имееться
9. Other (please specify): **Другое** (пожалуйста, укажите):		

10. Looking ahead to the next 10 to 20 years with developments in sustainable forest management and broadening demands for forest products and services, changing ecological, governance and economic environments, please articulate what the most important functions of a useful and appropriate forest information system should be in your country? Please rank them in order of priority?

Заглядывая вперед в следующие 10 до 20 лет с развитием устойчивого лесопользования и расширением спроса на лесные товары и услуги, изменением экологических, управленческих и экономических условий, пожалуйста, определите, каковы наиболее важные функции полезной и целесообразной лесной информационной системы должны быть в вашей стране? Пожалуйста, проранжируйте их в порядке приоритета?

1.	Score 5 excellent, down to 1 extremely poorly Оценка 5 отлично, вплоть до 1 очень плохо	Please briefly explain why? Просьба кратко объяснить, почему?
2. Describe, monitor, and report on the national forest trends and changes 3. Описывать, отслеживать и сообщать о тенденциях и изменениях национальных лесов	4	Each year, as of January 1, local authorities approve land forest fund balance and all the changes introduced by land categories are put in there. Ежегодно по состоянию на 1 января утверждается местными органами власти земельный баланс лесного фонда и вносится все произошедшие изменения по категориям земель.
4. Assess progress towards sustainable forest management and identify emerging threats	4	Forestry volumes are planned on the basis of materials of forest management, approved the balance of the land and depending on the forestry the capacity of. The main threats and weaknesses: tough forest conditions, grazing, pests and diseases Объемы лесопользования планируется на основании материалов лесоустройства, утвержденного земельного баланса и в зависимости от потенциала лесных хозяйств. Основные угрозы и слабые стороны: жесткие лесорастительные условия, выпас скота,

and weaknesses; 5. Оценивать прогресс в обеспечении устойчивого лесопользования и выявлять возникающие угрозы и слабые стороны;		вредители и болезни
6. Assistinthedevelopmentandevaluationofnationaland/orsub-nationalforestpolicies, strategies, plansandprogrammes 7. Оказывать помощь в разработке и оценке национальных и / или субнациональных лесных политик, стратегий, планов и программ	4	Every year, a program of forestry development and approves the minutes of the Cabinet of Ministers. On the basis of this protocol shall be communicated to the Order of the performers Ежегодно разрабатывается программа развития лесного хозяйства и утверждается Протоколом Кабинета Министров. На основании этого протокола Приказом доводится до исполнителей.
8. Serveasabasisforcross-sectoralforestrelateddatacollection 9. Служить основой для кроссекторального сбора данных, связанных с лесом	4	All forest enterprises, regions and headquarters in the country are organized, by which on the developed forms of data are collected electronically. Во всех лесхозах, областях и в республике организованы штабы, со стороны которых по разработанным формам осуществляется сбор данных в электронном виде.
10. Focus research efforts where knowledge is still inadequate 11. Направлять научно-исследовательские работы, где знаний по-прежнему недостаточно	4	Since independence, worked out 91 scientific topics incl 77 topics in applied research, the 9 on innovative projects and 4 threads on a contract basis. Scientific studies have mainly focused on the creation of protective forest plantations in various site conditions, cultivation of ornamental trees and shrubs, pest and disease the main forest-forming species, the improvement and introduction of modern technologies in forestry and so on. A weakness of the research is not enough work on economic research and breeding. За годы независимости проработано 91 научных тем в.т.ч. 77 тем по прикладным исследованиям, 9 тем по инновационным проектам и 4 темы похоздоговору. Научные исследования в основном направлены на создание защитных лесных насаждений в различных лесорастительных условиях, выращиванию ценных декоративных деревьев и кустарников, борьбе с вредителями и болезнями основных лесообразующих пород, совершенствованию и внедрению современных технологий в лесном хозяйстве и т д. Слабой стороной научных исследований является не достаточно ведется работа по экономическому исследованию и селекционным работам.
12. Provide a common understanding of what is meant by and the status of sustainable forest management for other sectors and the society 13. Обеспечивать общее	4	Sustainable forest management implies rational and no exhausting management of forest resources without damaging natural resources Под устойчивое лесопользование подразумевается рациональное и не истощительное пользование лесными ресурсами без ущерба природной среды.

понимание того, что подразумевается под и статус устойчивого лесопользования для других отраслей и общества		
14. Serveasabasisforinternationalcooperationandcollaborationon SFMandreporting 15. Служить в качестве основы для международного сотрудничества и кооперации в области устойчивого лесопользования и отчетности	4	Data sustainable forest management is the basis for international cooperation. Данные устойчивого лесопользования является основой для международного сотрудничества.
16. Other (please specify) 17. **Другое** (пожалуйста, укажите):		

8. What would be the best form, of an appropriate forest information system, what kind of information should be collected, how and by whom?
Что было бы лучшей формой, подходящей лесной информационной системы, какого рода информация должна быть собрана, как и кем?

All of the forest resources information needs to be collected electronically forestry authorities
Вся информация о лесных ресурсов должна быть собрана в электронном виде органами лесного хозяйства

8.1. What kind of Criteria and Indicators are needed? For:
Какого рода Критерии и Индикаторы необходимы? Для:

• Sustainable Forest Management: Устойчивого лесопользования	Criteria: safety and protection of reforestation and the use of forest resources Indicator: forest condition Критерии: охрана, защита, воспроизводства лесови использованиелесных ресурсов индикатор: состояние лесов
• The whole forest sector: Лесного сектора в целом	Criteria: safety and protection of reforestation and the use of forest resources Indicator: forest condition Критерии: охрана, защита, воспроизводства лесов и использование лесных ресурсов индикатор: состояние лесов

• The forest-based bio-economy: Био-экономики, основанной на лесах	It is planned in the future to establish production of wooden briquettes from brushwood and firewood Планируется в перспективе наладить производство древесных брикетов из хвороста и дров.
• For international processes (Forest Europe, FAO, UNFCCC, CBD, UNCCD, …): Международных процессов: (Леса Европы, ФАО, РКИК ООН, КБР, КБО ООН, ...):	Forestry agencies in their activities are guided by and work in accordance with the Conventions Органы лесного хозяйства в своей деятельности руководствуются и работают в соответствии с принятыми Конвенциями

9. Finally what are the bottlenecks to achieving this ideal system? And within the current financial resource and material constraints, how would you recommend that a feasible/practical system be developed that best suits the needs of yours?
И, наконец, каковы ограничения для достижения этой идеальной системы? И в рамках текущих финансовых ресурсов и материальных ограничений, как бы вы рекомендовали разработать осуществимую / практическую систему, которая наилучшим образом отвечала бы вашим потребностям?

The main limitation to achieve the ideal system is the lack of financial resources, modern information systems and equipment, the experience of developed countries in this field. It needs help of international organizations such as UNECE and FAO
Основным ограничениеми для достижения идеальной системы являеться нехватка финансовых средств, современных информационных систем и оборудований, опыт развитых стран в данной сфере. Нуждается в помощи международных организаций, таких как ФАО