



**REPUBLIC OF ALBANIA  
MINISTRY OF TOURISM AND ENVIRONMENT  
NATIONAL ENVIRONMENT AGENCY  
FORESTRY DIVISION**

**Summary of presentations and discussions during the NFICB 8<sup>th</sup> experience sharing meeting, including training workshop March 11-15 and Second National Seminar, March 19, 2019.**

Since the beginning of the ANFI Capacity Building project, there have been more than two years of capacity building, method development and IT system (Open Foris). The first phase of field data collection for the National Forest and Pasture Inventory was completed in Albania and data processing training was carried out as well in November 2018. In order to arrive at the preliminary results of the inventory, a week of experiences sharing was held during March 11-15, 2019 and the Second National Seminar on March 19, 2019.

The main objective of this meeting was the capacity building of NEA Core Team relating to field data statistical analysis, processing and preliminary table result generation and finally the presentations of this result in a National Seminar. The minutes of the meeting have been divided into two parts - the training workshop and the national seminar.

**Minutes of the training workshop:**

**Dates: March 11-15, 2019**

**Venue: Meeting Hall, “Mondial Hotel”, “Muhamed Gjolleha” st., Tirana**

**Chairman: Mr. Kliti Starja**

**Participants in the training workshop:**

NEA Core Team, Swedish Team (SLU&SFA), Faculty of Forestry Sciences Experts, Environment Services Project (ESP) Team, ASIG representative.

**Specific objectives:**

- ✓ Capacity building related to data analysis;
- ✓ Review of inventory preliminary results, generating first preliminary data to be presented in the 19<sup>th</sup> March National Seminar;
- ✓ Critical assessment of first inventory results;
- ✓ Identification of requirements for further training of the Team on specific components (LiDAR, GIS etc.).

**Expected results:**

Sharing of experiences will assist NEA Team to perfection data processing and analyzing; NEA Team capable to analyze data and generate tables on various topics from inventory;

Review of volume formulas and set the most appropriate formulas to be used in case of species for which no volume formulas are available;  
NEA Core Team processing and preparing results to be analyzed and presented in the Second National Seminar of March 19 2019;  
NEA Team capable to define needs for training and collaboration for being able to successfully terminate of the process;  
NEA Team moving one step forward in the communication with stakeholders concerning expectations of the seminar results.

### **Monday, March 11 2019**

The workshop was led by Mr. Kliti Starja, Head of Forestry Division at the National Environment Agency.

After the presentation of all the participants, **Mr. Starja** took the floor, welcomed all the participants and made a brief introduction about the progress of the project and above all about the termination of the first phase of the data collection and processing.

The discussion stressed the fact that the processing of the preliminary results is very important to be presented at the National Seminar on Tuesday morning as it serve as preparatory for the presentation and final dissemination and publication of the data.

The meeting continued with discussions on data processing:

**Mr. Elmaz** explained the various steps until data processing:

- There was the cleansing of database from errors;
- There were exported data in *MS Access*, we established connection between pre-evaluation data and the field data and we re-imported them again to *MS Excel* through *Pivot Table* and expansion factor it was carried out the data processing.
- All results are accurate, except volumes. After that we encountered problems during the use of volumes formulas used as well as in ANFI 2004;

We also used comparability even coefficient of the form regarding volumes, as well as the formula used in Sweden;

- We have been very careful in the data cleansing and also concluded master table in *MS Excel* where expansion factor is included;

We have used regression function of 2004 Inventory. Concerning other species which doesn't have a formula we referred to the general formula (suggested by the Swedish side for use only when there will be no other opportunity to find the appropriate formulas for the preliminary results);

- Test were done as well with Italian formulas but the results did not match each other.

**Mr. Michael** asked if the max and min value correction has been applied.

**Ms. Cornelia** suggested it's necessary to limit, before calculating, the values which goes out of the normal curve.

**Mr. Jonas** stressed that regression analysis serves more as comparison to view how much compatible are the dependency curve of height and diameter.

From the discussion it was stressed that there is insufficient time to gain new formulas as it takes a project in its self;

Also in the *Excel* format, it's difficult to track manually the data that's why these data should be uploaded in the server in a sustainable way;

The only comparison that we can make is between max and min of 2004 Inventory;

Before we get a final result, we should compare volumes through various formulas in different situations comparing with calculations based in the coefficient of the form.

From all the discussions it was seen necessary that a data calculation team (**Mr. Elmaz, Mr. Jonas, Mrs. Cornelia and Mr. Elvin**) should recalculate the data in order to have some preliminary results.

**Mrs. Cornelia** showed an exercise relating the calculation of volumes using 2004 formula. For sample trees we have an accurate volume after we have measured the height from which the volume function is generated. We saw that in some intervals the function does not follow the logic in this situation, she stressed, and we need to find an average value of the function. So we exclude the maximum and minimum values that arise out of logic function.

From all the discussions it was agreed that we should use 2004 formulas concerning the present species when available. Meanwhile concerning species which doesn't possess a formula it will be chosen the formulas closer to the species.

**Mr. Jonas** stressed that the way and formulas should be documented for each species that will be used.

After that **Mr. Mats** raised the question concerning the next 6 month plan.

**Mr. Kliti** explained in general the next 6 month plan. It will be undertaken an informative tour in 5 regions across the country, then it will be followed by second phase of field measurements which is expected to begin at April or early May.

Concerning Field Teams they will be equipped with new tablets, that's why **Mrs. Blerina** stressed that there should be carried out tablet checks before the beginning of the work in the field.

Discussion continued about the possibility to create maps in the frame work of inventory. There were shown examples of mapping in the Sweden, demonstrating that only forest general maps are created as well as a few map for the INSPIRE directive. To create maps **Mr. Michael** pointed at several ways.

**Mr. Jonas** suggested that you have to define what kind of thematic maps you want to create then to decide method to be used. **Mr. Kliti stressed** that is necessary for their production to contract an external GIS expert to guide the map production process.

### **Tuesday March 12:**

In the second day of the meeting the work process followed by dividing in three working groups as below:

1. Field data processing Team;
2. LIDAR data processing Team;
3. Policy approaching discussion Team.

According to work themes there were assigned also the participants in to three Teams: **Kliti, Mats, Björn, Erion, Leonidha, and Behar**, in policy discussion team; **Cornelia, Jonas, Elmaz, Shkëlzen and Elvin** in the data processing Team and **Michael, Silvamina, Bilena, Blerina and Valbona** in the LiDAR data processing Team, (partly) followed by ASIG representatives.

In the afternoon meeting, each Team summarised the accomplished work.

### **Wednesday March 13:**

Third day started with presentations of work done by all three Teams.

**Mr. Michael** explained that a shape file was received by ASIG, a part of the area of Maliq-Korça region. Based on these LiDAR data we look at with "Fugro Viewer" program.

LiDAR views show three coordinates of objects X, Y, Z so the height from the ground. We are interested in the height and density of the points.

At the first step we will design flat area to gain the height of points over the ground; the second step is to produce the 2D image. We classify height for each 5 meters and so we combine LiDAR

data with inventory data making their comparison possible. So, we can design models as well as other areas where we have not been with ANFI. Doing this, we combine ANFI data with remote sensing to maps that we want.

**Mr. Michael** stressed that by LiDAR data we **cannot define** type of the tree species, it is impossible.

Present in the workshop was also **Mr. Erin Mlloja**, representative from ASIG who stressed that the Albanian LiDAR data are not certified yet, meantime Michael opinion was that not necessary we want them certified.

The acquirement of the software to insert LiDAR data that will facilitate the work is in the process. We should hurry to hire the external GIS expert who should be a warranty to receive and save the data.

**Mr. Erion** confirmed that software is acquired now, so it is ready to save the data.

**Mr. Kliti** expressed that maps listed in the ToR to be produced by the project were:

1. Distribution of the forest in Albania;
2. Land cover map.

For their accomplishment it will first be discussed how to formulate the training topics in the function of their producing.

Participants continued discussions on the terms of reference for mapping training by setting the closest possible period in June.

The next discussion was the agenda of the National Seminar. It was discussed and settled the referrals of NEA Team and a presentation from the Swedish experts.

#### **Thursday, March 14**

**Mr. Kliti** referred to a summary of the Wednesday, calling it highly intense by the work of two data processing and mapping working Teams. He then laid out the agenda of the day as follows:

The Volume calculating Team will continue to work in the other room and Michael will present us with the possible variants of map processing.

**Mr. Michael** launched questioned the following mapping possibilities:

1. Recreate maps according to methods used 2004;
  - Require much work;
2. Use new *Corine* map to define forest, pastures and other types of areas needed. Fill polygons using classification with Sentinel images and ANFPI field data;
  - Probably the best forest polygons available due to work already done outside project;
3. Use polygons defined 2004 and fill polygons using classification with Sentinel images and ANFPI field data;
  - From previous experience we know that polygons are not precise;
4. Create automatic segmentation using satellite imagery as base and then fill polygons using classification with Sentinel images and ANFPI field data;
  - Probably the least precise method to produce polygons but they will be the most recent;
5. Create thematic maps using some kind of non forest polygons such as municipalities using ANFI field data;
  - Probably not sufficient but easily done;

- 6 Create Kriging (or similar) images of field measurements covering Albania. One map per variable;
  - A good way of illustrating singular variables e.g. land use but not possible to use for different variables in the same map.

I find it difficult, **repeated Michael** to understand what kind of map you require and what you need. Caution should be paid to interpretation since any map should be properly interpreted. Mostly you can only create illustrative maps that are not used for any other purpose. About this subject **Mr. Michael** said that we think to organize a brief training course.

**Mr. Elvin Toromani** presented the results of the volumes calculation from the working team.

**Mr. Jonas** continued the discussion stating that you should constantly design formalized quality control methods using QGIS, *MS Access* and *MS Excel* as auxiliary tools.

You already have a data storage server and you have made it possible to avoid maximum and minimum values. You can also refer to the Kosovo's formulas for calculating volumes. Volume functions are very important and should therefore be reviewed the way of calculation by pivot table is ok but for the continuation there is a need for another automatic calculation program as this is more efficient and more sustainable.

### **Friday, March 15 2019**

Friday as the last day of the workshop served to summarise the objectives set to accomplish for year 2019, this year's ongoing plan as well as the themes of reference at the National Seminar.

**Mr. Kliti Starja** listed the accomplished objectives until now

1. Analysing and data processing in T700;
  - a. Data quality;
  - b. Verification of areas with missing data;
  - c. Processing of T700 data.

These activities are completed:

2. We begin early February the preliminary discussion on the data with MTE and Faculty of Forestry Sciences;
3. Organization of this seminar and preparing of the result for the National Seminar;
4. The Tour with the Field Teams has been postponed later on and we hope to accomplish this year;
5. An information tour is planned in 5 regions in the framework of the Communication Strategy;
6. Disseminations of preliminary results and their interpretation;
7. Second phase of measurements T1100:
  - a. Procurements;
  - b. Open Foris software improvement;
  - c. Field Teams training repeated exercises with new changes.
8. Analysing and processing data collected from the grid T1100:
  - a. Quality analysis of T1100 data;
  - b. Field verification of sampling plots which have lack of information;
  - c. Training workshops on processing data and extraction of the results;
  - d. Data processing and extraction of preliminary (T1100);

- e. Design of preliminary report concerning T1100 results;
- 9. Third and last National Seminar relating ANFI.
  - a. Preparations to accomplish by Third National Seminar on ANFI;
  - b. Holding the Third National Seminar of ANFI;
- 10. Dissemination of final results of ANFI:
  - a. Design and publication of a book on methodology, approach used during the caring out ANFI;
  - b. Design and publication of Final report of ANFI.

**Mr. Björn** supported the idea of communication and socialization as very important, and you can do it yourself with the Field Teams by making a summary of the work and a "study-tour" together with them.

**Mr. Mats** also noted that work in the field should be finalized before September, since it is not possible to go directly to the National Final Seminar, as a pre-seminar is needed to familiarize ourselves with the issues. The final seminar will be made possible by the end of November.

**Mr. Björn** supported the idea to postpone in time the project because more time is needed to analyze and processing data.

**Mr. Kliti Starja** stressed that time needed for the preparation of the Final Seminar should be at least one month. We have the responsibility to conclude this process and also require support from the Ministry and the policy level for establishing a highly missing structure - the Forest Agency. The Environmental Service Project provides many projects that do not know who to delegate.

Friday's discussions were closed with the definition of the seminar presentations as well as the figures to be announced as preliminary.

## Minutes of the Second National Seminar

**Date: March 19, 2019**

**Venue: “Hotel Tirana International”**

### **Participants:**

Minister of Tourism and Environment **Mr. Blendi Klosi**;  
Head of National Environment Agency **Mr. Edison Konomi**;  
Head of National Protected Areas Agency **Mr. Zamir Dedei**;  
Dean of the Faculty of Forestry Sciences **Mr. Leonidha Peri**;  
Head of Environment Project at BB, **Mrs. Drita Dade**;  
Swedish Consultancy Team (SLU/SFA);  
ASIG representative;  
IT experts;  
NEA Core Team staff;  
Field Teams staff representative of RAPA.  
(For further details, see the list of attendees in Annex 1:1);

The Minister took the floor. Mr. Klosi set the forest policy at the spotlight and the forests as an important economy. In his presentation entitled: "**Inventory of Forests in Albania**" he first stressed the importance of forest ecosystems such as: Makes livelihoods sustainable, Biodiversity conservation, Reduces carbon emissions, Protect the forests for future generations, and Breaks cycles of corruption and poverty. Spending time close to the trees improves physical and mental health by increasing energies.

National Forest Inventory pays contribution in the accomplishment of objectives 15 and 17 of sustainable development of “LIFE in the EARTH” and “Partnership”.

### **Data are the key, to manage forests towards sustainable development:**

Investing in the monitoring in the national as well as local it becomes possible that government have a clear picture of forest impact in the society, economy and in the environment. This information's is important in:

- Modernization of forestry sector and the food safety;
- Investments in technology and innovations;
- Define the level of the support regarding various economy sectors;

Forestry statistics which are used in the inventory process are widely used as below:

- Forest policies;
- Planning of National Forest Managing;
- Planning of investments in forest industry;
- Evaluation of green houses gases emissions and forest certification and changes in carbon stock;
- Scientific researches.

We are currently registering forests and it's a process that will continue to be finalized as the basis of a well-managed forest economy. We are involved in a planting (afforestation) campaign but will continue with concrete afforestation plans as this is just the beginning.

**Mr. Klosi** concluded his speech by thanking the Swedish Working Teams and collaboration for sustainable development of the forest sector.

**Dean of Forest Faculty Science Mr. Leonidha Peri**, continued with his presentation entitled: “Forest Economy in the policy planning that follows the approving of the strategic forestry document with reference to the policy document and the stages to be followed for its implementation”.

Three conclusion of the analysis of forestry sector:

- Story of gradual dismantling of the rule system and structural organization of the sector;
- Country forestry sources in their most difficult situation, seen by biological view as well as from socio-economic view;
- We are seriously risking the principle of Sustainable Forest Management (SFM) for a long-term period;

It leads to the need for intervention in forestry policies "**Momentum in time for a radical change in sector development policies**" Concerning this, a National Forestry Program (NFP) is needed, which will have its own stages of development: Situation analysis, policy design and implementation, monitoring and evaluation. All these phases will be supported by policies and strategies, legislation and institutional framework.

**The next presentation was held by Mr. Björn Merzell**, the Swedish Forest Agency representative. In the presentation on "Forest Policy and National Forest Inventory in Development of the Forest Sector in Sweden" he presented a brief overview of forestry policies in Sweden, the development of the forest sector and the role of the Swedish Forest Agency in the forestry economy.

In Sweden 51% of the forests are owned by private family forest owners, 17% are state-owned, 7% are other public forests and 25% owned by private forest companies. Sweden's export value of wood products is about 14 billion €, which is 10% of the total value of all Swedish exports.

Even in my country, stressed Mr. Björn, forests have had their own stages of mismanagement and destruction but this has happened 100 years ago. Today we have a National Forest Programme as well as forestry policy that set the balance of forest production and biodiversity conservation.

The first national forest inventory in Sweden started already in 1923 and continues to be carried out by the Forestry Faculty at SLU by providing information and data:

- ... for policy development and strategic decisions;
- ... for strategic decisions on forest industry establishment;
- ... for calculation of sustainable harvesting levels;
- ... as basic data for research activities;
- ... for monitoring of environmental performance;
- ... for international reporting;

The Swedish Forest Agency carries out these main functions:

Law surveillance as well as providing forest information and consulting services like: Day of forest, My forest – internet etc.

Forest monitoring: the inventories, utilization levels, regeneration quality as well as environmental evaluation for the forest related issues.

Also, he stressed that Geographic Information System is crucial concerning the Agency's daily work, regarding monitoring and forestry development.

**Another important presentation was held by Mr. Kliti Starja** entitled: "Process of National Inventory of Forest during three years period" where it began with the importance of caring out

this process in the context of new national policies and the global objectives of UNFF or the vision of FAO, Forest Europe and the European Network of National Forest Inventories. ANFI is a process which provides accurate data regarding the size, distribution, and forest composition of forestry areas, production variables, but also ecosystem services, biodiversity, biomass, carbon sequestration, etc. NEA, stressed him, aims to transform the system into a sustainable monitoring system for data at the country level. This system will enable the re-inventory 20% of the bundles every 5 years and by 2021 it will be possible to calculate the differences between the two measurements.

Main ANFI function is the monitoring of state of forests as a national and international obligation which assists in the policies drafting and strategies in the forest. Involved stakeholders in this process are: NEA by Forestry Division, Field Staffs from NAPA as well as SLU-SFA Consultancy which assist the process and capacity building.

Mr. Starja listed the main steps that have been followed:

- Design of permanent grid of 1100 bundles by 5 sampling plots, pre-evaluation of these areas, field measurements and statistical processing of data.

Main result of ANFI is statistical and is used regarding various analyses of the state, distribution and changes in the forest by focusing in:

- Tendencies of forest and pastures use and other ways of land use;
- Change in time of the standing timber wood;
- Managing form and regeneration state.

Building a sustainable system of ANFI is able to face with these constant challenges:

- Improvements and organizational sustainability;
- Developments and continuous improvements in methodologies and technologies;
- Permanent needs for training and qualifications to update the knowledge;
- Continuous communication, collaboration and transparency.

**Mr. Hektor Xhomara summarized the design and implementation of the National Communication Strategy<sup>1</sup>:**

Strategy of Communication is a tool to promote ANFI as:

- Priority and principals of ANFI 2018 Communication Strategy
- 1) Strategy should provide a long term sustainability;
  - 2) To implement in an appropriate way national system of forest inventory in time and in efficient way.

CS set the users in the spotlight of the communication process.

CS is focused in the promotion and the awareness relating to ANFI 2018.

The ANFI programme provide actual information, consistent and reliable regarding the state and trends of forest in Albania.

Management and involvement of interest stakeholders was another task implemented in the framework of this strategy, so 5 regional meetings were organized during April 2018 sharing with the stakeholders the first results of the ANFI and in the meantime pulling out possible opinions and suggestions.

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<sup>1</sup> Due to the time running out, it wasn't possible to make a presentation of the CS, even though it was scheduled in the program of the national Seminar.

After that **Mrs. Bilena Hyseni** held a presentation on the topic "Establishment of the monitoring network and the pre-evaluation process" focusing on these key issues: Establishing the monitoring network, designation of cluster's plots, Pre-evaluation Process, Methodology followed Analyze pre-evaluation data.

**Mrs. Bilena** explained the steps and the method followed during the pre-evaluation process as well as the analysis of the results compared to the field data. So, the deviation standards were calculated according to the "CAPPa VALUE" method. This method takes into account the coefficient of randomness (or the probability of the random agreement), making it possible to calculate the quality of a statistical product.

The next presentation was made by **Mrs. Blerina Kurti**, contracted IT expert for design a data collection system titled "Open Foris Collect" for Albania. Mrs. Kurti stressed that this program is the translation of the Field Manual. By means of logical connections, it is possible for the requested information to come one after the other eliminating, as appropriate, requests for unnecessary specifications for the situation that appears on the field.

The main issues in this presentation were:

- Development of Open Foris for field measurement;
- Include comments / coordinates in the application;
- Preparing needed GPS data;
- Creating a monitoring application;
- Updating functionalities according to field comments;
- Transfer data to the AKSHI server;
- Discussion for Analysis / Data Control;

The next step was the transfer of data to the AKSHI server and sign up accounts for the NEA team. We are in the process and have a broad objective to realize the completion of field measurements and perform quality control and processing of statistics data.

**Mr. Behar Hate** in his presentation "Field Work Process" made a brief description of field work and manual field measurements. During this presentation were presented the difficulties and problems encountered in preparing the field work, as well as the organization of data collection work in the field. Also, data quality analysis with the *cappa* value method that confirms good measurements to the field.

During these two years, we have worked on training the staff of NEA Core Team and the RAPA Field Teams to apply the field manual, the use of data collection equipment, etc.

Training topics relating Capacity Building has been very reach listed as below:

- Evaluation of pastures and forestry vegetation aspects, medicinal plants;
- Classification of land cover concerning forest lands, erosion;
- Health and safety
- Caring out a study tour relating experience sharing in Sweden;
- Caring out pilot Survey;
- Training staff to have knowledge on Open Foris software;
- Improving team skills in Open Foris software practicing, apply Field Manual, equipment use etc.

After analyzing and processing the data, it is aimed to complete these key variables.

- Forest area according forest type;
- Forest and pastures area by land use categories;
- Forest area by managing form;

- Forest area by forest composition;
- Forest area by age-classes;
- Forest area by fire damage;
- Forest volume by forest type;
- Forest volume by managing form;
- Forest volume by main species;
- Forest volume by age-classes.

Then a video was shown produced by NEA Team that presented the problematic encountered in the field, the difficulties with the vehicles as well as the way to carry out measurements and quality control in the field.

**Mr. Elmaz Islami** presented the preliminary data from the statistical processing of the first phase of the measurements field.

Data processing has gone through these main phases:

- Data encountering problems (Data – mining);
- Data cleansing/correction;
- Data processing.

Analysis of recorded data through checking of these data for non-logic deviations:

- Height recording in (dm<sup>2</sup>) in some cases;
- Height measurement in broken trees;
- Inaccurate measurements in some cases.

Working Team through statistical checking methods made possible as below:

- Values by abnormal deviation were identified;
- New functions through D.1.3 and tree heights were calculated;
- Based in these models height relating tree height was estimated for trees that did not measure height.

After data cleansing, species were grouped into groups by families/ genus calculating the volume of measured trees, according to the equations used to calculate the volume of trees in the ANFI 2004.

Silver fir (*Abies alba*)

$$V = 0.00894 - 0.40429 \cdot D^3 \cdot H + 0.00000334 \cdot H^4 + 16.45303 \cdot D^3$$

Macedonian silver fir (*Abies borisii-regis*)

$$V = -0.00037178 + 0.28764 \cdot D^2 \cdot H + 0.00002815 \cdot H^3$$

Pines (*Pinus sp.*)

$$V = -0.00089978 - 0.00329 \cdot D^5 \cdot H + 0.33982 \cdot D^2 \cdot H + 1.92278 \cdot D^3$$

Ash (*Fraxinus angustifolia*)

$$V = -0.00247 + 3.24126 \cdot D^2 + 0.00000032 \cdot H^4 + 0.07715 \cdot D^2 \cdot H$$

Maple (*Acer sp.*)

$$V = 0.012 + 26.38906 \cdot D^3 - 83.48778 \cdot D^5 + 0.07246 \cdot D^5 \cdot H$$

Oaks (*Quercus sp.*)

$$V = 0.02226 - 0.3529 \cdot D + 0.5216 \cdot D^2 \cdot H - 0.29616 \cdot D^3 \cdot H$$

European beech (*Fagus sylvatica*)

$$V = 0.01193 + 0.35466 \cdot D^2 \cdot H - 2.30104 \cdot D^6 - 0.00000005 \cdot H^4$$

Up to this phase, 13,831 sampling plot trees have been measured, the total number of standing trees reach 550 million trees as a result of the calculations.

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<sup>2</sup> Decimeter.

As long as there is still 35% of the number of clusters to carry out the measurements, the calculated data are preliminary. 46% of the country's territory is covered by forests, 19% are pastures, while forests themselves are 2/3 of the forest and pasture area versus 1/3 of pastures.

The largest part of the forest area is covered by 34% coppice; in the second place are pastures with 30% winter and summer pastures. In the third place comes high forests with 23% followed by scrubs with 13% of the area against the total area of forests and pastures in Albania.

The forests of our country are dominated by broad leaf forest in 66% of their total, where 20% is covered by coniferous forests. Forests mixed with dominance cover a small percentage of about 6% and 8% covered the mixed coniferous forests.

During the presentation, Mr. Islami summarized preliminary findings on areas and volumes by management form.

The entire ANFI process is expected to be completed by the end of 2019, so it will include measurements in all classified clusters for the inventory as well as statistical processing and analysis of the collected field data.

As introduction to the final discussion session **Mr. Mats** introduced 3 strategically important issues for the participants to address in the discussions:

1. What do the preliminary results illustrate (most importantly) regarding the current situation of the Albanian forest?
2. What is missing/what else in the current forest situation would it be desirable that the results could show?
3. What should the forests ideally look like in future (sustainably in order to satisfy needs of biodiversity, recreation, economic production, employment...?)

During that discussion a number of questions were raised by the participants:

**-Mr. Sokol Bezhani**-Can the protected areas be separated once they have another management way?

**-Mr. Rexhep Peka**- Will there be additional formulas for calculating volumes?

**-Mrs. Aida Tafili**- Can there be a comparison with the cadastre or the 2004 inventory?

**-Mr. Admir Seci** - We see that the forest area and the volumes are bigger than they have been reported so far this makes us optimistic, or the result may even change to the end of the measurements.

**-Mr. Haki Kola** - Can you estimate the average annual growth? It will be very important!

Questions were answered by **Kliti Starja** who explained to the participants that:

- Protected areas (PA) can be separated but we are doing national inventories including PA.

- The project is a very short period of time for developing new formulas for calculating the volume

- Mr. Mats stressed that it is extremely hazardous to compare inventory national data with the cadastre data.

- The presented results are preliminary and the final results cannot be presented until next year.

- Average annual growth will be calculated as a very important indicator so it is one of the indicators that we will present in the future.

The participants concluded that it had been a very productive seminar and expressed optimistic that we will arrive in the results of autumn 2019 with the final output and a good experience in ANFI 2018-2019.

The National Seminar was closed by Mr. Starja thanking all the participants.

## Konferencapër Politikat në Ekonominë Pyjore-Inventarin Kombëtar të Pyjeve

E Martë, datë 19 Mars, Hotel Tirana International

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