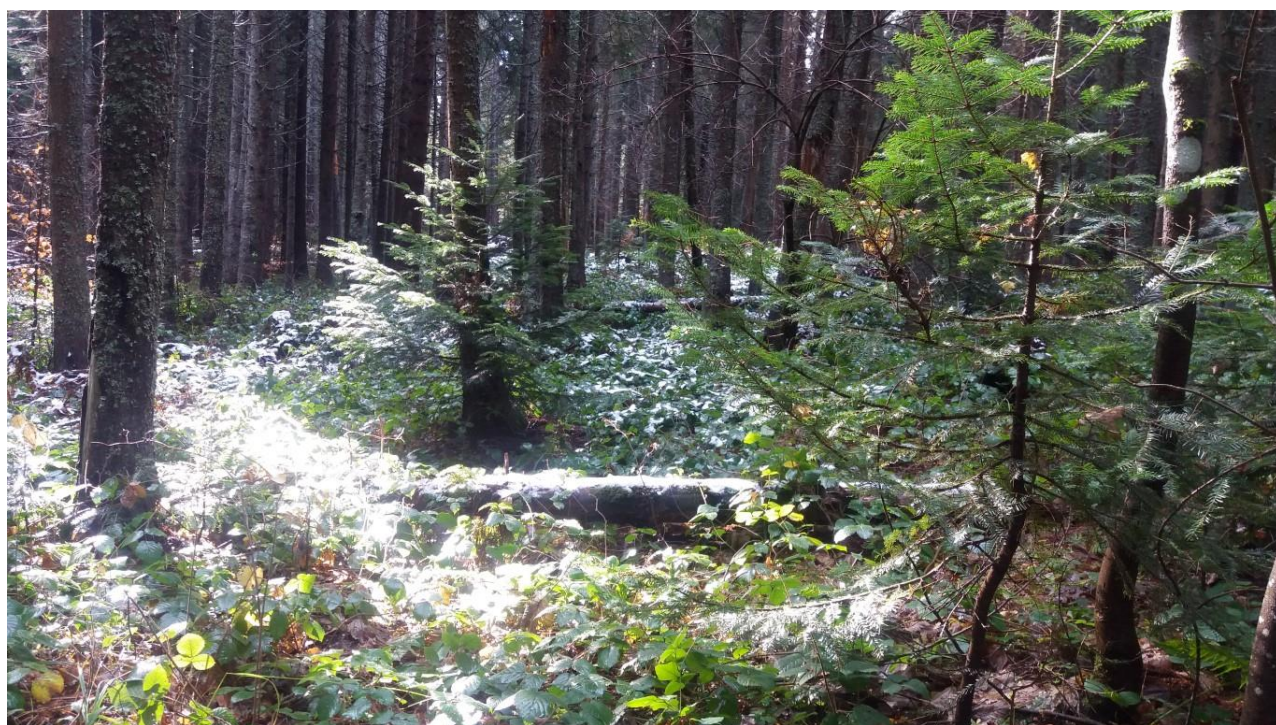


SUSTAINABLE FORESTRY 2nd Workshop 2016

November 11-13 2016 - Tara National Park - Serbia

REPORT



Tara National Parc



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Background

Sustainable forestry is one of the topics Forum Synergies is focusing on. After a first workshop held from 17-20 March 2016 in Milverton, UK we now hold the second in a planned series of four workshops.

After an inaugural meeting in 2012 a small working group started to plan the activities and set up a workplan. This group brought together representatives from 4 countries who agreed a programme to deliver four workshops based around the following topics:

- To raise **awareness** of the different services provided by sustainable forest management Kingdom
- To analyse **strategies** of how forests can be a lever for local development in rural communities
- To share **experiences** of how rural communities are involved in looking after woodlands
- To give local actors and authorities better **access** to practical knowledge about sustainable forest management

What we want to achieve:

- To understand and communicate what **sustainable forestry means in practice**.
- To disseminate the **EU Forestry Strategy** amongst practitioners and civil society.
- To help formulate realistic, complementary and consistent **policies in and between member states**.
- Propose **actions** and recommend **support**.

Context

We have identified so far these **main elements** which are important factors in the context of sustainable forestry and which will have to be taken into consideration in the process of discussions:

- Sustainable management across the main European forest types (Mediterranean, Central European, temperate, Scandinavian)
- Dissemination of good practice at stakeholder level
- State Action Plans and programmes
- Member state coordination/cooperation/consistency at the stakeholder level and where appropriate try to link up rural development funding between and across state boundaries to improve consistency of management, sustainability and communication
- The role of forests at the heart of Europe's Green Infrastructure and in delivery of the 2020 Biodiversity Strategy
- Promotion of woodland and wood products and the communication of forestry benefits to decision makers and civil society.
- The cultural role of woodlands to communities and in the landscape
- The role and importance of small woodland owners
- The development of information systems
- Climate Change mitigation
- Forestry policy coordination at the National and European levels
- The impact of forests as a source for "green electricity", renewable resource
- The "access to forests" as an upcoming conflict between big companies and small owners.

Results of the 1st workshop, 17-20 March 2016, Milverton, UK

In the first workshop we discussed many different aspects and definitions of forest management and resolved not to strive for any standard definitions of sustainable forest management, but rather to focus on the values and principles which may guide the efforts to achieve sustainability, which we see as a process rather than a static measurable condition.

We therefore agreed upon four key principles :

- A Holistic respect for the health of woodlands and forests as natural organisms and systems, which have a validity and even sanctity in their own right, regardless of human intervention
- A sense of stewardship of forests on behalf of humankind now and in the future, rather than selfish or short-term exploitative use of forests
- A sense of communal responsibility for, and pride in, the forests; and of fairness in the provision and

allocation of forest-based benefits and resources

- A global perspective, based on care for all the world's forests and on awareness of the fragility of global ecosystems and climate.

These principles need to be held against the competing interests in forests from those who make a living from woodland products to those people who live in and around them through to the wildlife that depends on the habitats that woodlands create and maintain.

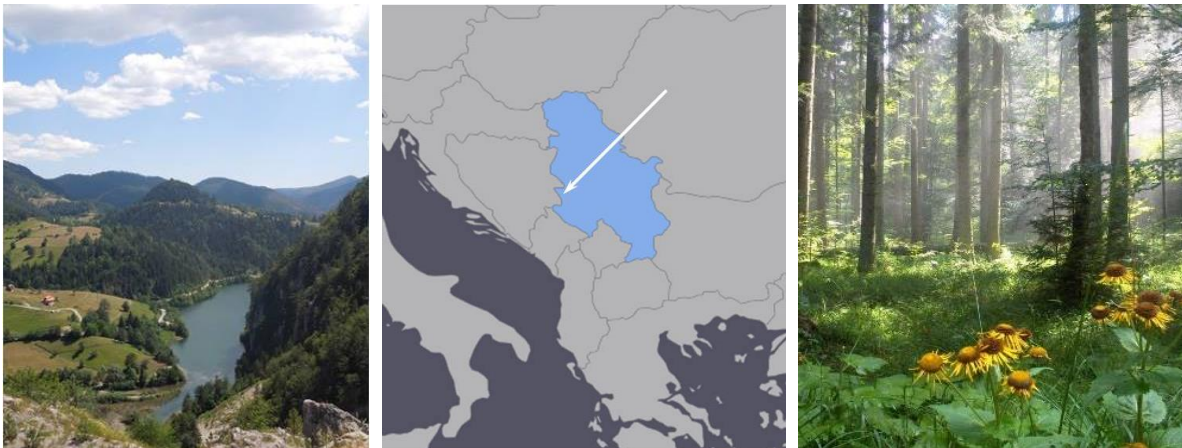
We need dialogue about all these interests to ensure that they are complementary and not competitive.

Main objectives of the 2nd workshop, 10-13 November 2016, Tara National Parc, SRB

Main objectives are to discuss and define recommendations about

- the condition of forests in the Balkan region and the policies and actions needed to achieve sustainable forest management in that region
- the development of small forests managed by private owners (with special attention on existing experience in ex-Yugoslavia, ex-socialist countries from East and Central Europe and EU countries),
- sustainable forest management in protected areas and
- sustainable development of mountain communities based on forestry and activities linked to forests.
- to produce a report on the workshop proceedings, in a form which builds upon and complements the report on the first workshop, with recommendations for policy and action

The region TARA NATIONAL PARK



1. Woodland Coverage, woodland types and Woodland Ownership

According to the National Forest Inventory, the total forest area in Serbia (excluding Kosovo and Metohija) covers 2.252.400 ha or about 29.1% of the territory of the whole country making Serbia an averagely forest-covered country comparing to the European average.

The Private forests in Serbia today occupy an area of 1,058,400 hectares, which is 47% of all forests in Serbia.

The total growing stock of forests amounts to 362,487,000 m³ of wood, and the annual increment of timber is 9,079,000 m³ of wood. Regarding the ownership structure in Serbia, there are two types of ownership: state (53%) and private (47%). After 2006 (i.e. after the adoption of Law on Restitution of property to churches and religious communities), a new sub-category of private forests - church forests occurs in the private forest ownership category (around 1% of all forests). Private forests can be characterized by big number of forest owners, small to average area of forest property and a lot of small forest parcels.

In the period after World War II, there were great social changes both in the state system and in the system of ownership and in the legal and property structure of forests. At this time, there were predominantly two categories of ownership of forests in Serbia: social and private forests (which changed their name to "forests with the right of ownership"). The ownership category of social forests was introduced after WWII. According to The Law on Agrarian Reform and Colonization (1945), social

property included public forests originating from state, communal, private, monastery and church forests, where the area was larger than the maximum legal area allowed: i) for monastery and church forests maximum allowed area was 30 ha; ii) for private individuals the maximum allowed area was 5-10 ha.

Hardwood species dominate the forests of Serbia, of which the most significant is beech with approximately 47%, followed by oak at 25%, other hardwood species at 16%, and poplar at about 1%. For the softwood species, the most significant is spruce with a share of 5.2%, followed by pine (black and white) 4.5%, and fir 2.3%. Other softwood and some hardwood species account for a mere 1%.

2. Authorities in charge of Forests and Woodlands

The state is the biggest forest owner in Serbia. Management is delegated to two public enterprises which were originally set up by a Forestry Act in 1991. This structure was confirmed in a new Forest Act in 2010 which also recognised other forest owners (i.e. church, cooperatives and other associations). The role of these public enterprises is to manage state forests and give technical and advisory services to small private forest owners all round Serbia.

There are an estimated 900.000 small private forest owners in Serbia who were legally recognised in an amendment to the Forestry Act in 2015. Although large in numbers they but they are not organised and have no strong links or voice and they are not represented in the forest policy arena. This situation has existed for a long time.

Private forest owners are used to their property being dominated by state forest administration. After the restitution process (2006), private companies in forest management made an arrangement with churches and monasteries to manage their forests and with the obligation of paying concession fees for this.

The management of forests is still based on old national legislation and Forest Acts (above) although, as stated, a new private forest owner entity has emerged.

There are two types of organization in church forest management. The first is represented by church-owned limited companies within the forest area. The second is where management rights are given to a private professional company with qualified staff. Both management approaches require ten-year management plans for the property they manage and therefor the private companies managing church forests do so under a ten-year contract.

There are two main public enterprises (PE) responsible for the management of state forest resources. PE `Srbijašume` is responsible for the management of state forests in the central part of Serbia and PE `Vojvodinašume` in the autonomous province of Vojvodina. The responsibility for the autonomous province of Vojvodina was delegated according to The Law on Establishing Certain Competencies for the Autonomous Province of Vojvodina (2002). Apart from these two enterprises, state forests are also managed by five public enterprises that are responsible for the management of national parks. Furthermore, PE `Borjak` manage state forests in one municipality in central Serbia and The Faculty of Forestry has the use right of state forest with the main purpose of education and research.

Other organizations, mostly agricultural, water or military entities have management rights for a small part of state forests. In the table below we can see the percentage distribution of different management entities.

Table: State forest managers in Serbia

Organization responsible for the management of forest	No Area (ha)	Area (%)
PE Srbijašume	775.000	77,9
PE Vojvodinašume	108.000	10,9
PE National parks	80.000	8,0
PE Borjak	8.000	0,8
Faculty of Forestry	6.000	0,6
Other organizations	23.000	2,3
Total state forest	995.000	100.0

National Parks

Serbia has five National Parks - Fruška Gora, Đerdap, Kopaonik, Šar Mountain and Tara. These National Parks are authorised to manage and operate all state owned forests within their boundaries. This includes forestry operations and management of other state owned habitats such as meadows, rivers and lakes. To deliver this each Park is obliged to prepare and deliver 10 year plans (with and annual management plans) for its forests. Additionally each Park is obliged to prepare and deliver 10 year plans (with and annual management plans) for nature conservation in protected areas. All forest management plans/programmes have to be harmonised with the Protected Area Management Plan and its prescribed protection regimes.

These management plans bind not only National Park and state authorities but also private owners who have to manage in accordance with them.

Certification

State forests managed by the largest forest management enterprises in Serbia (PE Srbijašume and PE Vojvodinašume who manage approximately 40% of Serbian forest cover) are under the Qualifor Programme of FSC management certification scheme. However, none of the National Parks have acquired certification.

Elements of the meeting

Participants.

Around 30 participants from 10 different, mainly Western Balkan countries met and exchanged about elements of sustainable forest management and drivers of unsustainable management. For the participants' list see **Annex 1**

Overview

This was a two day event, based in the Tara national Park in Western Serbia. On Day 1, after a welcome and introduction session the party split into two groups for Field Visits to look at Forest Management and Economic Activities related to forestry.

For the field trips the participants had been briefed about the findings of the first workshop, particularly the difficulty of making a single definition of Sustainable Forestry. Therefore the first meeting resolved “not to strive for any standard definitions of sustainable forest management, but rather to focus on the values and principles which may guide the efforts to achieve sustainability, which we see as a process rather than a static measurable condition. We agreed upon **four key principles**:

- Holistic respect for the health of woodlands and forests as natural organisms and systems, which have a validity and even sanctity in their own right, regardless of human intervention
- A sense of stewardship of forests on behalf of humankind now and in the future, rather than selfish short-term exploitative use of forests
- A sense of communal responsibility for, and pride in, the forests; and of fairness in the provision and allocation of forest-based benefits and resources
- A global perspective, based on care for all the world's forests and on awareness of the fragility of global ecosystems and climate.”¹

The parties returned to the hotel in the late afternoon and held working groups and then a plenary session to discuss issues raised by the field trip in the context of the Key Principles, before enjoying an international buffet supper.

Day 2 started with presentation of forestry in the National Park and the value of drones for fire and disease spotting. This was followed by a Market of Initiatives in which participants were invited to present projects and experiences in an informal setting. There were five presentations which attracted much attention - see **Annex 3**.

¹ Sustainable Forestry 1st Workshop 2016 March 17 - 20 2016 - Milverton - UK Summary Report

In the afternoon session we had a group photograph taken as part of a drone demonstration and then held a Group session to discuss the Pressures and Problems acting on Serbian and Balkan Forestry before holding a second Group session seeking Solutions.

At the end of the day participants were asked for feedback on the workshop, the issues and the organisation of the workshop. Finally co Chair Gwil Wren summed up the key points and revisited some of the main solutions that had been offered as well as inviting suggestions for the third workshop.

Field trips

On day 1 the Forestry Management party visited Barski Do to discuss forest management with local stakeholders, the Visitor Centre at Mitrovac, the Crveni Potok Nature Reserve the Zoavine Dam to look at a fire site before finishing at the Tara NP visitor centre at Bajina Basta. The Economic Group visited a very small scale local tar producer, a sawmill, a local wood sculptor and the wooden village of Mechnavik.

Market of initiatives

During our "market of initiatives" we offered to the participants the opportunity to share their project/ experience with other participants in a "market place". Sitting at a table they could put posters, leaflets etc. in order to present their initiatives.

This market was organised in different rounds with 5 minutes presentations running at the same time. The other participants visited these tables to listen and discuss the presentations before changing after approx. 20-25 minutes. The atmosphere of a fair or a "market place" opened the space for some lively discussions and exchange of experiences in small groups.

A list of presentations with short descriptions is in **Annex 3**

International Buffet

All participants were invited to bring special food or drinks typical of their local area. During the "international buffet", these specialities were personally presented by the participants and the stories behind gave a further insight into different European customs and cultures.



International Buffet - story telling by regional products

Detailed Programme

See **Annex 2**

Introduction

After initial welcomes the workshop started with an introduction to the Tara National Park from Park Rangers.

The National Park was founded in 1981 and covers an area of 24,991.82 ha.

The main management issues facing the Park Authorities in the last few years have been protecting the forest and reducing the negative impacts of global warming through the control of Bark beetle, fire and drought.

In recent year infestations of Bark beetle have become an increasing problem not just in the National Park but across Serbia. Milder winters have increased the number of generation of beetles and drier conditions make trees drought stressed and more susceptible to attack.

National Park managers are combining classic approaches with new innovative methods such as pheromone traps. The traps provide two positive effects, firstly the reduction of beetle populations to a sustainable level for both trees and beetles, and secondly the opportunity to gather statistical data

about beetle populations within the Park. This programme was implemented in cooperation with Faculty of Forests with the support by of the Royal Norwegian Embassy in Serbia.

The National Park also has a problem with damaging fires and management is improving measures for both prevention and response in difficult terrain. This is through investment in new equipment, improved collaboration with local people, better monitoring and other technical measures. In addition major efforts are made to restore fire damaged areas quickly and all available resources are deployed in replanting. As an example, following a fire in 2012, 1m trees are being replanted in the Park at Zaovione following a sponsorship agreement with Toshiba.

Field trips and issues arising

Day 1 was dedicated to understanding the situation in the region - from policy framework to local reality.

From the Field Trips and subsequent discussion we sought to have a clearer view on :

a) The elements of sustainable forest management

b) The role of local communities in sustainable forest management

c) Sustainable forest management in protected areas

Following the introduction participants were briefed about the Field Trips. There were to be two Groups looking at Forestry and Economic factors. Each Group was to be asked to consider several questions deriving from the 4 principles agreed at the First Workshop for discussion on return.

These questions were

- How does what you have seen fit with the 4 principles set out in the first workshop?
- Is there anything that does not fit with the 4 principles?
- Who or what benefits from the forest management you have seen? Are all the stakeholders benefiting? Is there any dialogue between them? What pressures are acting on the various stakeholders? What can be done to resolve issues and problems?

Field trip 1: FORESTRY AND FOREST MANAGEMENT

1st stop: Locality Barski Do - presentation of forest management

At the first stop we met Rangers from the Tara National Park to discuss forestry and conservation.

The climate is good with 1000mm rain a year. The soils are fertile but ground moisture varies according to the topography. The main tree species are fir, beech, spruce.

These mixed forests are derived from natural regeneration and have a high productivity growing at 14m³ per hectare per annum which is twice the average annual increment of Serbian forests. The growing stock is estimated to be about 450m³ per hectare.

The value of the forests in this areas was recognised very early and their preservation process was well underway by 1870. As it has forest records dating back to 1852 it is regularly visited by foresters for information and research.

Fifty years ago the National Park started a project to monitor every tree larger than 10cm diameter at breast height. A team of 20 local people undertake this work and measuring all the trees takes 3 years. The data is held by the Tara National Park management which uses it to calculate the amount of growing stock.

There are also private forests and woodlands within the Park area and although the owners do not have to pay for measuring, they do need to ask permission to fell trees. As well as granting permission the Park also offers advice on the amount to be cut.

As indicated in the introduction the Park has a major problem with the growing number of Bark Beetles, which are causing significant damage. As the Park holds some trees that are



endemic and rare there is concern that they could be lost if the problem was left to nature and so the Park Authorities have adopted pro-active control measures. This prompted a discussion among participants about how far management intervention measures should be allowed in a National Park.

Longer seasons, driven by climate change, are allowing the Bark Beetle to regenerate 3 times a year instead of the previous 2. To deal with this 50% increase in numbers the Park is using pheromone beetle traps and the Group was shown one being set up.

The roads through the Tara National Park are in relatively good condition. As well as the needs of harvesting and forestry management they are also designed to offer access for tourists and fire fighting.

Bark beetle pheromone trap

There is a high awareness of the risk of forest fires but not every part of the forest is accessible due to steep slopes and dense tree cover. Fortunately this inaccessibility deters tourists so there is not a big risk to them as they tend to stay on the established trails and can be evacuated quickly. Fighting fires in the more remote areas is however a particular problem

2nd stop: Visit Visitor Centre of Tara NP at Mitrovac

Apart from the visitor centre that offers information, exhibitions and souvenirs the site also offers accommodation for commercial use. The camp has 650 beds to rent and it's very well used by schools and summer camps.



Butterfly collection at the visitors centre

One of the biggest tourist attraction are the bears. There are 50 living in the 25.000 ha National Park and it is possible to see them in the wild at special feeding places, however bears are only fed if there is a need for it. All feed comes from the local area. Although it is illegal to hunt bears in Serbia there is a problem because the Tara National Park is close to the border with Bosnia and Herzegovina, where it is legal to hunt them. Research has shown that bears cover huge distances and so there is a constant risk that bears from Tara National Park could cross the border and be legally shot.

3rd stop: Visit "Crveni Potok" natural reserve

Crveni Potok is a nature conservation area within Tara National Park. It is renowned for its bogs which are important resources for analysis of preserved pollen and seeds. This research delivers important data related to climate change and the climate history of the Park and Serbia as a whole. The Reserve is covered by primeval forest and management measures are restricted to safety interventions in order to prevent injury to visitors (e.g. because of falling trees). Again there was a discussion among the participants on striking the right balance between giving as much space as possible to natural processes whilst meeting strict protection goals and allowing tourist activities.

4th stop: Visit Zaovine Lake, dam Lazici - area

Zaovine Lake is an artificial lake on the Tara Mountain. It was created on the Beli Rzav river as a reservoir for the *Bajina Bašta II* reversible hydro power plant ([wikipedia link](#)). It is a famous place because the endemic species Serbian Spruce (*Picea omorika*) was discovered and described here. The lake is surrounded by forests characterised by very steep slopes that severely restrict forest management activities including pest and disease control.



View on the Zaovine Lake

5th stop: Bajina Basta Visitors Center

The tourist centre in the city of Bajina Basta is a place for exhibitions and houses the Park Rangers office. As the centre is placed in a city one objective is to attract tourists who visit the city but not necessarily the National Park. The exhibitions are interesting and educational for children. We were told that schools often make week-long trips to the area as part of special summer programmes.

As well from within Serbia tourists also come from surrounding countries. As well as being a beautiful area there are a many local and traditional products (handicrafts) available for them to buy. This is an important feature of the local economy which needs protection.

Hunting is also allowed for wild goats, however permits are restricted in strict accordance with the management plan. The visitor centre gets a small income from the sale of tickets for visiting the National Park or using walking trails, but National Park managers find it difficult to reach a balance between visitor numbers and charges that keeps demand stable.

Field trip 2: ECONOMIC ACTIVITIES RELATED TO FORESTRY

1st stop: Maker of local tar from pine stumps.

He buys and extracts old pine stumps from steep slopes in the Park.. After drying they are split, stacked into a brick kiln and covered. A fire is lit in a adjacent chamber and the wood is carefully heated to give off vapour leaving charcoal behind. The vapour is composed of hydro carbons and free carbons which condenses into tar and is collected in barrels for sale in small quantities for wood preservative. Apparently he exports to Sweden where there is a long tradition of tar production for caulking boats and protecting wooden buildings. The charcoal by-product is bagged on site and sold locally

The business is small and employs the owner, his son and occasional casual workers for a week or two at a time. It operates from a very primitive shack and has two kilns and a basic collection system. Tar is stored in barrels and is sold in small cans.



The owner, Mr Raskovic would like to expand and modernise but is wary of inviting bureaucracy. Additionally all his suppliers are private individuals who have no wish for their sales to be accessible to the tax authorities. There is a further issue that the supply of suitable stumps (80-100 years old) is probably finite and so it is not clear whether the business has a long term viability.

2nd stop: Gallery of Miladin Lekic.

Mr Lekic is a wood sculptor. Originally trained as a vehicle mechanic he is now exploiting an artistic and creative streak that he showed at school. He uses locally sourced wood (mainly walnut) from private owners and sells his carvings primarily to ex patriot Serbians who want to take home a memory of their home country. The sculptures are priced in Euros and apparently sell quite well. He works alone and was asked what he would be doing in 20 years, his reply was 'the same'.

3rd stop: Gorstak sawmill.

This is a large plant employing 100 people in producing sawn timber and pallets. It also has a pelleting plant to produce wood fuel. It can process trunks between 20 and 80cm diameter. Timber is sourced from the National Park and about 50% comes from public forests and 50% from private owners. There appear to be issues over continuation of supply which revolve around a reduced output from public forests and the very fragmented nature of private ownership locally which makes sourcing difficult.

It was also apparent that the plant operates to standards that would not be acceptable in the EU particularly in terms of health and safety e.g. no ear defenders, no machinery guards etc.

4th stop: Mecavnik wooden village.

Originally constructed as a film set a by the Serbian film director Emir Kusturica for his film *Life Is a Miracle* it is now maintained as a tourist and cultural, attraction. It includes the house and the library of Emir Kusturica, log cabins offering comfortable accommodation, the subterranean "Stanley Kubrick" cinema, a library, gallery, souvenir shop, restaurant and sports centre. As our visit was on a Bank Holiday weekend it was quite busy.

Reflections on the site visits

Upon return to the hotel the two groups went to discuss the questions.

Group 1 Forestry and Forest Management

In Plenary the group reported that it had found a mix of sustainable and unsustainable activities.

The following practices were felt to be sustainable:

- Woodland management is based on selective cuts and continuous cover meaning the forest meets the needs of the National park in terms of landscape and timber production.
- A clear recognition of the non-timber value of the area within the area.
- Well developed tourism infrastructure with information and trails and close co-operation with the local community.
- The treatment of Bark Beetle infestations through the use of pheromone traps.

However there were some practices that were felt to be unsustainable:

- There is a lack of acknowledgement by the State for importance of forestry and so there are no funds to support the forestry sector and sustainable development of forests;
- Private forest ownership is recognised but when it comes to include the private forest owner needs in the forest planning there are no special management plans for the private forests, apart from the general management plan of the National Parks.
- Local laws and plans are ignored - illegal building being highlighted as a particular problem.
- Bureaucracy and the length of time required to gain consents - again permits for building were referenced as a problem.
- There are different hunting laws in different places.
- A significant proportion (about 80%) of the budget of National Parks is derived from timber production which is leading to increased pressure for commercial utilisation of forests.

There was a strong feeling in the group that there was insufficient co-operation both domestically and across international borders which, if improved, could provide support for sustainable management of forests. At the moment, in Serbia, it is easier to amend plans to favour economic development than it is to influence management for nature conservation. This situation is not helped by the lack of an organised forestry lobby and it was felt that if one was created on a national level which had cross border influence the profile of forestry and the need to manage it sustainably could be raised considerably. This could also assist with the harmonisation of hunting laws.

So the overall conclusion was whilst the practices on the ground were broadly sustainable there was a lack of recognition, let alone support, for forestry beyond the boundaries of the National Parks and Provincial administrations. This policy vacuum at national level means that the continued management of the Serbian Forests is dependent upon its management entity's ability to provide its own resources, and as such is vulnerable to downturns in the timber market and tourism industry as well as natural disasters such as fire, pests, disease and drought.

Addressing this policy vacuum will require a co-ordinated response. In the absence of a national umbrella body for forestry the Group recommended better communication between domestic forestry stakeholders for example between Provincial administrations and National Parks as an important first step. This could encourage exchanges across international borders and help the building of a consensus around forestry as an important resource in the Balkans which should make national Governments pay more attention to their continued well-being.

However, extending these communications and building support amongst private owners will be very challenging because of the nature of land tenure (many small fragmented ownerships, absentee owners, unknown owners etc.). That said where private forests are being managed on a 10 year plan contacts should be made with those management companies and of course the Faculty of Forestry.

If these steps are taken to bring influential stakeholders with a common interest together then the formation of a national umbrella organisation for forestry ought to be the first objective. Once established this body can draw up a strategic plan to embed sustainable forestry in Serbia through better support, funding, the establishment of a proper land tenure/ownership register and respect, acceptance of and compliance with the rules and regulations.

Group 2 Economic Activities Related to Forestry

Group 2 felt that the business examples it had visited were broadly sustainable but made the following observations.

The tar producer operated at a small scale and was based close to his source of supply. The business provides for his family and some casual workers resulting in a local, albeit limited, economic benefit. There could be questions over the environmental sustainability of removing old stumps from the forest ecosystem but the numbers are low and only those of a specific age and species are suitable which presumably leaves other sources of deadwood behind on the forest floor.

However, the long term viability of the business is less certain. The works, storage and working conditions are very poor and would not meet any sort of regulations, however minimal. The owner would like to expand but he is at a very low base and there are no financial or practical support mechanisms available. There is also the issue of a finite supply of stumps within a reasonable distance for him to use coupled with the difficulty of dealing with a number of dispersed private suppliers.

The Group concluded that this business actually derived all its benefit from the forests and the available supply of the specific raw materials it needed. However, it acted in isolation and apart from contact with its suppliers and customers had no discernible impact on the community and had no influence on forest management.

The sawmill operates at a large local scale and seems to be a significant employer in the area. Therefore there is a clear benefit to 100 families and the services that they access. Timber is sourced locally from both public and private sources and as the cropping system was based on selective felling rather than clear fell this was also felt to be sustainable.

However, as with the tar producer long term viability was less certain. The mill uses a lot of power and although it produces wood pellets it does not use these to generate power for itself and is therefore reliant on external suppliers and fluctuations in price. The continued supply of timber is also an issue and if there are not enough private owners selling timber then production and employment will fall.

The issues surrounding the role of private owners are complex. Many private owners own relatively small areas of forest and it is not unusual for a holding to be distributed in several small parcels in an area of woodland. This means that coordinating purchases is difficult and collection potentially more expensive. There is also the issue of absentee owners who take no interest in their forest area and there are also quite a lot of areas with no known owner. This means that the number of active private owners is quite a low proportion of the total and points to potential problems of continuity of supply from this sector.

Another issue is the poor structure of Serbia's forests. There has been very little planting and most forests are naturally regenerated leading to even-aged crops often of poor quality and abandonment of agricultural land is increasing the problem. This limits the range of timber the mill can buy and also the products that it can supply meaning that they tend to be at the low end of the market. However, the pelleting plant is a good use for poor quality timber and there is very little waste.

The Group concluded that this sawmill business derived all its benefit from the forests and the available supply of the specific raw materials it needed. Additionally, through employment and purchasing it did have a clear impact on the community. However, although befitting from the forests it is settled with the *status quo* and exerts no particular influence over forestry management and is not a sufficient driver for increased engagement in forestry management.

The wood sculptor is another very small business that seems to be profitable and therefore provides a small local economic benefit through a living for one family and small payments to private woodland owners. The principal wood used is walnut and as there was no mention of supply difficulties it was assumed that the business could continue. Additionally there was no hint of any 'below the radar' issues as there were with the tar production. However, as previously mentioned the prospect of any expansion seems to be nil. The business has an obvious connection with forestry and the Group concluded that it could potentially be located anywhere although its proximity to its supply was important in terms of the cost of transport of the raw material. Against this a sales presence or supply contract to a large city retailer could expand the business.

In common with the tar producer the Group concluded that this business actually derived all its benefit from the forests and the available supply of the specific raw materials it needed. It also acted in isolation and apart from contact with its suppliers and customers had no discernible impact on the community and had no influence on forest management.

We did not discover how many jobs existed in the wooden village of Mecavnik nor what the visitor numbers were but it is safe to assume that it represents a noticeable economic and cultural force in the area. However the enterprise does have a connection with forestry because it was built from locally sourced wood and its visitors are attracted to the area because it is an scenic afforested National Park.

The Serbian members of the Group were asked whether any local people would build wooden houses like those in Mecavnik and replied that this would not happen. These wooden houses were regarded suitable for tourists but not as permanent dwellings. Culturally local people wanted stone houses as they were substantial although the fact that local timber was regarded as being of variable quality may also be a contributory factor.

The group concluded that this business derived all its benefit from the forested nature of the National Park and through employment and purchasing it did have a clear economic impact on the community and adjacent businesses like local restaurants and the nearby tourist narrow gauge railway. However, although benefiting from the forests it exerts no influence over forest management although if forestry practices shifted to clear felling for commercial, disease or pest reasons visitor numbers might be adversely affected.

Environmental Pressures within Tara National Park

After the discussions on the feedback National Park rangers gave a presentation about the environmental pressure affecting the Park.

The principal pest is Bark Beetle of which there are several species (*Pityogenes chalcographus*, *Ips typographus*, *Polygraphus polygraphus*, *Ips curvidens*). In recent years climate change has affected the Park by shortening the winters and producing more frequent droughts. Drought conditions especially affect conifer trees, particularly spruce, which make up 70% of the trees within the Park and they get stressed and die before deciduous trees do. These stressed trees provide increased beetle habitat and the shorter winters mean that they can start breeding as early as February with regular broods right through to September. So when conditions are suitable beetle populations increase to infestation levels very quickly and the impact can be devastating as an affected tree can dry out within 2-3 weeks.

Unfortunately it is not easy to spot drought stress or increasing beetle numbers because the signs tend to be first apparent at the tops of the trees and therefore preventative measures are always trying to catch up.

Conventional pesticide control is not possible for practical and environmental reasons within the National Park and so the authorities have been using pheromone traps with great success. These are located throughout the Park and are changed once or twice a month depending circumstances. In the worst year 33 million beetles were trapped in this way and at the moment numbers are declining.

Maintaining control is challenging for the Park Authorities for various reasons. Firstly the forest area within the National Park is increasing through land abandonment and in 2015 an additional 6000ha of woodland was recorded. In common with the rest of Serbia approximately 50% of the Park is privately owned and the Park Authorities have to deal with beetle infestations in those areas too. Unfortunately there are no similar actions being taken over the nearby border in Bosnia.

As well as the pheromones the Park authorities are considering whether mixed stands might help to reduce the impacts as was considered in other European countries. However, it would take least several decades to deliver gradual change of the forest composition. They are also cutting large volumes of wood out of the forest to help with control but the quality is poor and there is little financial benefit.

The Rangers were asked about the presence of natural predators but replied that there were not enough but there is now evidence that numbers of woodpeckers and mice are rising in response to the outbreak which in turn is increasing the owl population.

The Rangers also expressed interest in using drones as demonstrated at the workshop for spotting disease and drought in the tree tops before the effects became apparent on the ground as this would give them a chance to respond before beetle numbers rose too far.

The second major environmental issue was fire with risks also increased by climate change induced drought.

The Park rises to a height of 1200m but is split by deep canyons which makes fighting fires difficult. To aid response the authorities divide the Park into zones based on four levels of protection from the most fire prone areas to the least.

Natural fires occur very occasionally (between 100- 500 years) through lightning strikes but others caused by man through negligence are much more frequent (c every 10 years) and there were severe fires in 2007 and 2012. Generally the negligence is from local fires that get out of control, barbeques and sometimes discarded litter - disposable lighters being specifically mentioned because they explode when exposed to strong summer sunshine. Whilst fires are a natural phenomenon and allow regeneration the sharply increased frequency of man made fires is particularly damaging in ecosystem terms.

Initial response is down to the controller of the land who is expected to spot fires, assess outbreaks and initiate action. If a fire is deemed to be beyond their capabilities or out of control then municipal fire-fighters are called in. This heightened response can involve planes, helicopters and crewed vehicles on the ground. There is good co-ordination between Park staff and the municipality.

Fires can be very challenging, not only because of the terrain but also because of the different vegetation types within the Park. As well as trees there is a lot of open ground and the loss of grazing animals has resulted in longer grass and more bushes which help fires cross gaps between woodland.

To counter this the Park authorities have a good track system together with a network of high capacity hydrants which can refill a fire truck in three minutes.

However, even with these preparations fire can be very difficult and the largest one in recent years was concentrated on the most inaccessible part of the Park. This required 800 people as well as aircraft in a major operation. As the priority with big fires is to save life they can take some time to control and cause a lot of damage.

Obviously early warnings are vital so the Park has many spotting towers and remote sensors and cameras. Unfortunately sensors have difficulty in distinguishing between smoke and fog leading to a number of false alarms so the Park is always looking at ways to improve its response. It would also be interested in looking at how drones could improve this but did point out that a number of fires break out after dark

The Park places a high priority on prevention and has a lot of information for tourists in leaflets as well as fixed information boards in and around the forest. There is a system of fire prevention but the topography makes cutting them difficult in some key areas.

Discussion during the Workshop in Tara National Park

After lunch and a drone demonstration the Workshop split into Working Groups to discuss and reach conclusions about sustainable forestry management in the West Balkan region.

Three Working Groups were formed to consider questions at

- a regional (i.e. Balkan) level,
- an environmental level and
- a local community level

Session 1: PRESSURES

Group 1 - Regional (Balkan) Level

The Group was asked to answer the following questions

Q1 Is what you have seen representative of Balkan Forestry management?

In terms of economics, for principal income, the Balkan forestry mainly rely on firewood or timber sales whether the forest is in a National Park, State or Private ownership.

Whilst management is broadly regulated the same for public and private forests in Serbia it is not necessarily represented in forestry practice across the country or in the wider Balkans.

After 6 decades of developing management in state owned forests, the state forests are managed and monitored to a much higher intensity than private woodlands. Although there is some clearfell and plantation management (e.g. poplar plantations in Vojvodina in northern Serbia) in state forests and coppicing in private woodlands Serbian forests tend to be of an even age structure through long term selective felling and natural regeneration of unmanaged grasslands. Other Balkan countries have more variety in age structure and species.

Q2 What Pressures are acting on the various stakeholders?

Lack of financial support is a big problem. Income from timber sales supports the running costs of the large public bodies or is treated as direct income by private individuals who actively manage their woods. It is not used for long term planning. A significant proportion of private forest owners do not actively manage at all because the parcels are small, the administration can be burdensome or simply because the owners are absent and/ or lack interest.

There no external financial support for local people living in forested areas such as compensation for restrictions or grants for improvements as is the case in other countries e.g. Latvia, UK etc. As a result a large proportion of privately owned forest has no management plan or has management based on timber assessment without survey. The situation in Northern Serbia is slightly better because the provincial government is providing subsidies for afforestation and forest amelioration in both state and private forests.

This general lack of support means that, certainly amongst active private owners, there is no ability, or incentive, to meet international conventions, obligations, directives, contracts or participate in ecological networks etc. The question was posed how do you expect people to abide by restrictions and undertake practices in line with Nature 2000 requirements if their only current benefit is income from timber which will actually be restricted?

There is also a related problem of mismanagement and the ignoring of laws, rules and regulations. These lead to over exploitation and reduced forest cover in certain areas. This leads to instability of the forest structure increasing the risk of windblow. These issues pose threats to the whole forest ecosystem.

Climate change was also regarded as a significant pressure as shorter winters and drier summers lead to increased drought and fires as well as increasing pests and diseases

Q3 How do these pressure impact on the 4 Principles?

Obviously these pressures impact heavily on the 4 Principles.

There does not appear to be much respect or understanding of forests by the major decision makers which in turn trickles down to local level.

Apart from the National Parks which do clearly have a sense of Stewardship it seems in short supply at a Government level certainly in Serbia and Bosnia. The Serbian Government only provides 10% funding for the National Parks. The sense of Stewardship amongst private owners is very hard to gauge but any that does exist is not supported by any Government finance.. Also further afield Montenegro, Romania, Bosnia and Albania have a declared ban on communal forest cutting, but have not provided rural communities with alternative sources of firewood or other cheap fuel.

Outside the National Parks economic pressures mean there is little apparent sense of community responsibility and certainly no sense of awareness of how Balkan forests fit into the global picture..

Group 2 - At an environmental level**Q1 How does what you have seen fit with the 4 principles set out in the first workshop?**

Interestingly Group 2 felt that the management that went on and the examples that they had seen did accord with the 4 Principles albeit on a relatively small scale.

Q2 What pressures are acting on the various stakeholders?

Two major pressures were identified.

a) Climate Change

The current situation is not seen as sustainable in the face of climate change. This will demand change to the structure, species and management of the forests. Already large areas are being burnt and disease is requiring clear felling both of which conflict with the long standing continuous cover management ethos. The even age structure of the forest is already seen as an issue and these problems will just perpetuate this. Consequently more planning is needed to look at creating a more diverse structure and consideration needs to be given to growing more robust species or sub species to ameliorate the impacts of drought and avoid a build up of pests and disease.

b) Poor Forest Management Practices

This issue also impacts on long term sustainability of the forests and revolves around poor management and a disregarding of the rules. This lack of control is very damaging environmentally and although much of the damage is on a small scale caused by large numbers of private owners operating independently in a haphazard way. This undoubtedly poses a potential long term risk to forest structure and economic viability.

Q3 Do these pressures conflict with the 4 principles?

The Group agreed that these issues were in direct conflict with the 4 Principles and if they were not addressed by Government could represent a 'Perfect Storm' where the issues of climate change and poor management could combine to create a situation where there is a net loss of forest and associated environmental degradation.

Group 3 - At local community level

Q1 How does what you have seen fit with the 4 principles set out in the first workshop?

The Group felt strongly that it did not.

Q2 What pressures are acting on local stakeholders?

One of the key issues identified was the presence of a centralised system which prevents the involvement and engagement of local people. Consequently the management of private forest is fragmented and disorganised. There is no incentive for involvement because the state takes all the public forest income outside the National Parks, and nothing is fed back to the local level.

Ownership is another vexed issue with no up to date Property Register or maps with defined boundaries which is often the basis for neighbourhood disputes. Where it is known forest ownership is frequently fragmented within an area, and where it is not known land is unmanaged or abandoned.

This situation is a legacy of history when the Balkans were split between the Austria-Hungarian and Ottoman Empires. In other places, for example Slovakia, local people received approval from the Austria-Hungarian Empress for a system where forests in multiple ownership could be registered and managed communally within a set of agreed rules, but unfortunately this was not common practice across the old Empire. Although land within the the Empire in the Balkans was measured and registered in the 19th century this system was neglected by socialist regimes and so ownership information is thoroughly out of date. There was no register within the formerly Turkish controlled areas.

Serbia has tried to address this by establishing a new land ownership register. This has been prompted by accession talks with the EU. Unfortunately the process developed problems and had to be halted. There is no indication when it will re-start.

The lack of any management plans is also a real issue which perpetuates continued mismanagement of the forests and does nothing to foster any personal or communal responsibility. The Group felt that land taxes were too low and should be used to incentivise active management, for example through a tax on absent owners.

A further problem is of local tycoons who are only interested in making money by exploiting the current system and are able to wield enough influence to undermine moves to reform it

Q3 Do these pressures conflict with the 4 principles?

These issues do affect the 4 Principles. The whole centralised system has separated local people from any sense of communal ownership of or interest in the forest and there appears to be little acknowledgement of the wider role that forests play in a regional or global sense. Individuals who do actually own land only see it as a resource to be exploited for gain or something of so little value that it is not worth wasting time, effort or money on.

Session 2: SOLUTIONS

In this session the working groups were asked to consider the pressures that had been discussed in Session 1 and offer some potential solutions.

Group 1 - Regional i.e. Balkan Level

Q1 Could cross border cooperation benefit forest management in the Balkans?

There was unanimous agreement that there needed to be more cross border cooperation and particularly exchanges of knowledge and best practice. The sharing of problem solving was also important especially in the face of climate change and increasing incidence of pests and diseases some of which could be new to the region.

Q2 Is there any dialogue between countries/institutions?

Presently there is some dialogue but it is not structured or result orientated. Essentially local initiatives are discussed but not within a regional or sharing context. This needs to change and each country has to understand that forests exist as continuous entities whose boundaries are dictated by topography and climate and not by national borders.

Q3 What can be done to deliver the 4 principles across the Balkans to resolve issues and problems?

There are many things that can be done but they are down to the collective will of people and governments. The Group considered that there is no incentive within the Serbian Governments to prioritise forests. This therefore requires the formation of a strong international cross cutting body to represent all forest owners and users, both private and public, to lobby governments and set out the benefits of forests beyond the narrow and obvious. An example is the evaluation of ecosystem services that has been done in Koviljsko-Petrovaradinski Rit Nature Reserve which has placed a monetary value the services provided by a sensitively managed local environment such as clean water, clean air, climate change mitigation, prevention of erosion, flood alleviation, soil fertility and natural control of pests.

The key message is for all interested parties to join together to exert more influence.

Group 2 - Management in sustainable forestry including nature and climate change at an environmental level

Q1 Who or what benefits from the forest management you have seen?

There was agreement that there was a benefit to most stakeholders at some level with no obvious dis-benefits. This of course varies depending on circumstances but certainly all active managers derive a financial benefit either directly or in kind. Inactive managers, who tend to be private owners, do not benefit apart from owning an asset, on the other hand there are no incentives to bring forests back into management.

The environment was also in relatively good condition because of dispersed management and remoter no go areas for visitors. However, climate change is a serious issue that is currently beyond the capability of the present forest management regimes to ameliorate.

Q2 Is there any dialogue between them or their representatives to improve matters?

Unfortunately there is no dialogue between stakeholders and no mechanism to facilitate it.

Q3 What can be done to resolve issues and problems?

The Group felt that the most immediate need was to improve the standard of forest management. There seems to be lack of respect for the national Government at Regional level and rules and regulations are routinely ignored so there is a need to develop a greater respect for them. This could be achieved through an awareness and education programme to increase understanding of why they are necessary. It was however acknowledged that some of the rules and regulations are not good so the issue needs addressing by law makers too.

However, over the longer term the Group stressed that Climate Change was the greatest threat that needed to be addressed. Although the impacts and effects are well understood by Institutions this is not so amongst the wider population. So expanding knowledge of and belief in Climate Change is vital and awareness needs to be raised much more widely among the general population so that they can put pressure on national and local politicians. There are some Civil Society organisations that have been raising this but they are not being taken seriously at a political level and therefore there is an urgent need to increase their capacity and weight through improved knowledge and education.

This is becoming more and more urgent because of the nature of forests in Serbia, they tend to be even aged and are therefore more vulnerable to catastrophic events, particularly drought, fires and pests and diseases. Additionally lack of land management is contributing to an increase in forest area so the potential size of any issue is growing whereas the resources to deal with problems are not. Given that Government resources are limited this is another reason for an increased Civil Society role.

The Group highlighted some good examples of influence citing the Hydro Plant on the Drina River where local groups had organised and stepped forward to help the project progress.

Overall the Group were cautiously optimistic that Civil Society capacity could be increased and that an attitudinal change is possible to address the pressures and meet the threats.

Group 3 - Local community and forestry - at a local community level

Q1 Who or what benefits from the forest management you have seen?

The forest supports a lot of local sawmills who clearly benefit from the present situation and provide much needed employment. They produce low grade timber for the local economy and importantly firewood which is the principal fuel. However, it needs to be pointed out that they also benefit from rule breaking and mismanagement as much as they do from responsible management.

The National Park also attracts tourists into the local economy which also provide direct jobs and opportunities for local businesses and individuals to make money through sales of crafts and local food. There is also an alternative 'in kind' economy where inactive city dwellers who only visit infrequently offer firewood from their land to local tradesmen in exchange for services.

There are signs that new businesses are starting to develop using wood products with the making of windows being cited as an example. However, this will only be sustainable if there is enough timber of sufficient quality available.

Although improved management to public forests has reduced problems and increased spin off benefits the local black economy is well established and attitudinal change will be difficult to achieve as long as there is a lack of wider control.

Q2 Is there any dialogue between them and others with an interest?

The Group was not able to identify any dialogue between stakeholders at this level.

Q3 What can be done to resolve issues and problems?

The Group made several suggestions to help improve matters for the forests and the local people.

First there has to be communication between communities, Civil Society, Regional and National governments about the forests and what they mean in social, economic and environmental terms. This has to lead to a greater awareness and understanding of their value to the country.

From this can come a discussion of the issues and hopefully a pragmatic plan to address the issues of poor management whilst enhancing the local situation. For example the 'in kind' economy could be promoted and regularised to increase benefits and reduce adverse impacts.

Conclusions

This second workshop was intended to build on the work of the first by gathering information and opening discussions about forestry in the Balkan Region. The main objectives were to discuss and define main recommendations about

- the condition of forests in the Balkan region and the policies and actions needed to achieve sustainable forest management in that region
- the condition of forests in the Balkan region and the policies and actions needed to achieve sustainable forest management in that region and the EU
- the development of small forests managed by private owners (with special attention to experiences in former Yugoslavia and other former socialist countries from both East and Central Europe and the EU.
- sustainable forest management in protected areas and
- sustainable development of mountain communities based on forestry and activities linked to forests.

The Workshop sought to understand the reality of these and the pressures that were impacting upon them in terms of the four key principles of sustainability set out in the first workshop.

1. A Holistic respect for the health of woodlands and forests as natural organisms and systems, which have a validity and even sanctity in their own right, regardless of human intervention

It was quite difficult to gauge the level of cultural or spiritual connection with the forest. Part of this was down to language but also because the view that local people rarely think of their forests and woods in this way nowadays. In the West the economic progress and growth have put considerable pressure on natural resources which has led to growth of conservation movements and the concept of sustainability which has raised awareness in the general population. In a way this is a luxury that well off people can afford but the overall impression of the Tara region was that as the area was economically poor local people concentrated on their own well being. There is no obvious pressure on the forests so the feeling was that they were there as they always had been and were used to support their low key economy. Wood remains the primary fuel and there are a lot of small sawmills producing low value timber products. So there is a dependency on the forests by local people but the value that they place on them is probably limited to having a job and heating their houses. There has to be a risk that economic growth through inward investment could seriously disrupt this.

2. A sense of stewardship of forests on behalf of humankind now and in the future, rather than selfish or short-term exploitative use of forests

There was also a view expressed that this disconnection from a holistic view of forests was a legacy of the centralised socialist regime which sought an industrial urban-based economy where workers were encouraged to leave the countryside. The result was that rural areas apart from those producing food were largely left to fend for themselves.

Forestry represents about 3% of Serbian GDP with 50% from timber and processing and 50% from secondary forest products like fungi, berries and medicinal plants, licences for hunting and fishing and the production of energy. The sector is estimated to employ 36000 people.

Nationally tourism represents about 6% of GDP and although half the foreign tourists only visit Belgrade there is still a strong domestic demand particularly for spa resorts which are often located in mountainous and afforested areas. So at about 9% it can be said that economic activity associated with Serbian forests represents a significant sector of the Serbian economy. Nevertheless there was a strong view that forest and forestry were very low priorities for National and Regional Governments. At the moment there is little sign of a desire to exploit them in economic terms but this is not because of a feeling of responsibility or stewardship by decision makers, but more likely that there are more pressing political issues and that economic 'potential' has not been fully understood. When and if this occurs it is very important that the Government sets up a strong regulatory framework with the resources to impose it otherwise there will be issues of external exploitation such as have befallen other former socialist countries which will not benefit Serbia in any way.

3. A sense of communal responsibility for, and pride in, the forests; and of fairness in the provision and allocation of forest-based benefits and resources

The National Park clearly has a remit of communal responsibility which it discharges very well given that its funding is basically restricted to what it can earn from timber sales and ancillary activities. It is responsible for the drawing up and delivery of the 10 year National Park Management Plan and the annual programmes derived from it.

The Park Authority itself is responsible for managing the 50% of the forest area within its ownership while the rest is privately owned. However as the regulatory body for the forests within the Park it is responsible for issuing felling permits for its own and private operations in accordance with the 10 year plan.

Unfortunately the private forestry sector is very fragmented with multiple owners who often own dispersed parcels, often live a long way away or are simply unknown. Under these circumstances it is virtually impossible to meet this principle for the 50% of the forest in private ownership.

4. A global perspective, based on care for all the world's forests and on awareness of the fragility of global ecosystems and climate.

Serbia is a beautiful country and one presentation included a habitat map that showed the Serbian mountain forests as a component of a biotope that stretched to the Carpathians and beyond. However, the country is emerging from some particularly turbulent times so it is not surprising that the Government and people are concentrating on building a modern and resilient country. The emphasis is on joining the EU to provide political stability in the Balkan region, encourage inward investment and help the economy grow.

Under these circumstances it is perhaps not surprising that forests are low on the political agenda and apart from a consideration as a local resource there appears to be little acknowledgement that they are part of a globally or even regionally important ecosystem. The lack of an EU wide forestry policy, except where they form part of Natura 2000 series, is an issue because damaging activities in one area could have impacts across national borders but within the same biotope such as the spread of pests and disease, displacement of wildlife and accelerated changes to climate.

Turning now to the main objectives of the workshop which were to understand

1. The condition of forests in the Balkan region and the policies and actions needed to achieve sustainable forest management in that region

Overall forestry in the Balkans is in reasonable condition but this is mainly based on historical management and local practices rather than as part of any national plan or initiative. Consequently, they continue in a broadly self sufficient way and could probably continue as long as other external factors such as climate, local management or political imperatives did not change. Recommendations for policies and actions will be made in the conclusion.

2. The development of small forests managed by private owners (with special attention to experiences in former Yugoslavia and other former socialist countries from both East and Central Europe and the EU.

There are many small woodland owners but it is impossible to estimate overall numbers or how many actively manage their woods.

We concluded that there are three broad categories of private owner of which only the first is involved in forest management.

- a) Locally based and active. This includes absentee owners who allow local people to manage their woods on a barter/exchange basis.
- b) Of local origin but living away ie absentee. This includes those with elderly relatives still living locally but unable to manage the woods and those who maintain a residence in the area but do not manage their woods.
- c) Unknown.

Although these categories cover the full range of private engagement in forest management that is about all the information available about private woodland ownership in Serbia. The absence of an up to date national private land ownership register is a critical problem and until more is known who owns what and where it will be virtually impossible to bring forward deliverable policies to assist sustainable forest management.

It seems that this is also an issue in other former Yugoslav countries which will need to be addressed before any accession to the EU can be possible because compliance with the Common Agricultural Policy (CAP) is based on sound and reliable ownership information. However, as the CAP does not cover woodland as such there has to be a risk that the registration of private woodland ownership could be a lower priority.

3. Sustainable forest management in protected areas

As set out throughout this report it is clear that forest management within the Tara National Park and other protected areas is generally sustainable. However, this seems to be dependent on a 'business as usual' approach which cannot be guaranteed in the medium term.

Therefore there needs to be an evolutionary approach to forest management that maintains the good aspects of the current situation such as well staffed and solvent National Park authorities with clear remits and control over delivery whilst addressing the very strong need to engage with private owners and local communities to build a strong consensus around the medium to long term sustainability of the forests and the communities that rely on them. This will involve management planning to improve structure and diversity as well as an improved regulatory and enforcement regime.

A better understanding of private ownership in terms of who owns what and where is an essential first step before any improvements can be made for this significant sector of the forest industry. This will need to be followed by a policy to address the management of land where ownership is absent or unknown, possibly by a state body managing such land "on Trust" until ownership is clearly established. However, it is unlikely that this can be achieved without a change in attitude at Government level both in terms of supportive legislation and adequate funding.

4. Sustainable development of mountain communities based on forestry and activities linked to forests.

Overall the mountain communities are not economically strong and there is a suspicion of an over reliance on a closed, almost 'subsistence' system where nearly all economic activity is created and consumed within the same area. One example given was where owners who live away for long periods give access to their woods to local people in exchange for local services when they come to stay. This type of internalised economic activity does little to foster economic growth or improve standards of living.

Ultimately the mountain communities will only survive if they can offer a standard of living that is attractive in comparison to other alternatives. This standard of living is unlikely to offer the monetary rewards that a life in urban areas can deliver but this can be offset by living in a rural environment with the associated benefits of clean air and water, local food and a slower (less stressful) pace of life. However, these communities must also be able to access the services that urban dwellers can in terms of goods and services at a price that matches their income.

The key economic sectors in the Tara National Park area are forestry, tourism and local food and services. From our visit it became clear that forestry is the most important as it was the keystone resource that supports local employment, provides the environmental and landscape conditions that attract tourists and is the source of local fuel without which no-one could survive a winter. To a lesser extent it also provides locally foraged foodstuffs.

As a result it is of paramount importance that the forests upon which the local mountain communities depend are managed and protected for the future.

Summing up

The condition of forests in Serbia, and from the other Balkan examples that were shared is reasonably good in environmental terms. The forests support the wide range of flora and fauna that would be expected to be present and so from that perspective can be said to be generally in favourable condition. There is strong timber growth and although the economic benefits are mainly restricted to the local economy it is broadly sustainable.

This condition has stayed the same for many years but there are real signs that they exist in a quickly changing world.

The immediate issue is that climatic conditions have changed in recent years which are causing problems for the large scale active managers such the National Park. Pests and diseases are on the increase in forests across Europe and land borders provide no barrier so they can move to where conditions are suitable. There are also signs that increasing leisure time is putting pressure on forests

and their biodiversity and this coupled with longer, drier seasons is increasing the risk of drought and an increasing number of catastrophic fires.

The nature of the Serbian forests may make them more vulnerable to these threats. Broadly they are dominated by few species and they tend to be even aged which are a major risk factors for both fire and disease spread. Additionally lack of management and abandonment in private areas is leading to the natural re-generation and overgrowth in previously open areas which allows fires to spread more quickly. This abandonment also reduces biodiversity among species that rely on open areas and edge habitat within woodland.

Consequently forests and their managers will need to adapt to meet the challenges of climate change in the short term and economic pressures driven by EU accession in the medium term as both of these issues have the capacity to seriously disrupt the well-being of local communities through loss of jobs and possibly even a reduction in firewood. Although, tourism is of growing importance it is heavily dependent on an attractive landscape and the variety of activities which are delivered through the sustainable management of the forests.

To meet these challenges the Group identified the following actions to help make Serbian forests more sustainable. There was also agreement that these actions would benefit forests in the wider Balkan region and that the establishment of stakeholder groups would facilitate this

Establish a land ownership register or cadastre

This is vital to delivering consistent forest management across Serbia. It is almost certain that a functioning system of land registration of ownership will be a pre-requisite to EU entry and so it should be one of the highest domestic political priorities for the country. Therefore the EU funded project which has stalled needs to be re-evaluated and the reasons its lack of progress needs to be understood and corrected. The key to success will be a policy that addresses the thousands of land parcels without a known owner. One solution could be for a state body to take on a management role 'in trust' for a period of years thus bringing them into management whilst allowing people time to prove ownership.

Formation of stakeholder groups within Serbia and the wider Balkans.

At several points during the workshop participants stated that there needs to be a strong Civil Society voice to champion and promote the sustainable management of Balkan Forests.

If this happened groups from each country could set up a network to share information and articulate the common factors that link the forestry systems, forest economies, biotopes and their associated local communities. Once identified and agreed there would be strong grass roots movement to communicate to politicians and decision makers what needs to be done to preserve and strengthen them.

Engage, inform and train local people

We saw that Serbian forests are facing unprecedented changes which will challenge their ability to support communities both practically and economically. Climate change and fires could wipe out mature forest areas for two generations and reduce the value of any remaining timber. This would lead to a loss of local employment and seriously damage a relatively fragile local economy. It should also be pointed out that unfettered exploitation for short term economic gain could also do the same. It is therefore important that local people consciously acknowledge their connection with and dependence on forests as well as understanding the changes that are coming. This will empower them to mandate their politicians to pursue policies that both strengthen and safeguard their sustainable management.

Engage, inform and train politicians

It is clear that that forestry is not really on the national or regional political agenda. This is strange given their fundamental importance to local communities and their economy. As stated above if Civil Society groups can champion the sustainable management of forests and positively engage with local communities then local politicians should also be encouraged to take notice, engage with the topic and start to formulate policies and frameworks to support it in a sustainable way.

Review forestry rules and regulations to remove the unnecessary, tighten the necessary and ensure enforcement.

Once politicians have become aware of the importance of forests then they will need to address the lack of legal rigour in their protection. We heard that rules are widely disregarded and that was partly because they were not seen to deliver any particular benefit. As part of an energised political consensus

around sustainability in forest management the Government needs to review the legislative framework around them and revise it to meet key policy priorities. These should include:

- Maintenance of Serbia's forestry cover and annual incremental growth.
- Maintenance of Serbia's forest biodiversity
- Control of pests and diseases
- Measures to counteract a changing climate including better forest structure, increased diversity, fire management plans and incentives to reduce agricultural land abandonment.

The Government should increase financial support for forestry areas.

Adequate financial support for state bodies and Government agencies involved in the forestry sector is essential to the continued well-being of forest areas and their communities. The Government could reinvest the income from state forests outside National Parks back to rural communities to allow state bodies and national parks to be more proactive in managing state and supporting private forests. This could improve resilience to climate threats by improving structure and diversity. Additionally it should set up funding, possibly on a LEADER model, to support small local enterprises that are reliant on sustainable forestry to invest, grow and become resilient.

Recognition that Serbia is a component of the larger Balkan ecosystem and needs to harmonise the management and appreciation of forests within communities, biotopes and across borders.

Once groups have been successful in engaging communities and politicians then they should use these alliances to build contacts with colleagues in neighbouring countries. They should help to build consensus across the biotope to see if management and other practices such as pest and disease control, hunting regulations and protections can be harmonised to deliver sustainable management of forest areas for all interests.

Establish relations at Government level to discuss forestry issues with other Balkan countries.

In conjunction with the international Civil Society engagement politicians should also be encouraged to work with neighbouring countries to harmonise forestry laws, rules and regulations across the biotope and build consistency of management which will strengthen communities, deliver economic benefit and protect their environment for the future.

Links

About Tara National Parc <http://www.nptara.rs/en/>

Report drafted by Gwil Wren

Contributions by Anela Stavrevska-Panajotova, Dainis Kreicberg, Michael Dower, Simone Matouch

Annexes

Annex 1: List of participants

Title	First Name	Last Name	Organisation	Country
Mr	Miloš	Bojanić	UPŠ "NAŠA ŠUMA"	BA
Mr	Zoran	Čančar	NP Sutjeska	BA
Ms	Danica	Cigelj	FMPVŠ BIH	BA
Mr	Dejan	Cupic	ATEU iz Jelasnice	SRB
Mr	Marko	Cvijanovic	Ruralni Centar Sova	SRB
Mr	Marko	Djapic	Institute for Nature Conservation of Vojvodina Province	SRB
Mr	Aleksandar	Gvozdic	Mission of People of Good Will	SRB/ XK
Mr	Stig	Hansson	All Sweden shall live	SE
Mr	Miloš	Homola	Ekotrend Slovakia	SK
Ms	Silva	Huda	PVN Albania (Service Civil International branch)	ALB
Mr	Sinisa	Jovanovic	National forestry and related sectors cluster	SRB
Mr	Alen	Kiš	Institute for Nature Conservation of Vojvodina Province	SRB
Mr	Dainis	Kreicbergs	Private forest owner; Forest management company (farm)- ZS "Andulaiši"; Private Forest Owner NGO - "Saldus forest owners association " via "Latvian Rural Forum"	LV
Mr	Slobodan	Ljubojević	Network for Rural Development of Serbia	SRB
Mr	Sima	Markovic	National unmanned aircrafts vehicles and related sectors cluster	SRB
Ms	Simone	Matouch	Forum Synergies	AT
Ms	Olivera	Milosevic	NGO Green Key	SRB
Mr	Vladan	Milosevic	PAK MOSOR NIS	SRB
Mr	Nikola	Niksic	Cluster Sancti Demetri	SRB
Mr	Miroslav	Pavlović	Eco Movement Ibar	SRB
Mr	Ivan	Petruševski	National unmanned aircrafts vehicles and related sectors cluster	SRB
Mr	Dragan	Roganovic	IBAR Development Association	SRB
Mr	Dragolub	Sekler	PE Srbijasume	SRB
Ms	Anela	Stavrevska-Panajotova	CNVP- Connecting Natural Values and People Foundation	MK
Mr	Srboljub	Stojanovic	National unmanned aircrafts vehicles and related sectors cluster	SRB
Mr	Duško	Topić	UPŠ "NAŠA ŠUMA"	BA
Ms	Jana	Vaverčáková	EKOTREND	SK
Mr	Dejan	Vickov	Turisticko drustvo jezero centa	SRB
Mr	Milan	Vulović	Zlatno runo	SRB
Mr	Gwilym	Wren	EuCAN CiC	UK

Annex 2: Detailed programme**Day 1: 11 November 2016 Discovering the region and activities**

09:00 - 10:00: Opening the workshop

- Introduction by Forum Synergies: Thematic Exchanges - focus on sustainable forestry
- Introduction by IDA
- Introduction by National Parc Tara
- Introduction by Municipality Bajina Basta
- Presentation of NP Tara
- Main questions to be raised and discussed during the field trips

10:00 - 16:45: Field visits with lunch 10:00 departure from Hotel Omorika

- Group 1 FORESTRY (forest management)** visit several field experiences including discussion with stakeholders
- Group 2 ECONOMIC ACTIVITIES RELATED TO FORESTRY** - visit several field experiences including discussion with stakeholders

Coffee break on return to the hotel "Omorika"

17:00 - 18:00: Working groups

- main issues / questions / ideas raised during the field trips
- conclusions and criteria

Group representatives will bring findings to the plenary

18:00 - 19:00: Plenary - feedback on field trips

- Short feedback by each working group
- debate and exchange

20:00 Dinner & international buffet

Day 2: 12 November 2016: Coordination policies (national and European), local initiatives, regional initiatives and sustainability in woodland management

09:00 - 10.30 Plenary: Introduction and policy context

- Presentation of conclusions of 1st Sustainable Forestry workshop in Milverton (GwilWren, UK)
- Forestry and climate - examples of the impact of climate, fires, bark beetles - NP Tara
- What is regional cooperation and possibility for sustainable forestry and the services it provides?
- What is the European forestry policy?
- What are the national policies related to sustainable forestry and the services it provides?

10:30 - 11:00 Coffee break

11:00- 13:00 Market of Initiatives

13:00 - 14:30 Lunch, family photo and presentation of drone using

14:30 - 18:00 Introduction to working groups**WG1 .(Session 1 - PRESSURES)**

- Group 1 - Regional cooperation in forestry
- Group 2 - Management in sustainable forestry and climate change
- Group 3 - Local community and forestry

WG 2. (Session 2 - SOLUTIONS)

- Group 1 - Regional cooperation in forestry
- Group 2 - Management in sustainable forestry including nature and climate change
- Group 3 - Local community and forestry

18:00- 19:00 Plenary: Finding the synergies

This plenary session will seek to bring together the themes and examples which have been offered in the market of initiatives and the working groups.

19:00- 19:30 Plenary: Commitments & homework, planning of 3rd workshop

Official closure, 20:00 Dinner

Annex 3: Presentations during the Market of Initiatives

Success stories and presentations of the Market of initiatives can be found on the Forum Synergies website ([link](#))

1. **Forest conservation and executing national law with regard to biodiversity**
Kiš, Alen; Institute for Nature Conservation of Vojvodina Province, SRB
2. **A platform for sharing knowledge from CAP international events**
Miloš Homola; Ekotrend Slovakia, SK
3. **GAIA Microgrants Selection Team and the Create a Climate for Peace campaign of SCI**
Silva Huda; PVN Albania (Service Civil International branch), ALB
4. **Project Forest fire monitoring system using fixed cameras and UAV in the area of western Serbia.**
Sinisa Jovanovic; National forestry and related sectors cluster; SRB
5. **Recent developments in the private forestry in the Balkan region.**
Anela Stavrevska-Panajotova; CNVP- Connecting Natural Values and People Foundation, MK
6. **Project: Management of forest in national parks of Montenegro**
Slobodan Stijepovic; PE National parks of Montenegro, ME
7. **Characteristics of drones, regulative framework for using drones**
Srboľjub Stojanovic; National unmanned aircrafts vehicles and related sectors cluster, SRB

