

SHORT TERM SCIENTIFIC MISSION REPORT

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COST ACTION: FP1201 – Forest Land Ownership Change in Europe: Significance for Management and Policy (FACESMAP)

REFERENCE NUMBER: COST-STSM-ECOST-STSM-FP1201-150314-040839

HOST: Dr Zuzana Sarvasova
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TITLE: NATURA 2000 compensation mechanism (Mechanism for financing protected areas in Serbia)

WORKING GROUP: WG3: Forest owners related policies

TIME PERIOD: 15.03.2014-02.04.2014

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1. Purpose of the STSM

The purpose of my stay at National Forest Center –Forest Research Institute Zvolen, is to explore how protected areas are managed in this country in relation to management of protected areas in Serbia. Process of establishment of NATURA 2000 sites in Serbia has just preliminary started, with their mapping, but key issue in future period will be how they will be managed and finance. One of the subgroups of COST FACESMAP project is dealing with the issue of NATURA 2000 directives and compensation mechanisms for private forest owners which is very relevant for the future NATURA 2000 sites in Serbia. Namely around 50 % of protected areas in Serbia are privately owned, by private forest owners or other types of ownership. Thereby experiences from Slovakia case would of huge importance in order to see how this system is organized, what kind of compensation mechanisms are present and what are the future trends in Europe concerning this issue. The main objective is to understand how are these compensation mechanism incorporated into the system of NATURA 2000 sites and what different compensation mechanisms are present within nearby countries and countries involved within this COST project. My PhD topic is also dealing with this issue, trying to understand how protected areas are financed and managed in the Republic of Serbia and it would be of huge importance to get experiences from other countries and understand how this system of financing will be organized in the future. This type of research would provide me adequate data for a comparative analysis that will greatly help me in my PhD work.

2. Description of the work carried out during the STSM

In order to understand the situation in Slovakia, during STSM, literature on NATURA 2000 payments was analyzed together with the field visits. Field visits were organized by my host. First field visit included trip to the Banska Bistrica, on 18th of March, and contacts with employees of State Nature Conservation Agency. Second field visit included trip to the Banska Štiavnica and interview with dr Andrej Kunca who is head of Forest Protection Service. This field visit was organized on 25th of March. Last visit was organized within Technical University of Zvolen – Faculty of forestry and dr Zuzana Dobsinska (26th of March) was my contact there. This first step was used to understand how these payments are organized in Slovakia and further, more work was done concerning NATURA 2000 payments in Europe.

Contingent upon the study needs and objective, different general and specific scientific methods were employed. General methods, by their nature, can be employed for acquiring knowledge in all sciences and scientific disciplines. The general scientific method employed in this study is the statistical method, while the other general scientific methods include the hypothetical, deductive, analytical-deductive and comparative method. The method used for collection of data on the territory of EU is non-reactive. This method was used in order to collect data on NATURA 2000 payments in different EU countries.



3. Description of the main results obtained

In the period of economic growth and well being of human population, forest stays as one of the major pillars, for providing different ecosystem services. These ecosystem or environmental services are very diversified. They include provision of water and food, regulation of climate, regulation of floods, air regulation and among many of them biodiversity conservation (Czajkowski et al., 2014). NATURA 2000 is a system of ecologic network developed by the European Union (EU) in order to enhance and protect biodiversity. It represents system of protected areas for endangered species and habitats at EU level and one of the „*biggest coordinated network of nature protected areas in the world*“ (Posavec et al., 2011). The legal bases of this ecological network lay in two Directives from 1979 (Bird directive) and 1992 (Habitats Directive). The aim of the network is to assure the long-term survival of Europe's most valuable and threatened species and habitats. It is comprised of Special Areas of Conservation designated by Member States under the Habitats Directive (HD), and also incorporates Special Protection Areas under Birds Directive (BD). This network isn't a system of strict protection where all human activities are excluded but includes some restrictions on specific area and its protection depends on different cases. Since this network also includes forest area and by that, forest which is privately owned, some restrictions exist. By that, if we take in account that private forest ownership in Europe is present averagely on 31,4% (2010), we can see that for sure, some impact is present on the privately owned land. This implicates that for sure some restriction in the management of forest resource exists at the EU level. In Slovakia restrictions in the management of PA exists and depends on the level of protection. According to the Law on nature and landscape protection Act No. 543/2002 protected areas in Slovakia include sites of habitats or habitats of species of European or national interest, and habitats of birds, including migrating birds. According to this law, human activities are restricted through provision of five different levels of protection, where 1st level of protection means unprotected landscape, and 5th is the highest level of protection. This level of protection includes nature reserves and monuments and prohibits and kind of forestry activity. Management of land in second, third and fourth regimes of protection is restricted particularly in terms of pesticide and fertilizer use, building of forest roads and other constructions, berry-picking, intensive forest management and hunting activities (Kovalčík et a., 2012). In addition to the national system of nature protection, in Slovakia, NATURA 2000 network is established on 57% of Slovak forest area (Kovalčík et a., 2012). NATURA 2000 network includes Sites of Community Interest and Special Protected Areas defined by Habitat and Bird Directives. In Serbia process of establishing NATURA 2000 has just started while protected areas, defined by national legislation, cover 5,9% of territory of Serbia (Đorđević et al., 2013). System of protected areas in Republic of Serbia represent complex structure of different actors, rules, institutions and all others involved in their management. The law on nature protection from 2009 represents one of the main pillows in nature protection in Serbia. This law defines different

protected area types and organizations involved in their management. Protected nature area includes protected areas, protected species and movable protected nature documents. Protected areas are defined as areas with “geological, biological, ecosystem and biological diversity” and they are proclaimed with the act of protection for the area of special purpose. This law defines three levels of protection with precise measures and activities, 1st level of protection has the highest protection regimes while 3rd level of protection the least protection. In first level of protection are excluded all forms of using space and activities, except scientific research and controlled education. In second level of protection are possible management activities concerning restoration and revitalization of PA as well as controlled educative activities. In third level of protection are possible all activities that take in account principles of sustainable management (2009).

The country with the most privately owned land in the forest in EU is Portugal (around 98%) while Malta and Belarus have no private forest at all (2010). In Serbia private forest occupy area of 1.058,400 ha which is 47 % of all forest in Serbia (Banković et al., 2009). Serbia as a future member of EU, also has obligation to apply HD and BD, and by applying this directives some of the restrictions on the forest management will be present. Because of this, exploring financing mechanism that can be used for compensating PFO their lost income is of huge importance.

Mechanism that can be used for financing PFO for their goods and services can range from public to private (Weiss et al., 2011). In literature these mechanisms are explained in different forms as “compensation”, “financing” or “payments” and all of them are understood as general terms for paying different environmental services to landowners in forestry. Public financing mechanisms include, pure public instruments compromising negative incentives (taxes, fees and charges) and positive incentives (subsidies). A mixed mechanism refer to state interventions that are voluntary or aims to create new markets for externalities of forest ecosystems. Private mechanisms include all market solutions developed without any specific public intervention (Mavsar et al., 2008). All these mechanisms can be used as a compensation mechanism for PFO in NATURA 2000 site but specific interest of this study is public mechanism – subsidy, developed within European Agriculture Fund for Rural Development (EAFRD).

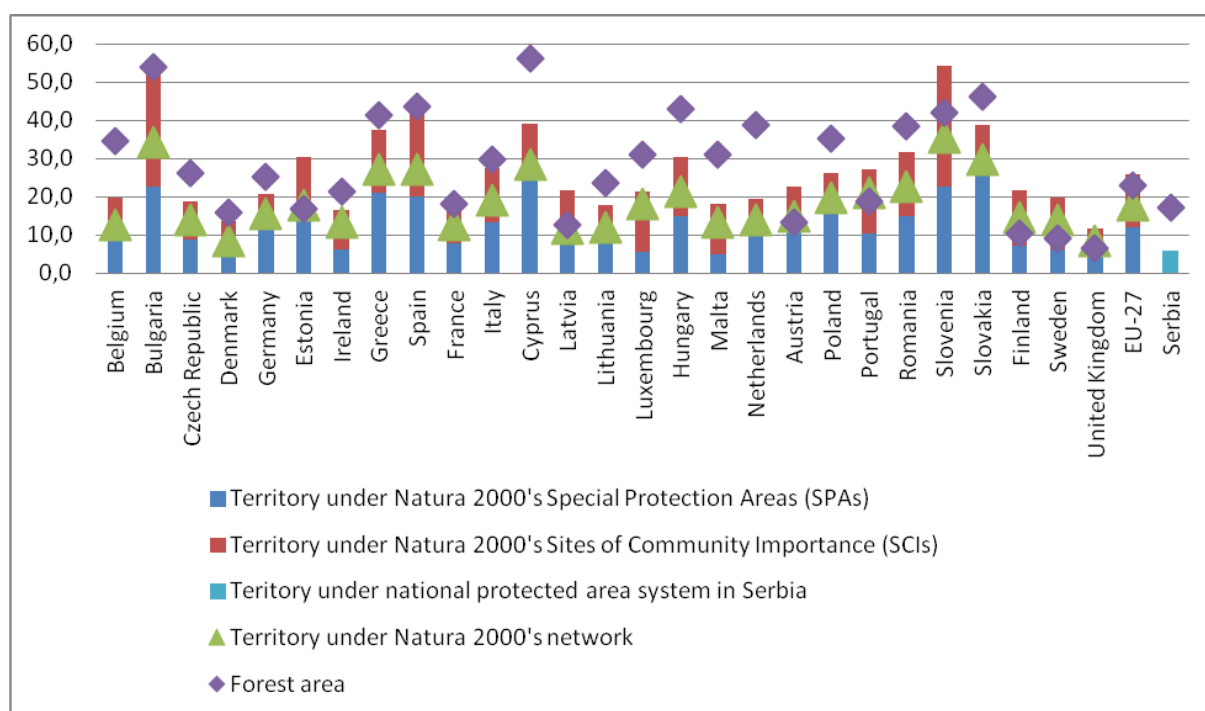
Table 1. Classification scheme for financing mechanisms

Type of mechanism	Mechanism
Public mechanisms	Taxes, fees, charges
	Subsidies
Mixed mechanisms	Public-private contracts
	Tradable permits
Private mechanisms	Trading goods/services
	Land purchase/lease
	Eco-sponsoring
	Donations
	Certification

Weiss et al., 2011

In the graphic below, it can be seen differences in coverage of land by NATURA 2000 HD and BD, in all EU countries. On the same graphic is shown average NATURA 2000 coverage and coverage of forest area, together with the current coverage of protected areas in Serbia.

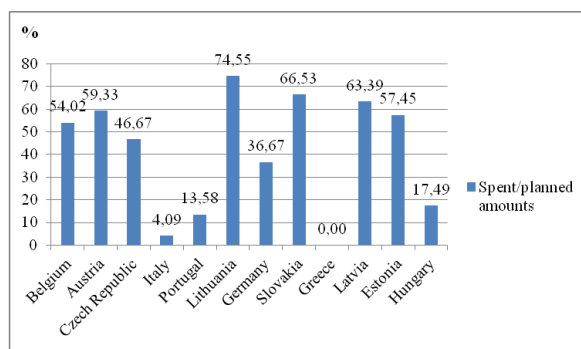
Graphic 1. Coverage of NATURA 2000 sites



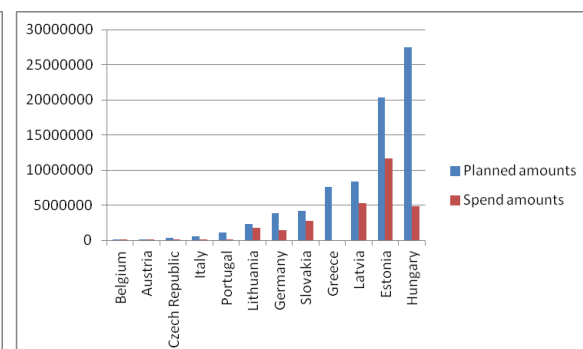
As it can be seen from graphic 1 country with the most territory under NATURA 2000 network is Slovenia (35,5%) and Bulgaria (34,3%), while countries that have least of this network is Denmark (8,4%) and United Kingdom (8,6%). In Slovakia NATURA 2000 network covers 29,6% of land, while territory under SPAs covers 26,8% and SCI (12%). On 86% of SCI, there is overlap with national network of protected areas, remaining 14 % is under interim protection with the 2nd level of protection (Kovalčik et a., 2012). If we take in account forest area that is covered with this network in Cyprus 56,1% of forest is covered by the NATURA 2000, while again Bulgaria is also one of the first three countries (53,9%). Country with the least NATURA 2000 network is again United Kingdom (6,5%) and Sweden (9,1%). Looking from perspective of average coverage on EU level territory under NATURA 2000 network is 17,9% while this network is present on 22,9% of forest area. Coverage of protected area in Serbia, defined by the national legislation, is around 5,9% while 17% of forests are within protected areas.

In order to get insight, into the spent amount on NATURA 2000 payments, each EU country programme of rural development was analyzed. Rural development policy (2007-2013) didn't include all EU countries and just for the "old" members this data was available. In the table below we can see ratio between spent and planned amounts.

Graph 2. Ratio between spent and planned amounts

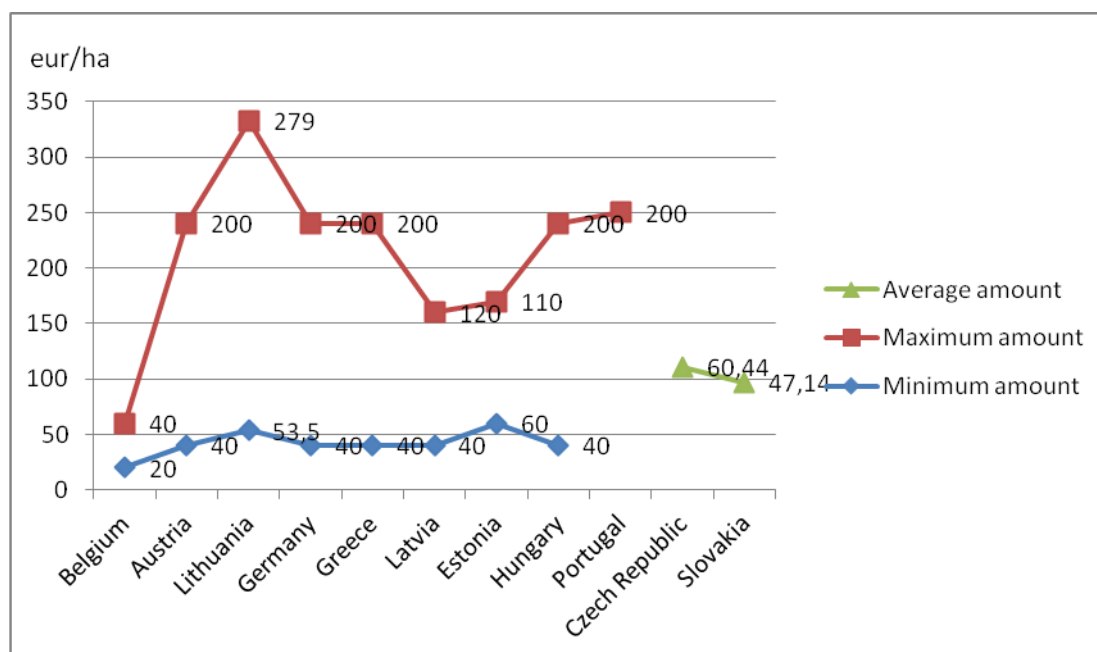


Graph 3. Planned and spend amounts



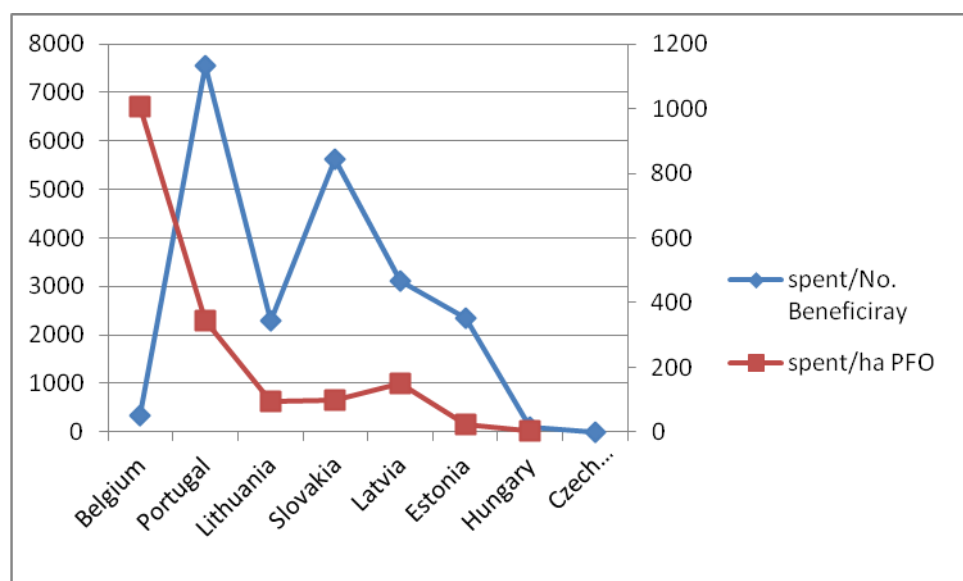
As we can see (Graph 2) from all EU countries Lithuania has the best ratio level (74,55%) between spend and planned amounts, followed by Slovakia (66,53%) and Latvia (63,39%). The lowest level of ratio spending has Greece and Italy (4,09%). If we compare this ratio levels of spending with real amounts (Graph 3) we can see that Hungary has planned more than 27 million euros but only 4,8 million were used. The similar situation is with Italy where only 23000 euros were used for NATURA 2000 payments while around half of million was planned. In the graph 4 bellow we can see minimum, maximum and average amounts that were paid to PFO for selected EU countries.

Graph 4. Minimum, maximum and average amounts



These amounts are result of RDP analysis (period 2007-2013) within all EU countries. Their individual programs prescribe methodology for calculating amounts and conditions that they have to fulfill. For some countries as Czech Republic and Slovakia are stated average amounts while for other countries maximum and minimum amounts, that should be paid to PFOs. The maximum amounts are planned for PFOs payments in Lithuania (279 eur/ha) while minimum payments are in Belgium (20 eur/ha).

Graph 5. Distribution of NATURA 2000 payments



In the graph 5 above we can see distribution of NATURA 2000 payments, for each EU countries for the period 2007-2014. The analysis involves EU countries for which this kind of data was available. The graph is showing distribution of:

- spent funds and number of beneficiary;
- spent funds and area (ha) of private forests.

Taking in account number of beneficiaries and spend funds for NATURA 2000 payments, Portugal (7550 eur/beneficiary) and Slovakia (5618 eur/ beneficiary) have the highest amounts while Hungary has the lowest amounts of payment (96,22 eur/ beneficiary). For Czech Republic data on number of beneficiaries wasn't available. Looking at the second parameter that involves area in ha of private forest, situation is little bit different. The highest amount per ha was paid in Portugal, with something more than 1000 eur/ha while the lowest amounts were paid in Hungary (23,2 eur/ha) and Czech Republic (4,8 eur/ha).

In Serbia, compensation mechanism for private forest owners, in protected areas is defined by the law on Nature protection (2009). In article 63 it is stated that legal entity, entrepreneur or private owner that has any kind of limitation or prohibition, defined by this law, can ask for compensation (fee). This fee can be obtained if owner used this property, at least five years before establishing protection. Fee is paid by the responsible ministry, secretariat of autonomous province or municipality which declared specific protected area. Data on fees that were paid to PFO in PA aren't available for Serbia.

4. List of literature

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5. Future collaboration with host institution

During my stay at the National Forest Center –Forest Research Institute Zvolen, close cooperation was established with the researchers from Forest Research Institute, especially with the department for Forest policy and economics. One part of my work also includes work on working group 3: “Forest owner related policies” and subgroup 5: “NATURA 2000 directives and compensation mechanisms for private forest owners”. The activity within this subgroup included direct contact with the FACESMAP participants who stated their interest in this sub group. For this

purpose interview protocol was designed and sent to these participants. Until 15th of April answers are expecting. These case studies of selected EU countries will be used for further analysis.

Beside this, STSM was used also for presenting issues of PFO in Serbia and work of Institute of forestry-Belgrade. Presentations at Forest Research Institute were organized under two titles “Serbian forestry and nature protection and its relations to private forest ownership” and “Organization of Institute of forestry-Belgrade”. Participants from forestry sector were invited, though Secretariat of forestry Department, Slovak Academy of Agriculture Sciences, to participate at this event. The presentations were well received and discussion stated some topics for future cooperation.



6. Foreseen publications/articles resulting from the STSM

Together with dr Zuzana Sarvašova, I am working on presentation for FACESMAP meeting in Helsinki for subgroup 3. Also our plan is to publish paper on NATURA 2000 payments in Europe that will deal with payments that are coming from rural development fund, and that are already used in the period 2007-2013.

7. Confirmation by host institution of the successful execution of the STSM

Together with this report I am submitting Confirmation of the successful execution of Short Term Scientific Mission signed by the Dr Tomas Bucha, Director of NFC-FRI Zvolen. Also I am submitting Confirmation on presentation „Serbia forestry and nature protection and its relation to private forest ownership“ signed by Dr Marian Radocha.

8. Other comments

I would like to express my gratitude to the Chair of Action dr Gerhard Weiss and STSM coordinator dr Zuzana Sarvašova, who was also my host at the Forest Research Institute in Zvolen. Special thanks to Msc Matej Schwarz and dr Lucia Ambrusova who helped me a lot in providing necessary data and information, together with other researchers from Forest Research Institute.



NÁRODNÉ LESNÍCKE CENTRUM - NATIONAL FOREST CENTRE

LESNÍCKY VÝSKUMNÝ ÚSTAV ZVOLEN • Forest Research Institute Zvolen

T. G. Masaryka 22, 960 92 Zvolen, SK

8th of April, 2014

Chair of Action FP1201

Confirmation of the successful execution of STSM by Ilija Djordjevic

To whom it may concern

Dear Sir or Madam,

by this letter I confirm that the National Forest Centre - Forest Research Institute Zvolen, Department of Forest Policy, Economics and Forest Management, hosted PhD student MSc Ilija Djordjevic during his COST FP 1201 FACESMAP STSM mission. The early stage researcher and COST participant Msc Ilija Djordjevic worked together with Dr Zuzana Sarvašova and MSc Matej Schwarz on the topic related to COST FACESMAP WG3 SG5 „Natura 2000 directives and compensation mechanisms for private forest owners“, in the period 15.03.2014-02.04.2014. MSc Ilija Djordjevic was active particularly on research work by visiting different institutions related to implementation of NATURA 2000 directives. He also gave presentation on „Serbia forestry and nature protection and its relations to private forest ownership“. Presentation was organized at the National Forest Center – Forest Research Institute in frame of Slovak Academy of Agricultural Sciences. This mission was beneficial to both, his scientific career and the COST FP 1201 FACESMAP research work.

With kind regards,

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Dr. Tomáš Bucha

Director of NFC-FRI Zvolen



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Chair of Action FP1201

Confirmation on presentation organized on March 28th 2014

To whom it may concern

Dear Sir or Madam,

by this letter I confirm that the **Msc Ilija Djordjevic** gave presentation on "Serbia forestry and nature protection and its relations to private forest ownership" on March 28th 2014. Presentation was organized at the National Forest Centre – Forest Research Institute and participants were invited through Slovak Academy of Agriculture Sciences-Section of Forest policy and economy. The duration of presentation was 30 minutes by ca. 30 minutes of discussion.

With kind regards

Dr. Marián Radocha

Secretary of Forestry Department, Slovak Academy of Agriculture Sciences

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