

Collection: RegioResources21 - "Spatial information and participation of socio-ecological systems: experiences, tools and lessons learned for land-use planning"

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Public participation in sustainable forestry: the case of forest planning in Slovakia

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Public participation is considered an important element of democracy. The purpose of this paper is to evaluate participatory approaches in the formulation processes of forest strategic documents and forest management plans in Slovakia. In order to present the context in which the public participation in forestry is applied, we describe the rules according to national forest law. The nation-wide example is presented for the case of the National Forest Program formulation, where the scope of the forest management units is covered by the process of Forest Management Plans elaboration and adoption. The empirical findings from forest authorities' data demonstrates that participation is still very formal. The most common actors are public authorities represented by their official representatives and the most active actors besides forest owners or managers are environmental interest groups. To strengthen the participatory process in sustainable forestry planning, not only changes in legislation are needed but also an increase in public awareness concerning the significance of forestry resources.

Keywords: Participatory Approaches, Forest Management Planning, National Forest Program, Evaluation of Participation Process

Introduction

The quality, relevance and effectiveness of EU policies (cohesion, rural development, environmental, gender policy) depend on ensuring wide participation throughout the policy chain - from conception to implementation. Improved participation is likely to create more confidence in the end result and in the institutions which deliver policies. Participation crucially depends on central governments following an inclusive approach when developing and implementing EU policies (European Commission 2001). The participation of the public, including practical foresters, is a condition for the formulation of shared forest policy documents (FAO/ECE/ILO 2000). The concept of involving people in forest management and

thus in planning and policy dates back to 1980, and the introduction of participation in forestry decision making first occurred in developing countries (Buttoud 1999a). The participatory approach was experimented at various levels: in the formulation of national forestry policies, in forest planning on a landscape scale and in protected areas, in the creation of public and private forest owner consortia, in specific programmes, for example for afforestation or anti-fire defence, for the creation of sustainable management standards and in the activation of permanent forums on issues related to forestry (Boon & Meilby 2000, FAO/ECE/ILO 2000, Jeanrenaud 1999, Zingari 1998). In European countries, the trend towards participation was definitely influenced by the debate on

sustainable development initiated during the '80s amongst organizations in the forestry sector, and fuelled by the Conference of Rio and the pan-European Process initiated in Strasbourg in 1990 with the First Ministerial Conference on the Protection of Forests in Europe, which resulted in the resolutions of Helsinki and Lisbon (Cantiani 2012). The Pan-European approach to National Forest Programs (NFP) was adopted on the results of Ministerial Conferences on Protection of Forests in Europe (MCPFE-Forest Europe) and their resolutions from Strasbourg, Helsinki and Vienna. The approach constituted a participatory, holistic, inter-sectoral and iterative process of planning, implementation, monitoring and evaluation of NFP.

In the beginning of the 1990s, the aims and objectives of the Slovak forestry policy were expressed in two basic documents issued by the Ministry of Agriculture and approved by the Slovak Government and Parliament - the Principles of the State Forestry Policy in the Slovak Republic (SR) and the Strategy and Concept of the Forestry Development in the SR (1993). These documents contained priorities and principles of forestry policy, further embodied and described in Slovak forest legislation. The National Forest Program of the Slovak Republic (NFP SR - Moravčík et al. 2007) represents the fundamental documents of the sustainable forest policy in Slovakia and, as is the case for all NFPs, includes the requirement of participation.

The former Act on Forests (no. 61/1977 of the Coll.) was updated after 1990 but still did not define public participation in sustainable forest management (SFM). This act was in force until the year 2005 when a new Act on Forests (No. 326/2005 of the Coll.) was adopted. The new forest legislation together with the EU accession in 2004 brought the principles of sustainability adopted at the European level into the national level as the basis for forestry policies, including the principle of public participation in decision making.

The aim of the paper is to evaluate the participation process of NFP SR formulation at the national level and at forest management unit Forest Management Plans (FMP) elaboration and adoption according to the criteria of public participation.

Theoretical background

Public participation is a voluntary process whereby people, individually or through organized groups, can exchange information, express opinions and articulate interests, and have the potential to influence decisions regarding the outcome of the matter at hand (FAO/ECE/ILO 2000).

Several studies reported a positive relationship between public participation activities and forest management practices on the

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Received: Oct 31, 2013 - Accepted: Nov 12, 2013

Citation: Sarvašová Z, Dobšínská Z, Šálka J, 2014. Public participation in sustainable forestry: the case of forest planning in Slovakia. iForest (early view): e1-e9 [online 2014-05-19] URL: <http://www.sisef.it/iforest/contents/?id=ifor1174-007>

Communicated by: Marco Borghetti

Tab. 1 - The criteria to assess the participation process. Source: Rowe & Frewer (2000).

Kind	Criteria	Assessment questions	Indicator 1	Indicator 2	Indicator 3
Acceptance Criteria	Representativeness. The public participants should comprise a broadly representative sample of the population of the affected public	Who was involved in the procedure?	random sample	proportionate election of members	ease of attendance (available finance resources)
	Independence. The participation process should be conducted in an independent, unbiased way	How were the actors invited?	Public representatives are independent to sponsoring body	Working group with public representatives	Acceptance of independent participants outside the sponsoring body
	Early public involvement. The public should be involved as early as possible in the process as soon as value judgements become salient	In which stage were the actors involved?	Too early	At a reasonable time	Too late
	Influence. The output of the procedure should have a genuine impact on policy	How can the actors influence the process?	Output of the procedure has a genuine impact on policy	The output only legitimates decisions	The output gives an appearance of consultation without an intent to accept participants' recommendations
	Transparency. The process should be transparent so that the public can see what is going on and how decisions are made	What is the feedback for how decisions are made?	Realising information on procedure aspects	Information withheld	-
Process Criteria	Resource accessibility. Public participants should have access to the appropriate resources to enable them to successfully fulfil their brief	What kind information, human, material and time resources were available?	Access to information from the public	Access to human resources	Enough time to make decisions
	Task definition. The nature and scope of the participation task should be clearly defined.	How were the nature and scope of the participation task defined?	Clearly defined participation task	-	-
	Structured decision making. The participation exercise should use/provide appropriate mechanisms for structuring and displaying the decision-making process	Which mechanisms for structuring and displaying the decision-making process were used?	Decision making in groups	Use of decision-aiding tools	-
	Cost-effectiveness. The procedure should in some sense be cost-effective (e.g., time, finances, knowledge)	Could the procedure be evaluated as cost-effective?	Potential costs of large public involvement taken into account	High monetary costs	-

ground (Buchy & Hoverman 2000, Kruger 2001, Hamersley Chambers & Beckley 2003, Farcy 2004, Saarikoski et al. 2010). Public participation processes can lead to better decision-making by providing local or independent sources of information and by examining alternative management strategies; they also build trust, educate and inform all involved, and can reduce long-term delays and uncertainty. An important motivation for engaging in public participation activities is that such processes lend legitimacy to the final outcome (Beckley et al. 2005).

There are varying degrees of intensity of public participation ranging from sharing information to collaborative decision making, and one or more levels of intensity may be

used in any one process (FAO/ECE/ILO 2000).

Buttoud (1999a) distinguishes between passive and active participation, where passive participation is only used as a tool for improving the communication between public authority and actors. The relationship between state authority and actors is a unilateral one. It is just a consultation procedure, whereas active participation presumes that the participants contribute more or less directly to the decision making, through a negotiation procedure (Buttoud 1999b) with multilateral relations between the public authority and the actors.

Public participation can be understood in two ways. In a narrow sense it is the participation of public in sustainable forestry. We

understand public participation in a broader sense including the involvement of stakeholders within the forestry sector and outside the sector. Participation is closely related to governance modes (Rhodes 1997, Benz 2004), cross-sectoral coordination, intra-sectoral discourse and multilevel governance, which influence and complement each other.

Evaluation criteria on public participation according to Rowe & Frewer (2000) were adapted for the purpose of this study. Participation criteria were operationalized by the selected empirical indicators (Tab. 1). The following Acceptance Criteria related to the effective construction and implementation of a procedure were evaluated: (i) representativeness; (ii) independence; (iii) early public involvement; (iv) influence; and (v) trans-

Tab. 2 - Data sources.

NFP SR formulation	FMPs elaboration
<ul style="list-style-type: none"> - National Forest Program (Moravčík et al. 2007) - Action Plan of the NFP SR (http://www.mpsr.sk/download.php?fid=2861) - Hand-written minutes and list of participants from discussion forums (authors internal documents) - Government documents and public records (http://www.mpsr.sk, http://www.nlcsk.org, http://www.lesmedium.sk, http://www.rokovania.sk) - Personal statements of NFP editors (3 interviews) - Newspaper and magazine articles about the NFP SR (clippings and data from media monitoring: e.g., online newspapers, professional journal Les-Letokruhy) 	<ul style="list-style-type: none"> - Act on forest (No.326/2005 of the Coll.) with amendments (http://www.nlcsk.sk/nlc_sk/ustavy/uhul/dokumenty/zakon_c_326_2005_z_z_v_zneni_neskorsich_predpisov.aspx) - 5 interviews with representatives of DFO - Internal documents on FMP elaboration from Banská Bystrica (BB) and Prešov (PO) DFOs: Meeting minutes and list of participants (13 meetings in BB and 24 from PO) - Final protocols about new FMPs with the comments - Comments descriptions: 163 letters from FMP participants, mostly stakeholders from forestry, water management, nature conservancy and municipalities

parency. Also Process Criteria related to the potential public acceptance of a procedure such as resource accessibility, task definition, structured decision making and cost-effectiveness were evaluated.

Material and methods

Forests in Slovakia cover an area of 2170 thousand hectares, 40.9% of that is in state ownership (*i.e.*, managed by state enterprises - MA 2010). State forestry administration is separated from state management organizations and performs administration and controls forest management. The central unit is the Ministry of Agriculture and Rural Development with the Forestry section and on the lower level are 8 District Forest Offices (DFO) and 38 Local Forest Offices. All their duties and responsibilities are delegated by the Forest law no. 326/2005 of the Coll.

Planned sustainable forest management has a long tradition in the territory of the Slovak Republic. The first order of preserve for the forest was more than 400 years ago (the Maximilian's forest order, *Constitutio Maximiliana* in 1565 - Šulek et al. 2007). History of SFM in Slovakia is characterized by many institutional changes. Forest act no. 61/1977 of the Coll., adopted during the socialist period, promoted large scale forest management which applied less sustainable management principles. During that time there was no engagement of public, not even forest owners in forest planning or decision-making processes. This new period of democracy (after 1989) brought also the demand for public participation in forestry issues.

Currently, there are several levels of forest management planning in the Slovak Republic. The most complex strategic national planning instrument is the National Forest Program SR at the political level. Lower level planning is represented by Forest Management Plans which are elaborated for forest management units (minimum forest area is 1000 hectares) for the period of 10 years. Professional level of forest management is ensured by the Authorized Forest Manager who is a licensed individual guaranteeing ex-

pert treatment of forest property for the forest owner in accordance with the law.

The first relevant policy document on public participation in Slovakian forestry was the "Provision of the Ministry of Agriculture on Forest Management", which included a chapter on participation of interested parties in FMP. Other official documents, *e.g.*, "Conception of Slovak Forestry up to 2005" and "Program of Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Forestry Development", also included chapters dealing with public participation and public relations.

Based on the participation criteria in Rowe & Frewer (2000), several empirical indicators listed in Tab. 1 were set. By answering the assessment questions using yes or no according to these indicators, we will verify whether public participation in sustainable forestry planning in Slovakia meets all participation criteria.

The main research methods were document analysis and interviews. Relevant primary and secondary sources for NFP SR formulation and FMPs elaboration and adoption are listed in Tab. 2.

Personal observation at the meetings during the NFP SR formulation process was used as complementary research method. Author's notes which were taken during the meetings were used for the assessment of participation during the NFP process. Information was complemented by consultations with the main three NFP editors during the early stage of this paper.

Two DFOs (Banská Bystrica - 19.15° E 48.44° N, and Prešov - 21.14° E, 48.59° N) were chosen for FMP analysis. In these DFOs the total number of 56 FMPs (for more than 240 000 ha of forests) were elaborated during the years 2010-2012. Individual qualitative semi-structured interviews with officers responsible for the FMP process were done by phone during the year 2012. All 5 interviewees shared their experiences of the participation status and provided extensive empirical data on FMP process (in-

stitution documents, attendance lists, minutes, etc.) by email which were used for the evaluation.

Results

National Forest Program

Formulation of National Forest Program SR as a strategic policy document had to follow the administrative procedure according to Governmental Directive no. 512 (13 June 2001) on preparation and submission of materials to the Government of the Slovak Republic. Before the submitting all materials are discussed with the relevant authorities (institutions) in interdepartmental comment procedure. The Ministry of Agriculture SR (MA SR) at the beginning of 2004 asked Forest Research Institute (FRI), presently part of National Forest Center (NFC), to coordinate works on NFP SR. During the formulation phase other actors and interest groups were approached by the direct co-operation mechanisms or through a public debate in a so-called Discussion Forum (Fig. 1).

This process was changed and delayed due to institutional, personal and political changes. Final version of National Forest Program of the Slovak Republic as a new forest policy document for the period of years 2007-2020 was approved by the Government of SR by resolution no. 549 (27 June 2007). National Council of SR discussed and noted NFP SR by its resolution no. 531 (20 September 2007).

Evaluation of participation process of NFP SR formulation

Representativeness. At the beginning of the process, lists of forestry institutions and environmental non-governmental organizations (NGO) were prepared. Later on, as a result of the MA SR management meeting decision held on 19 March 2004, a strictly narrow sectoral approach was used. Criteria of broadly representativeness was not met. Only forestry actors were directly invited to participate in the NFP SR preparation (re-

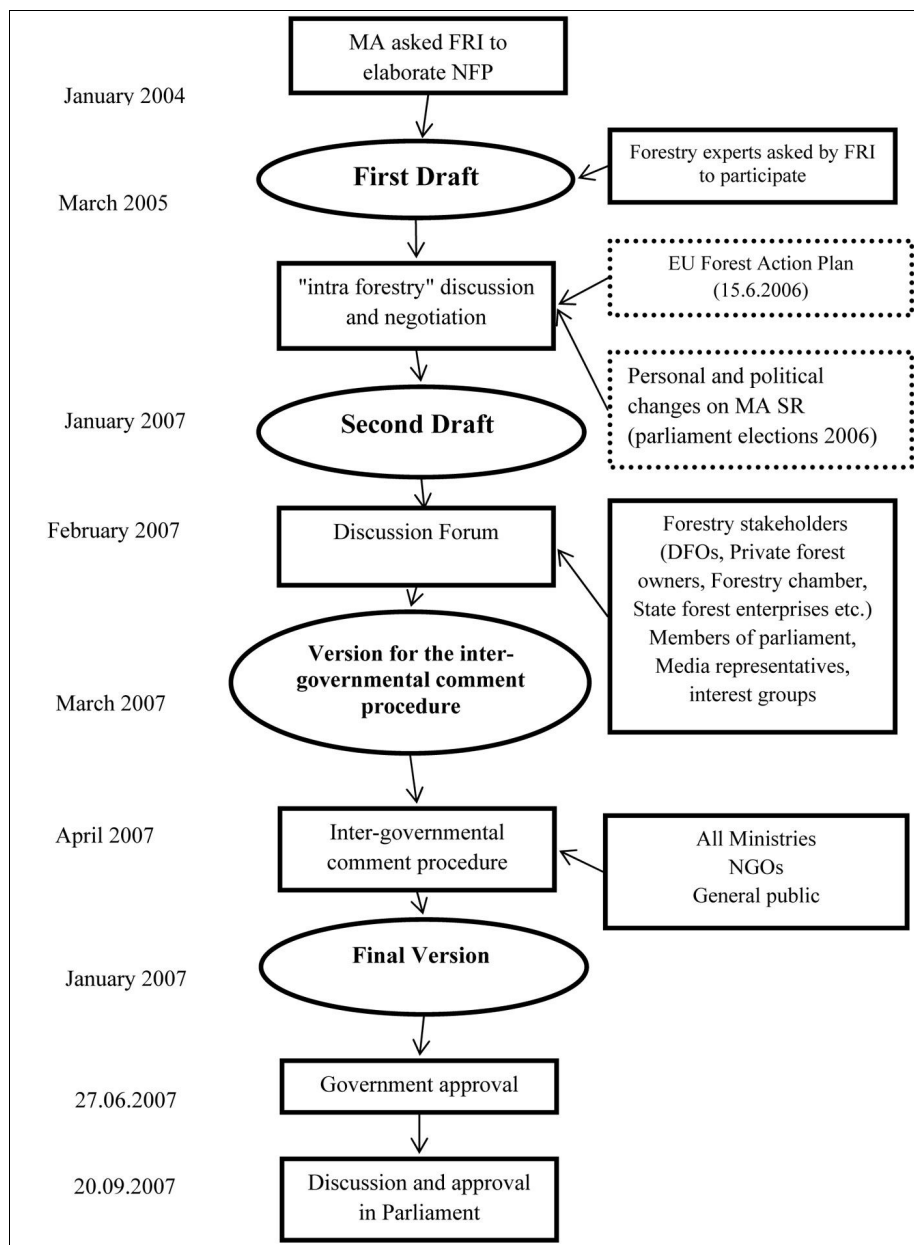


Fig. 1 - NFP preparation process. The ovals denote milestones and the rectangles denotes the actors or important external influences. The arrows indicate the causal relationships.

representatives of public forest organizations, Associations of private forest owners, Forest workers unions, and organizational units of MA SR). Other actors outside the forestry sector were not directly addressed in the preparatory phase; their activity was relied on in a later period using standard legal proceedings.

Independence. The forestry section of the MA SR asked the FRI to invite other participants (representatives of state and public institutions and various interested associations in the field of forestry). NFP SR preparation and coordination was commissioned to FRI, which created a working group composed of relevant forestry-organization representatives who elaborated the first working version of NFP SR and prepared the "intra-forestry" discussion. FRI is

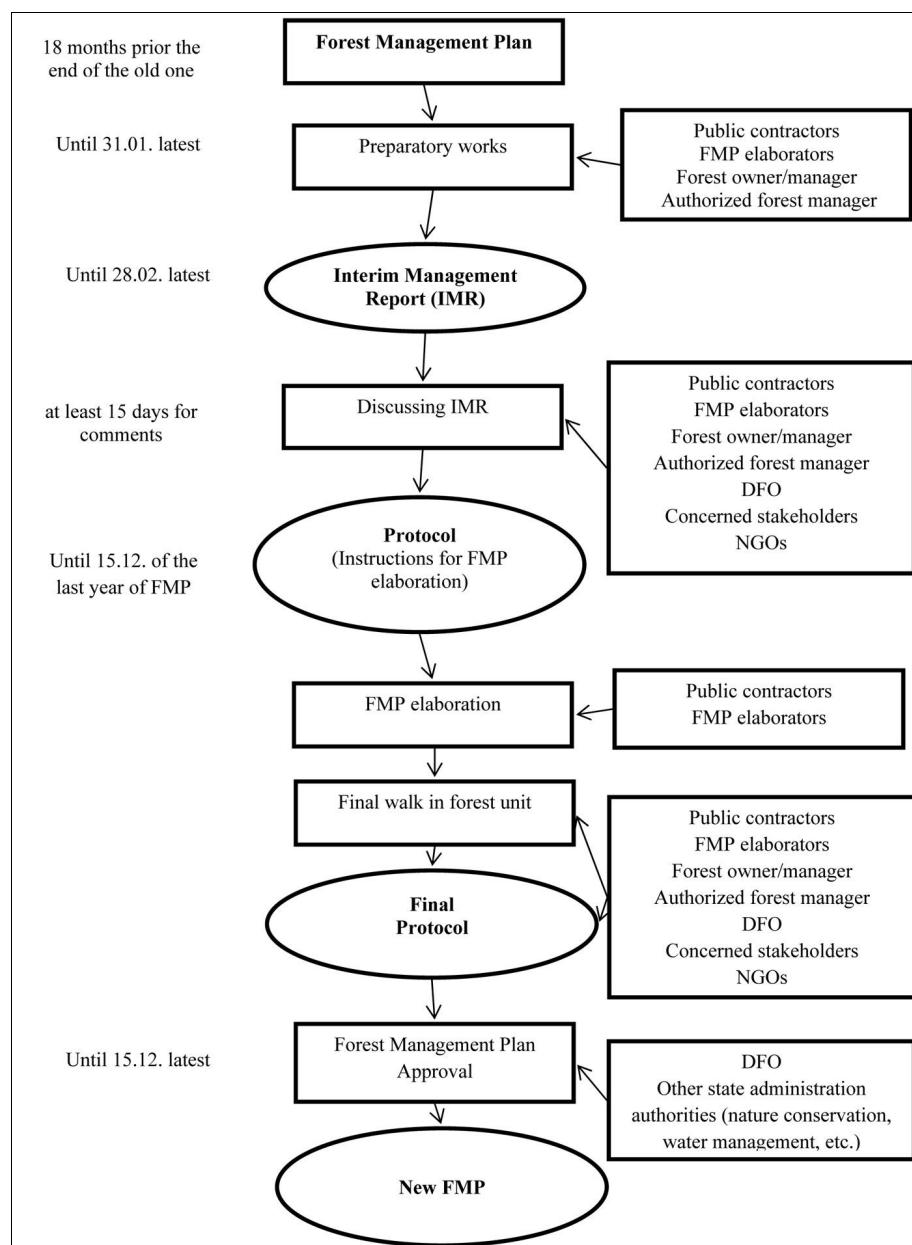
a semi-budgetary forestry agency established by the MA SR and reports directly to the Forestry section of the MA SR. Acceptance of independent participants outside the sponsoring body was ensured in working group.

Early public involvement. The process started in January 2004 within the forestry sector. The first draft was prepared and publicly discussed in March 2005; later the process was retarded and a new version of NFP SR was elaborated and publicly presented through a discussion forum in February 2007. Early involvement of invited actors was observed. Already at an early stage - in the working group of forest specialists - they had the possibility to enter into the formulation process and discussion forums gave the wider forestry public the opportunity to express their opinion before decisions were

taken, interest groups and the public had an opportunity to provide their comments and recommendations to the proposal through written statements in standard interdepartmental comment procedure.

Influence. In interdepartmental comment procedure sixty comments were raised of which 34 were from institutions. Seventeen of them were principal, while none of them presented a mass comment from the public. All comments were accepted, but 4 from Ministry of Economy SR only during the difference-reconciliation procedure. The National Forest Programme of the Slovak Republic together with the detailed developed Vision, Strategy and Prognosis of Forestry in Slovakia (2010) is the official state forest policy, which follows all applicable forest policy documents in SR.

Fig. 2 - FMP elaboration and preparation process. The ovals denote milestones and the rectangles denotes the actors. The arrows indicate the causal relationships.



Transparency. A decision was made on the democratic principle in the working group of forest specialists according to results from the discussion. Both the proposal of NFP SR, with the possibility to provide comments, and the final version were presented on the website of the MA SR. The information about this was announced via the web of forestry organizations, and professional journals. Process was communicated using media (journalists participation in discussion forum, articles in different journals) and web pages (web page of NFC, MA SR, government meetings, etc.), but feedback from the general public was low. Participants in NFP SR preparation had the opportunity to directly control the incorporation of their comments in the next version. No information on the procedure was withheld.

Resource accessibility. Principles of public participation were chosen based on previous practice in strategic document creation (Focus Group, Consensus Conference, interdepartmental comment procedure). Participation during the preparation was coordinated by FRI. The coordinator of the process had prepared a plan that described particular tasks in great detail. Partners in participation were chosen based on the decision of MA SR and FRI to discuss and unify the “forestry” version of NFP SR, and only after this meeting should it be presented to the general public. Duties were delegated among experts from FRI according to their field of expertise. The draft version had been reviewed and commented by other forestry partners from the working group. Involvement of the public was ensured in the later

phase and was coordinated by MA SR. FRI as the partner responsible for the preparation had enough information as well as other resources to fulfill the task. Other participating parties worked at their own expense. Given the regular and active participation of all actors (members of working groups) by NFP SR formulation, it can be assumed that they had enough available resources. Our findings did not indicate any actors outside the forestry sector complaining about insufficient resources for participation.

Task definition. Participants are allowed to discuss drafts under consideration among themselves or with others (colleagues, co-workers, experts). No facilitator was involved; decisions were made within the group in order to provide a final version. Later (in the interdepartmental comment procedure),

the numbers of comments were counted, and accepted or rejected, in a particular way. All responsibilities and scope of the task were defined clearly.

Structured decision making. A discussion forum, media presence and interdepartmental comment procedures were used as mechanisms for displaying the decision-making process. No specific decision-aiding tools were used. Informally in the first phase at FRI, consensus decision-making and group decision-making processes were used. Formal quantitative procedure was used to decide the final version.

Cost-effectiveness. To facilitate the process and save time and money, all material was available in advance in an electronic form. Face-to-face meetings of working groups were limited to a minimum. The staff of FRI was engaged in Forest Europe (MCPFE) processes from the beginning and had enough information about the NFPs and other international issues related to forestry. The task was delegated at FRI, which had available personnel, material and time resources. MA SR provided financial support for the coordinator during the NFP SR formulation process. The process was found to be cost-effective.

Forest management plans

Using FMP at practical management is obligatory for all kind of forests in Slovakia. The duty of elaboration of FMP, list of its mandatory components and exact descriptions of steps and terms/dates applied at FMP elaboration process are stated in the Act on Forests no. 326/2005 of the Coll. The elaboration process results in only one FMP proposal, which is considered to be the optimal (Sedmák et al. 2013). Every year new FMPs for approx. 200 000 ha of forest land are being elaborated, which is almost 1/10 of the total forest area of SR. Elaboration of FMPs is administered and organized by the forestry state administration authorities (specifically DFO - Fig. 2).

Evaluation of the participation process in the FMP's elaboration and adoption

Representativeness. In the process of FMP elaboration, the following actors were included: public authorities, licensed forest managers, forest owners (users), environmental NGOs and the public. The involvement of actors is stated in the forest act. It distinguishes between obligatory actors and concerned parties. Obligatory actors must be present at the FMP elaboration process, and concerned parties can step into the process when they claim that their rights may be affected by the FMP elaboration (NGOs, public). As the participants present a broadly representative sample, the representativeness criterion is met.

Independence. The schedule of FMP elaboration is made available at the website of DFOs. There are actors who must be invited according to forest law. Potential actors who express interest in specific forest management units in which the FMP is being elaborated can register at DFO and will be invited to participate at the FMP elaboration and adoption process. DFO has to send out the Call for Statements with a request for comments in which it also sets the period for sending comments (approx. 30 days). Comments sent after this date will be ignored. The independence criterion is met.

Early public involvement. When there is a specific area of interest, actors can participate from the beginning of the FMP elaboration process until the final approval by DFO. Early involvement of invited actors was observed. Already at an early stage, after elaborating the report on actual management activities in forests and principles of the next FMP elaboration, other actors besides obligatory ones are involved.

Influence. The actors can raise comments regarding materials for decisions on FMP approval. They can raise comments regarding management practices, felling quantity, tree species etc. For example, comments regarding management measures in protected areas raised by environmental NGOs were accepted, and management practices were changed. The influence could be assumed to be low because only 1/3 of comments were accepted.

Transparency. The parties have access to all relevant documents regarding the new FMP elaboration at the DFO. No information can be withheld. The results, from the discussion on the management report with the comments and requirements of involved actors, are listed in the protocol. After approval they can appeal against the decision in the specific part that concerns their interests. The transparency criterion is met because the whole procedure is enacted according to administrative procedure (Act no. 71/1967 of the coll.), and there are legal procedures that must be observed in order to ensure accordance with the law.

Resource accessibility. The full access to information is ensured by the law (Act on free access to information no. 211/2000 of the coll.). The time frame of FMP elaboration and approval process is strictly set by forest law and must be observed. We cannot estimate the accessibility to other resources; we can only presume that it is good due to the fact that there is interest from different actors (from 30-40 per forest management unit) to participate in the FMP elaboration and approval process.

Task definition. The nature and scope of the participation task is clearly defined by forest law. Participating parties have clearly set tasks which they must complete and

which results from their role in the process (e.g., a forest owner must choose the elaborating person from FMP, NGOs can raise comments regarding management practices, etc.).

Structured decision-making. The mechanisms for decision making are stated in the forest law. All involved actors meet at the discussion on management report, after the end of the field works, and before submitting the FMP proposal to public authorities for comments. At this meeting they can negotiate proposed management activities and FMP content. Then the FMP proposal must be sent out to other public authorities. The comment procedure of public authorities is obligatory, wherein concerned public bodies give comments to FMP content. After this the final version is elaborated and approved by DFO. No specific decision-aiding tools are used.

Cost-effectiveness. The costs are barred by the participating party. The process can be assumed to be cost-effective. The FMP contractor is chosen by public procurement from authorized subjects to ensure the cost effectiveness in terms of time, finances and professional knowledge. Processing of the participation quantities, the large number of actors and the number of comments (e.g., for the area of 51 thousand hectares, 413 actors and 325 comments) prolongs the FMP formulation process.

Discussion

While there is an increasing demand for active public involvement in forestry decision-making, there are so far few successful models for achieving this in the new context of SFM (Sheppard & Meitner 2005).

Participatory approaches in public policy in Slovakia are emerging together with the democratic process wherein the emphasis is placed on participation of people in public affairs and on the need to involve as many groups in policy making as possible. Public involvement in sustainable forestry is difficult to apply because of negative experiences with the engagement of different environmental NGOs in nature protection activities in Slovakia (Kovalčík et al. 2012).

It is necessary to mention that wide public participation is rather rare - various interest groups and NGOs play the key role here. Involvement of actors during the formulation and adoption processes may take place at the administrative level or between administration and actors at different levels. As a reaction to changes in governmental programme or international law, it is most often the MA SR who is involved as the initiator of forest policy changes. The Forestry Section of the MA SR performs coordination functions; the responsible body is usually a state-administered institution under the MA SR (FRI, NFC). The role of actors is to give comments

and participate in the implementation of tasks resulting from their mandate. The representatives of involved forestry organizations and interest groups represent the opinion of the whole professional public.

At the European level - National forest programs are examples of participatory processes involving stakeholders from the forest management and development areas. For example, in Germany the process of NFP involved various organizations, including federal departments, state forestry agencies as well as various NGOs, including those geared towards nature conservation, forestry, manager of land, timber and paper industries (Elsasser 2002). In Austria, the so-called Austrian Forest Dialogue, an ongoing governance process at the national level, created the elaboration of NFP. It took into account the basic procedural principles for the elaboration of a NFP as agreed in international commitments, e.g., stakeholder participation as well as efforts towards inter-sectoral and multi-level co-ordination (Hogl & Kvarda 2008).

The main problem of all participation processes is representation and legitimization (O'Neill 2001). An international agreement (MCPFE Vienna Resolution 1) states that participation is one of the basic principles of NFP, but there is no firm guidance who should be involved in such a process. This opens the opportunity for different interest groups to be involved in NFP formulation. With the invitation for organized interest groups to participate in an NFP, there exists the risk that these groups will lobby for their own interests (Elsasser 2002, 2007). The participants of the NFP SR were members of closed networks in the established forestry sector. It is therefore probable that common interests of foresters were sufficiently represented. Involved actors at the beginning of the formulation process disabled broader participation.

The tradition of general public participation in the development of NFP is known from Finland (Ollonquist 2006, Primmer & Kyllönen 2006). In Eastern and Central Europe there are also very strong initiatives to prepare NFP from the bottom up. The second Czech National Forest Programme covering the period 2007-2013 resulted from difficult negotiations among representatives of different state authorities, Public Administration bodies, scientific and research institutions, state and private enterprises, nature conservation NGOs and special interest associations. The consensus was reached by experts (Hruška 2008).

Participants or involved actors sometimes disagree with this procedure of wide public participation for practical reasons (the broadening of participants could paralyze the whole process), or for strategic reasons (to serve their own interests is easier in a smaller clo-

sed network of established interest groups), as in our case. The practical impact of this problem would be less relevant if the policy directions developed by the representatives sufficiently represented the goals of the group (Elsasser 2007). The first step in the NFP process is to reflect the respective goals of forest owners and managers of both state and non-state forest enterprises. The participation of experts allows the preparation of an "experts' version" based on state-of-the-art knowledge. Participative NFP can indirectly or even directly influence policy decisions, and therefore, according to Dryzek (2000), a collective decision is also important for that that may not be identical with organized actors.

Social acceptance of forest management also enhances public commitment to SFM (FAO/ECE/ILO 2000). Therefore, it is essential that the public is involved in forestry planning at the forest management unit level. Most forests in Europe have a forest management plan or some equivalent as the instrument for SFM (FAO 2010), but there are substantial differences in form and content (UNECE/FAO 2011), and public participation is addressed differently. For example since 2007, Belgium, Luxembourg, Slovenia and Ukraine have established special units/entities responsible for public awareness and participation matters. Similarly, the Federal Agency of Forestry in the Russian Federation established a unit of Public Ecological Advice with the aim of increasing public participation and strengthening cooperation between state and public forest authorities (UNECE/FAO 2011).

Nevertheless, a lot has been done for public participation in SFM in Slovakia since 2005, when the completely new Forest Act was passed. Participation in sustainable forestry is supported by legislation, but there are still many problems to be solved (independence, acceptance and influence). It seems that the majority of practical problems originate from the conflict between the economic interests of forest owners and the environmental interests of society, and some of them still even originate from rather strict forest legislation.

The participation features in the process of FMP elaboration are generally acknowledged in eastern and central Europe, but the extent and the outcomes of public participation largely varies. Bouriaud et al. (2013) focused on the FMP and forest owners participation. In some countries (Bulgaria, Czech Republic, Macedonia, and Romania) forest owners are put outside of the planning process or only consulted (Serbia, Slovakia, Kosovo), with no real influence in the process, in contrast to western Europe where FMPs may serve as information tool for forest owners (Brukas & Sallnäs 2011) or support for forestry decision makers (Kangas

et al. 2008)

The restricted possibilities for forest owners to participate during the FMP elaboration in Slovakia is mentioned by Kulla et al. (2010) and Sedmák et al. (2013). Forest owners practically step in the process of FMP elaboration only in the last phase of FMP approval. The common planning practice indirectly prescribes the forest owner preference settings mainly on the base of a decision of preferences optimal from the public perspective. The approach by Rowe & Frewer (2000) was designed as a basis for empirical studies assessing public participation. As the authors state, the main problem in the evaluation of participation methods was the absence of any optimal benchmark which they might be compared and measured against. They therefore proposed a number of evaluation criteria as benchmarks. The evaluation criteria should not be taken as definitive but rather as the focus for debate and a spur to future experimental research (Rowe & Frewer 2000). As the criteria are rather general, they can be applied to evaluate any public participation process. Public participation is considered to be an important element of forestry planning (Cantiani 2012) because it includes decisions on natural resources management which should take public interest into account. The results of this study shows that the criteria which were used in our case can be applied on assessing public participation in forestry.

Conclusions

Public participation in sustainable forestry may be considered a means to develop better informed and more widely accepted forest management outcomes. Chosen participation examples have showed that participation is still very formal. The most common actors are public authorities represented by their official representatives and the most active actors besides forest owners or managers are environmental interest groups.

NFP SR formulation process showed deficiencies in early public involvement and representativeness from the general public point of view. Process criteria were formally met.

The participation in FMP elaboration and adoption is open to the general public and all process details are described by forest law, but the involvement of actors other than public authorities is relatively low. Involved actors only legitimate decisions.

Future techniques aimed at opening the forest planning process to include all stakeholders including general public should be developed. The first step would be to greater engage forest owners in decision making on the forest unit level (FMP) which also requires changes in legislation. Only afterward it is possible to consider larger public involvement in SFM.

List of abbreviations

The following abbreviations are used throughout the text:

- Austrian Forest Dialogue (AFD)
- District Forest Offices (DFO)
- European Union (EU)
- Forest Management Plans (FMP)
- Forest Research Institute (FRI)
- FOREST EUROPE Ministerial Conference on the Protection of Forests in Europe (MCPFE)
- Ministry of Agriculture and Rural Development SR (MA SR)
- National Forest Centre (NFC)
- National Forest Program (NFP)
- National Forest Program of the Slovak Republic (NFP SR)
- Non-governmental organizations (NGO)
- Sustainable Forest Management (SFM)
- Slovak Republic (SR)

Acknowledgements

This work was supported by the Slovak Research and Development Agency under the contract No. APVV-0057-11, by the European Regional Development Fund, Project No. 262201200006 and Czech Agency for Agricultural Research under contract No. QJ1220313. The authors thank to Paul D Ronning, from Scientific and Technical Text Translation Company for improving the language of this article.

References

Beckley T, Parkins J, Sheppard S (2005). Public participation in sustainable forest management: a reference guide. Sustainable Forest Management Network, Edmonton, Alberta, Canada, pp. 60. [online] URL: http://www.northeasternforests.org/FRPC/files/1237487548SR_200506beckleyub_en.pdf

Benz A (2004). Governance - Regieren in komplexen Regelsystemen [Governance in complex control systems]. VS Verlag für Sozialwissenschaften, Wiesbaden, Germany, pp. 240. [in German]

Boon TE, Meilby H (2000). Enhancing public participation in state forest management: a user council survey. *Forestry* 73 (2): 155-164. - doi: [10.1093/forestry/73.2.155](https://doi.org/10.1093/forestry/73.2.155)

Bouriaud L, Nichiforel L, Weiss G, Bajraktari A, Curovic M, Dobsinska Z, Glavonjic P, Jarský V, Sarvasova Z, Teder M, Zalite Z (2013). Governance of private forests in Eastern and Central Europe: an analysis of forest harvesting and management rights. *Annals of Forest Research* 56 (1): 199-215. [online] URL: <http://www.edi-urasilvica.ro/af/56/1/bouriaud.pdf>

Brukas V, Sallnäs O (2011). Forest management plan as a policy instrument: carrot, stick or sermon? *Land Use Policy* 29 (3): 605-613. - doi: [10.1016/j.landusepol.2011.10.003](https://doi.org/10.1016/j.landusepol.2011.10.003)

Buchy M, Hoverman S (2000). Understanding public participation in forest planning: a review. *Forest Policy and Economics* 1: 15-25. - doi: [10.1016/S1389-9341\(00\)00006-X](https://doi.org/10.1016/S1389-9341(00)00006-X)

Buttoud G (1999a). Principles of participatory processes in public decision-making. In: "Regional Forest Programmes: A Participatory Approach to Support Forest Based Regional Development" (Niskanen A, Vayrynen J eds). *EFI Proceedings* 32, Joensuu, Finland, pp. 11-28. [online] URL: http://feffr.org/files/attachments/publications/proc32_net.pdf#page=11

Buttoud G (1999b). Negotiation methods to support participatory forestry planning. In: "Regional Forest Programmes: A Participatory Approach to Support Forest Based Regional Development". *EFI Proceedings* 32, Joensuu, Finland, pp. 29-46. [online] URL: [https://elearning.unipd.it/scuolaamv/pluginfile.php/14995/mod_resource/content/1/2_negotiation%20methods%20\(by%20G.%20Buttoud\).pdf](https://elearning.unipd.it/scuolaamv/pluginfile.php/14995/mod_resource/content/1/2_negotiation%20methods%20(by%20G.%20Buttoud).pdf)

Cantiani MG (2012). Forest planning and public participation: a possible methodological approach. *iForest* 5:72-82 - doi: [10.3832/ifor0602-009](https://doi.org/10.3832/ifor0602-009)

European Commission (2001). European governance. A white paper. COM(2001) 428 final, Brussels, Belgium. [online] URL: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52001DC0428&rid=2>

Dryzek JS (2000). *Deliberative democracy and beyond: liberals, critics, contestations*. University Press, Oxford, UK, pp. 208.

Elsasser P (2002). Rules for participation and negotiation and their possible influence on the content of a National Forest Programme. *Forest Policy and Economics* 4 (4): 291-300. - doi: [10.1016/S1389-9341\(02\)00071-0](https://doi.org/10.1016/S1389-9341(02)00071-0)

Elsasser P (2007). Do "stakeholders" represent citizen interests? An empirical inquiry into assessment of policy aims in the National Forest Programme for Germany. *Forest Policy and Economics* 9 (8): 1018-1030. - doi: [10.1016/j.forpol.2006.10.002](https://doi.org/10.1016/j.forpol.2006.10.002)

Farcy C (2004). Forest planning in Europe: state of the art, international debates, emergent tools. In: "Towards the sustainable use of Europe's forests - Forest ecosystem and landscape research: scientific challenges and opportunities" (Andersson F, Birot Y, Päivinen R eds). *EFI Proceedings* 49, pp. 11-20.

FAO (2010). *Global Forest Resources Assessment 2010*. Main Report. *FAO Forestry Paper* 163, FAO, Rome, Italy, pp. 378. [online] URL: <http://www.fao.org/docrep/013/i1757e/i1757e.pdf>

FAO/ECE/IO (2000). Public participation in forestry in Europe and North America. Report of the Team of Specialists on Participation in Forestry, Committee on Forest Technology, Management, and Training. *International Labour Office*, Geneva, Switzerland, pp. 144.

UNECE/FAO (2011). *State of Europe's Forests 2011: status and trends in sustainable forest management in Europe*. Ministerial Conference on the Protection of Forests in Europe, Forest Europe, Liaison Unit, Oslo, Norway, pp. 337. [online] URL: http://www.unece.org/fileadmin/DAM/publications/timber/Forest_Europe_report_2011_web.pdf

Hamersley Chambers F, Beckley T (2003). Public involvement in sustainable boreal forest management. In: "Towards Sustainable Management of the Boreal Forest, NRC Research Press" (Burton, PJ, Messier C, Smith DW, Adamowicz WL eds). NRC Research Press, Canada, pp. 113-154. [online] URL: <http://www.nrcresearchpress.com/doi/abs/10.1139/9780660187624#page=120>

Hogl K, Kvarda E (2008). The Austrian forest dialogue: introducing a new mode of governance process to a well entrenched sectoral domain. *INFER*, University of Natural Resources and Applied Life Sciences, Vienna, pp. 82.

Hruška J (2008). The Czech National Forest Programme II - a cautious optimism. The nature conservation journal 1/2008, web site. [in Czech] [online] URL: <http://www.casopis.ochranaprirody.cz/Pece-o-prirodu-a-krajinu/narodni-le-snicky-program-ii.html>

Jeanrenaud S (1999). Participation and partnership in forestry - why, what, who and how. *WWF/IUCN*, St. George, Switzerland, pp. 8.

Kangas A, Kangas J, Kurttila M (2008). Decision support for forest management. In: "Managing forest ecosystems", vol. 16, Springer, Berlin, Germany, pp. 222.

Kovalčík M, Sarvašová Z, Schwarz M, Moravčík M, Oravec M, Lásková J, Tutka J (2012). Financial and socio-economic impacts of nature conservation on forestry in Slovakia. *Journal of Forest Science* 58 (10): 425-435. [online] URL: <http://agriculturejournals.cz/publicFiles/75875.pdf>

Kruger LE (2001). What is essential may be invisible to the eye: understanding the role of place and social learning in achieving sustainable landscapes. In: "Forests and Landscapes: Linking Ecology, Sustainability, and Aesthetics" (Sheppard SRJ, Harshaw HW eds). *IUFRO Research Series* No. 6, CABI Publishing, Wallingford, UK, pp. 173-187.

Kulla L, Bošela M, Burgan K (2010). Potreba a možnosti inovácie rámcového plánovania HÚL na Slovensku [Needs and possibilities of framework planning innovations in Slovak forest management]. In: "Súčasnost' a budúcnosť hospodárskej úpravy lesov na Slovensku" (Bortel S, Bavlšík J eds). *NLC*, Zvolen, Slovakia, pp. 42-49. [in Slovak]

MA (2010). Report on the status of forestry in the Slovak Republic of 2009 (Green report - 1st edn). Ministry of Agriculture and Rural Development of SR in cooperation with National Forest Centre Research Institute, Zvolen, Slovakia, pp.102.

Moravčík M, Novotný J, Toma P (2007). *Národný lesnícky program Slovenskej republiky* [National forest programme of the Slovak republic]. Ministerstvo pôdohospodárstva SR, Národné lesnícke centrum - Lesnícky výskumný ústav, Zvolen, Slovakia. [in Slovak]

Ollonquist P (2006). National Forest Program in sustainable forest management. *Working Papers of the Finnish Forest Research Institute* 38: 14-27.

O'Neill J (2001). Representing people, representing nature, representing the world, *Environment and Planning*. Government and Policy 19 (4):

- 483-500. - doi: [10.1068/c12s](https://doi.org/10.1068/c12s)
- Primmer E, Kyllönen S (2006). Goals for public participation implied by sustainable development, and the preparatory process of the Finnish National Forest Programme. *Forest Policy and Economics* 8: 838-853. - doi: [10.1016/j.forpol.2005.01.002](https://doi.org/10.1016/j.forpol.2005.01.002)
- Rhodes RAW (1997). *Understanding governance: policy networks, governance, reflexivity, and accountability*. Open University Press, Buckingham and Philadelphia, USA, pp. 235.
- Rowe G, Frewer L (2000). Public participation methods: a framework for evaluation. *Science, Technology and Human Values* 25 (1): 3-29. - doi: [10.1177/016224390002500101](https://doi.org/10.1177/016224390002500101)
- Saarikoski H, Tikkanen J, Leskinen LA (2010). Public participation in practice - assessing public participation in the preparation of regional forest programs in Northern Finland. *Forest Policy and Economics* 12: 349-356 - doi: [10.1016/j.forpol.2010.02.006](https://doi.org/10.1016/j.forpol.2010.02.006)
- Sedmák R, Fabrika M, Bahýl J, Pöbiš I, Tuček J (2013). Application of simulation and optimization tools for developing forest management plans in the Slovak natural and management conditions In: "Implementation of DSS tools into the forestry practice" (Tuček J, Smreček R, Majlingová A, Garcia-Gonzalo J eds). Technical University in Zvolen, Slovakia, pp. 139-152.
- Sheppard SRJ, Meitner M (2005). Using multi-criteria analysis and visualisation for sustainable forest management planning with stakeholder groups. *Forest Ecology and Management*, 207 (1-2): 171-187. - doi: [10.1016/j.foreco.2004.10.032](https://doi.org/10.1016/j.foreco.2004.10.032)
- Šulek R, Šalka J, Sarvašová Z (2007). Innovations in forestry - National Forest Programme of the Slovak Republic. In: *Proceedings of the International Workshop "Status and Perspectives of Innovation in forestry"*. Prague (Czech Republic) 25 Sep 2007. Czech University of Life Sciences Prague, Prague, pp. 34-37. [in Czech]
- Zingari PC (1998). French forest communes and sustainable development in mountain areas. *Unasylva* 49 (195): 55-57.