

# Perspectives of Forest Management Planning: Slovenian and Croatian Experience

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## Abstract – Nacrtak

*Drawing upon the historical framework of origin and development, and a long tradition in forest management planning in Slovenia and Croatia, and based on a survey of literature and research to date, this paper addresses problems and perspectives of forest management planning. Comparison is made of forest management planning concepts, which generally differ from country to country in terms of natural, social and economic circumstances. Impacts of forest management planning on the condition and trends in forest resources are discussed. Perspectives of forest planning and management are viewed as a permanent and continuous task. This task involves sustainable forest management through the development of integral and close-to-nature management. Within the adaptive approach to management as the main focus of future planning development, the core elements of forest management planning are discussed: planning as a process, inventory and planning, project planning and design, team work, importance of management monitoring and analyses, spatial levels of planning, and finally, creativity and restrictions of adaptive management. Involvement of the public and of all interested subjects in the forest management planning process is highlighted as an essential prerequisite for developing a planning approach, and so is the establishment of an efficient system of private forest management planning and entrepreneurship.*

*Key words: forest management planning, adaptive management, planning process*

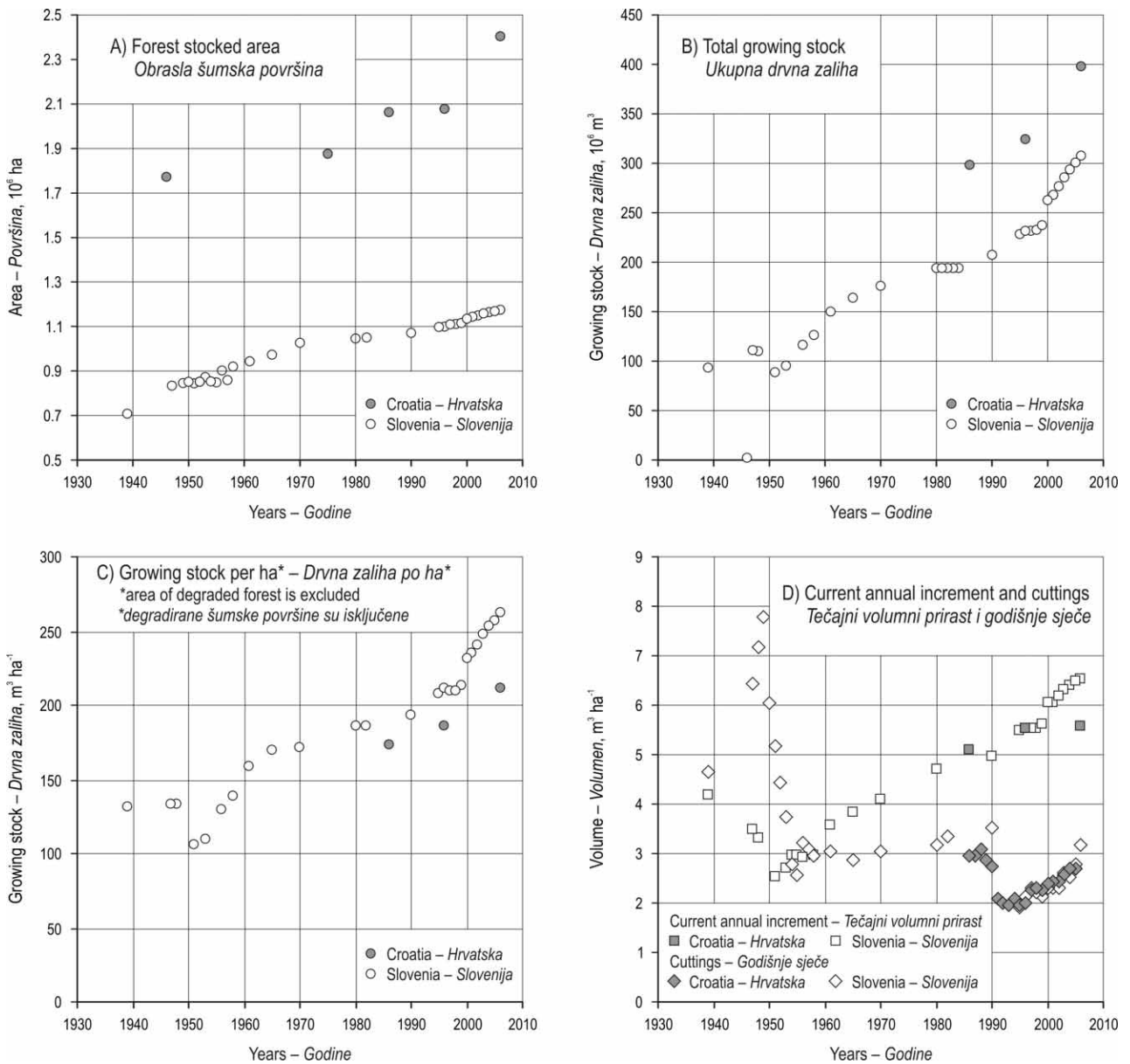
## 1. Introduction – Uvod

Forest management planning in Europe came into being over 200 years ago (Hartig 1795, Cotta 1804). Planned forest management was conditioned by the socio-economic circumstances of that period. As a consequence of over-exploitation of forests, demand for sustainable yield increased. The age of Enlightenment was marked by the development of natural sciences and education and by the emergence of experts in the field of natural sciences and later forestry.

Technological development and new transport possibilities allowed better use of forests and the transport of timber at longer distances. The formerly economically uninteresting and remote forest complexes became increasingly attractive for forest owners as sources of permanent and high forest revenue. As a rule, the oldest beginnings of forest management planning are found in areas lacking forests and

in those close to larger settlements, mines or roads (Schuler 1981, Johann 1994).

The main task of planned forest management was to ensure sustainable yield in timber; however, methods and approaches of achieving this goal were different. To simplify matters, these can be divided into two groups. The first group may be called the classical forestry school based on Cotta's area control method (Cotta 1804), Hartig's volume control method (Hartig 1795), and the later method of age classes (Judeich 1871). The second school is represented by »controllers«, whose approach may be classified as an adaptive forestry school (Gayer 1882, Hufnagl 1892, Schollmayer 1906, Biolley 1920, Möller 1922). The former developed forest management according to the clearcutting method, while the latter advocated more natural forms of management, such as selection management, for example. Their approaches do not differ only in the dominant silvicultural



**Fig. 1** Comparison of forest resources trends in Slovenia and Croatia during period 1939-2006  
*Slika 1.* Usporedba kretanja šumskih resursa u Sloveniji i Hrvatskoj tijekom razdoblja 1939-2006.

system but also in the cognitive approach to forests and management. Such a division is still present in forestry.

Some types of forest management plans are made for about 43% of all world forests (Siry et al. 2005). Comparison of forest management planning concepts in some European countries (e.g. Sekot 1993, Sekot 1994, Kurth 1994, Gašperšič 1995, Hladik 1995, Žihlavnik 2000, Bachmann 2002, Čavlović et al. 2003, Gadow 2005) reveals significant differences among them. Differences may sometimes be found within a single country, particularly if organized on federal

principles. They may be the result of different legal systems, traditions, different natural resources, different outlook on forests, etc. These differences are reflected in the planning levels: planning is sometimes organized on several, and sometimes on one spatial level. The planning content and the type of areas included in forest management planning may also differ, and so do issues such as how detailed the plans are and to what extent different interest parties and the public are involved in the planning process.

Slovenia and Croatia have a rich forestry tradition. The first forest management plan in Slovenia

was drawn up as early as 1771, and in Croatia in 1853 (Meštrović 1987). Forest management planning in Croatia and Slovenia was dominated by elements of the adaptive forestry school, although elements of the classical forestry school also left significant traces. Since the very beginning of forest management planning, social and economic conditions have undergone changes and have had a profound impact on forest management (Bachmann 2003). Despite these changes, the mission of forest management planning has remained the same: how to meet the demands of the society on the forest resource and at the same time preserve the forest ecosystem (Bončina 2001).

The demands on the forest change faster than the forest itself. Several decades ago, the demands on forests were different than they are today (Farcy 2004): therefore, we can assume that the demands in future decades will differ vastly from those of today. Perspectives of future development may be assessed on the basis of a long tradition of planned forest management. The goal of this work is to define crucial problems and perspectives of forest management planning in Slovenia and Croatia. The key area involves managing of stand development. Although the condition of forest resources is affected by historical factors and socio-economic circumstances, that of forest stands is largely the consequence of past management. The development of forest resources in both countries during the last several decades is also discussed.

## 2. Forest Management Planning and Forest Resource Development – Uređivanje šuma i razvoj šumskih resursa

After the Second World War, forest management planning was gradually introduced over the entire forest area of Slovenia (Anonymous 1974, Gašperšič 1995), having an important impact on the development of forest stands (Fig. 1). Apart from management regulations, changes in forest resources were also partly due to social and economic circumstances, which were manifested in the depopulation of rural areas and an increase in forest areas. In the past several decades the felling volume in Slovenian forests has also decreased due to the weakening relationship between forest owners and their forests (Bončina 2008). In comparison with Europe (MCPFE 2003), the growing stock in Slovenia is almost 200% of the average growing stock in Europe. Increment is also higher, and so is the share of large-diameter timber (Table 1).

An interesting point is the proportion of European beech (*Fagus sylvatica*). Beech indicates close-to-nature management, especially when compared

**Table 1** Comparison of forest resource in Slovenia, Croatia and Europe  
**Tablica 1.** Usporedba šumskih resursa u Sloveniji, Hrvatskoj i Europi

	Slovenia	Croatia	Europe
Growing stock, m <sup>3</sup> ha <sup>-1</sup> <i>Drvena zaliha, m<sup>3</sup> ha<sup>-1</sup></i>	269	211	137 (107)
Volume increment, m <sup>3</sup> ha <sup>-1</sup> <i>Volumni prirast, m<sup>3</sup> ha<sup>-1</sup></i>	6.6	5.6	4.6
Proportion of large-sized diameter timber - <i>Udio debeloga drva, %</i>	17	18	
Proportion of beech in total growing stock - <i>Udio bukve, %</i>	32	36	

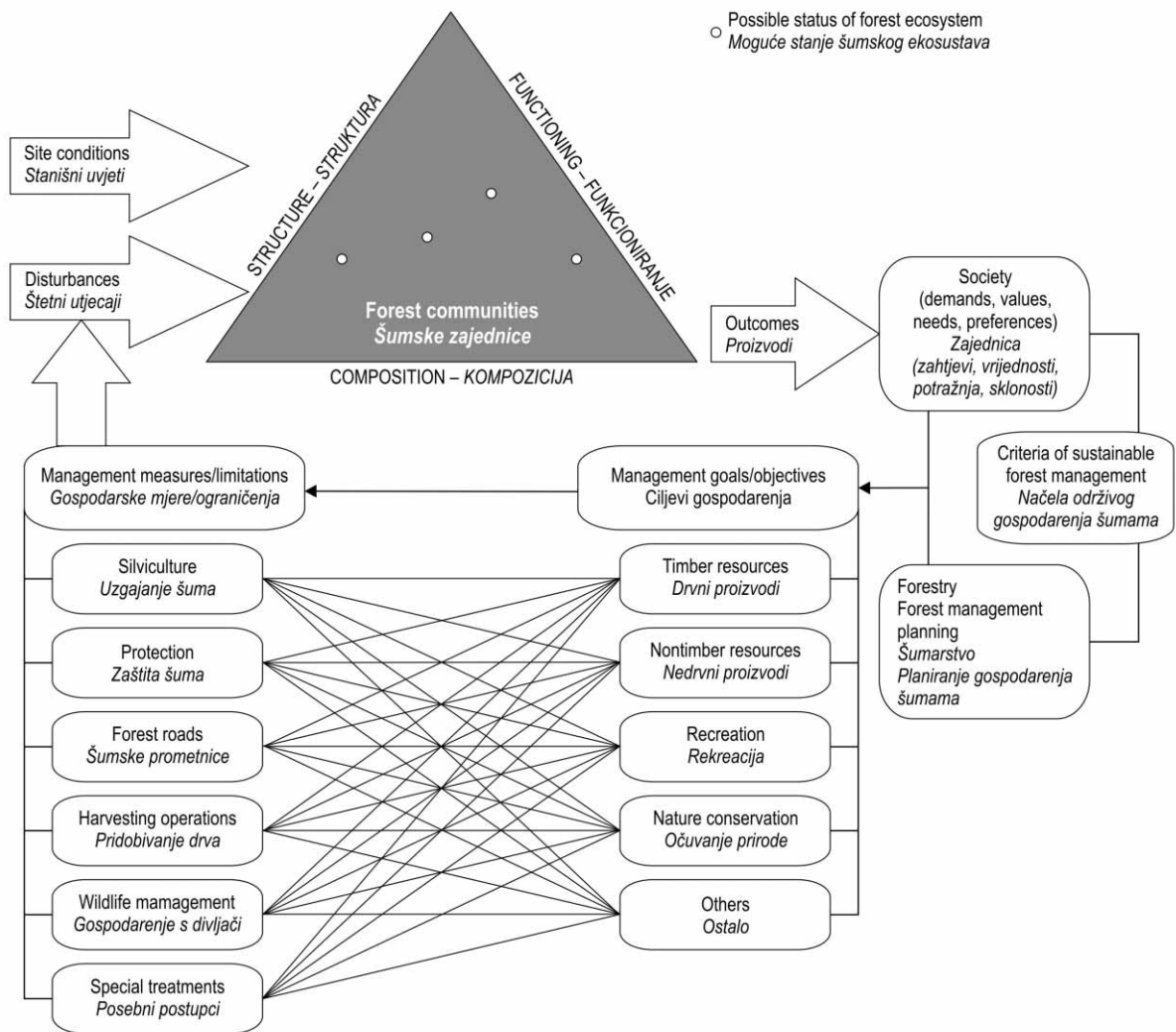
Source - Izvor: FRA 2005, SFS 2009, GFMP 2006

with countries in which, similarly to Slovenia and Croatia, potential forest vegetation is dominated by beech forests (Meštrović and Čavlović 2003, Ficko et al. 2008, Čavlović and Anić 2008). In Slovenia and Croatia beech accounts for one third or slightly more of the entire growing stock in forest stands. In Austria in the year 2000 it accounted for 9.3% of the growing stock (ÖWI 2002) and in Switzerland 18% in the year 1995 (Brassel and Brändli 1999). In the Czech Republic, beech forests cover only 5.8% of the forest area, instead of the potential 37.9%, a percentage which would otherwise be expected from the existing site conditions (Vašíček 1997).

## 3. Problems and Perspectives of Forest Management Planning – Problemi i perspektive planiranja gospodarenja šumama

In the narrower sense, forest management planning denotes the planning of management objectives and methods, and in the wider sense, as in Slovenia and Croatia, it includes three key stages, which are the constituent parts of forest management. These are: 1) defining goals and measures, 2) monitoring management (periodic inventories, records of cutting, performed activities, etc.) and 3) analyzing forest development and evaluating management efficiency.

The basic task of forest management planning has always been and will continue to be the organization of sustainable and multipurpose forest management. Essential management effects can be attained with simultaneous setting of management procedures for different management fields. Therefore, regulations should be synchronized and the contents for all the fields should be included in forest management plans (Fig. 2). Different approaches to achieving multipurpose management can be reduced to the two main approaches.



**Fig. 2** Model of multiple-use and integrative forest management  
**Slika 2.** Prikaz modela višenamjenskoga integralnoga gospodarenja šumama

- ⇒ Segregation management means that a single management goal is pursued in a given forest area and multipurpose management is applied over a larger forest area. This approach focuses on nature preservation. With this view, special protection forests are selected in a larger area, whereas in other forests nature protection is not an issue.
- ⇒ Integration management means that several goals are pursued simultaneously in the same forest area. The goals are not necessarily of equal importance, which is, as a rule, outlined in the forest function map. More important goals have preference (Fig. 2). Nature protection is integrated in active forest management.

The perspective for the region of central Europe is the development of integrative management. This

can be achieved with a close-to-nature management approach. The problems and the current tasks of forest management and forest management planning can be considered through:

- ⇒ Adaptive forest management,
- ⇒ Public participation in forest management,
- ⇒ Entrepreneurship in forest management.

### 3.1 Forest Management Planning and Adaptive Management – Planiranje gospodarenja šumama i prilagodljivo gospodarenje

Forest ecosystems and their subsystems are very complex. This must be taken into account in adaptive management, which means that the goals and regulations are adapted to newly emerging circumstances.



This is why monitoring and analysis of forest ecosystem management and development constitutes an integral part of adaptive management (Bončina and Poljanec 2006). Adaptive management indicates forest responses and allows assessments of management effectiveness. This approach is also important for close-to-nature forest management; however, it implies monitoring and understanding of forest stand dynamics in different sites. The concept of adaptive management is based on the following elements:

- ⇒ **Planning as a process – *Planiranje kao proces*.** The planning procedure integrates the following management stages: 1) identifying the condition and analyzing management to date, 2) identifying goals and plan guidelines and directions to be implemented and 3) monitoring management, and later evaluating management efficiency as a starting point for a new management plan. Planning does not mean simply writing a plan. The process is more important than the plan itself. A plan can be seen as a record of decisions resulting from this process (Lawrence 2000). Planners in this process must not be a closed group; on the contrary, in order for planning to be successful, they should cooperate with experts and other participants in the planning process.
- ⇒ **Adaptive planning and inventory – *Prilagodljivo planiranje i inventura*.** Forest inventory should adjust to the circumstances and should provide useful information for the decision making process. This information should clearly define forest management problems in the unit for which a plan is being made. In addition to standardized data collection, information should also be obtained to support good decision making. In the current practice of forest management planning, a large amount of time is used up by data inventory, collection and processing, which leaves little time and preparation for making decisions.
- ⇒ **Planning or making a project – *Planiranje ili izrada plana*.** Adaptive management focuses on the importance of integrating planning with monitoring, analysis and new decision making, i.e., developing a new plan. The quality of a plan primarily depends on the quality of the decision. Consequently, planning should be undertaken by a person who is thoroughly familiar with the object of planning and its environment and is well versed in the particulars of a management unit, such as, for example, different stand and site features, and who has an overall picture of the entire management unit, knows forest owners and other public

subjects with an interest in the forest area. Project offices (companies) can be very efficient in making inventories, they can also make management plans, but they do not follow their implementation, do not know stand and site particularities, do not know forest owners, and are not involved in the application and monitoring of management. In such cases the adaptive management process is not possible.

- ⇒ **Team work – *Timski rad*.** An important part of the planning process is cooperation among plan bearers, experts in different fields of forest management, district foresters and others. They should jointly analyze changes in forest stands and management effect, define management goals and make decisions on future management. Team work does not mean that decision making competences are divided among the individuals, but that key issues in the planning process are discussed by experts. Such discussions, meetings and workshops are a crucial part of the planning process. This approach improves decisions and avoids conflicts arising from the implementation of planned activities. At the same time, it results in a better quality and applicability of the plan. In the decision making process, important issues are argumentatively discussed by all the participants. Thus, the plan is not an edict »from above« but a record of shared agreement.
- ⇒ **Importance of management monitoring – *Značenje praćenja gospodarenja*.** Adaptive management of forest ecosystems is not possible without monitoring. Monitoring provides the basic data (Gašperšič 1995), makes it possible to test the applied management methods and enables the analysis of management success. Low monitoring reliability lessens the possibility of learning; incorrect monitoring leads to erroneous conclusions which generate wrong management actions. It is possible to monitor a large number of characteristics in a forest. Interest in monitoring is often combined with research and professional ambitions of individuals and institutions. Such monitoring results in good knowledge of the composition of a forest ecosystem and of less important data. Monitoring of forest development and forest management should be viewed from the management aspect; in other words, monitoring should include features relevant for the forest management. In order to cut costs and save time it is good practice to focus on key parameters of a forest ecosystem condition and development. These parameters are manageable

and changeable under management procedures. At the same time, they indicate the condition of the entire forest ecosystem. They are often connected with forest stands. Such data are essential for the evaluation of sustainable forest management. However, considerable time and means are invested in obtaining the data, but not enough in their storage and holding (Bončina and Poljanec 2006). Therefore, it is crucially important to continuously update the forest information system, since it allows rapid, accurate and simple survey of data for any forest management area and management period.

- ⇒ **Management analysis and evaluation – *Analiza i vrednovanje uspešnosti gospodarenja.*** Making a new plan should be regarded as an amendment or correction of the old plan and not as the development of a completely new plan. In order to implement such an approach to planning it is vitally important to analyze the success of past management, which is the essential constituent part of adaptive management and a testing and corrective instrument (Bachmann 2002). In forest management planning, the evaluation of past forest management is primarily important for the renewal of the management plan. Such evaluation requires information on changes of forest stands in the observed period, measures, performed in the observed period, management goals, guidelines and management regulations (Marti and Stutz 1993). Success analysis consists of four elements that complement each other: 1) analysis of measures implementation, 2) analysis of achieved goals, 3) analysis of efficiency, and 4) analysis of past management planning (Bachmann 2002, Bončina and Poljanec 2006).
- ⇒ **Spatial levels of planning – *Prostorne razine planiranja.*** Adaptive planning may be applied to different spatial levels with different important contents. Lately, there has been increasing awareness of the need for management plans at larger spatial levels, particularly at regional levels. In Slovenia, similarly to Croatia, planning is organized at three levels: forest region, management unit, and stand.
- ⇒ **Creativity–searching for novelty – *Kreativnost – traženje novoga.*** Adaptive management does not only imply permanent monitoring, inventorying and analyzing the development of forests and management, but also requires versatile planning of management procedures. This involves trying out new methods of forest management. Future scenarios

should be devised beforehand. Models or scenarios are later tested for system responses (feedback information) obtained by monitoring. Models provide significant support to planners and allow careful deliberation of the structure and dynamics of a managed system. Models also indicate which parameters should be followed for the purpose of interpreting management success. In view of the fact that natural conditions in Slovenian and Croatian forests are exceptionally diverse and considering the current method of forest stand management, we can see that it is often stereotyped and follows routine paths. What is missing is the investigative spirit, the search for new approaches and methods of forest tending, forest protection and new technological solutions. Organization of the planning system should provide suitable climate for innovative work.

- ⇒ **Advantages and restrictions of adaptive management – *Prednosti i ograničenja prilagodljivega gospodarenja.*** In comparison with other management methods, the concept of adaptive planning has some essential advantages (Williams et al. 2007). It allows flexible action in changeable and insecure conditions. It also makes it possible to adjust actions to additional understanding of the system. Another important advantage of such management is that it allows adaptation to changed environmental conditions. The quality of adaptive management is reflected in the fact that it can be permanently updated. Learning is based on monitoring and analysis of the results. Adaptive management allows successful regulation of complex systems and highlights key elements of management. However, adaptive management also has its restrictions. It cannot be applied to all the cases and cannot therefore be the only basis for forest management planning.

Besides methods of the adaptive management some other methods and approaches should be integrated into forest management planning. One of such fields is conflict management; planners must face the fact that conflict management is a constituent part of the planning process. The problem is how to solve or restrict conflicts.

### 3.2 Forest Management Planning and the Participation of Other Interested Subjects – *Šumskogospodarsko planiranje i sudjelovanje ostalih zainteresiranih subjekata*

One of the key perspectives of forest management planning is the participation process. The cur-

rent practice of forest management planning still has some elements of the „classical approach” to planning, such as centralized decision making, analytical approach, an autocratic planning model, disregard of interest groups, overrated possibility of environment control, non-acknowledgement of interest groups, synthesis of non-technical and non-scientific knowledge, experience and wisdom, disregard for the collective approach to planning and dialogue, non-involvement of the public in the planning process, maladjustment of the planning process to the existing circumstances (Lawrence 2000, Bončina 2004).

A part of these weaknesses can be removed by the introduction of participative planning, which has its advantages and disadvantages. The following advantages of intensifying participation can be important for planning (Bachman 2002, Bončina 2004): 1) direct confirmation of multipurpose management models, 2) avoidance of potential conflicts arising from forest use, 3) greater possibility of plan realization, 4) building partnerships and establishing the forest lobby, 5) better relationships between the public and the responsible planning institution, 6) acquisition of new knowledge, 7) raising the awareness and creating public co-responsibility, 8) educating the public, 9) establishing more trust towards professional forest organizations. However, participation also brings weaknesses and risks (Golobič 2002). The following weaknesses can be pointed out from the aspect of forest management planning: 1) the need for more resources, 2) the involvement of extreme groups, 3) development of possible conflict situations, and 4) great expectations. Forest management planning requires the following: 1) informing the public about planning and the planning results (notices, informative texts, discussions, seminars, field trips, web pages, meetings, presentations), 2) public display of plans (draft versions), 3) public debates, and 4) counseling, workshops and working groups.

Forest management planners are often self-sufficient, making a plan the reason in itself. In the future, planning should be directed towards the plan user, and the opinion of the user should be the main criterion for plan applicability. The principal users are the forestry service, forest owners and different public interest groups. Public participation should be intensified, new participation methods should be gradually and differentially introduced, focus should be placed on points in which the possibility of success is the highest, the initiative should be largely left to forestry experts at the level of forest management areas, examples of good practice should be relied on and learning from experience should become a mode of action. It is not enough only to deliberate on the forms of participation, participation methods and

their introduction; instead, a different relationship and approach to planning (philosophy) should be built, in which participative procedures will represent its (smaller) constituent part.

### 3.3 Forest Management Planning and Entrepreneurship – *Uređivanje šuma i poduzetništvo*

One of the perspectives of forest management planning in Slovenia refers to building models for private forest owners (Papler et al. 2004, Ficko et al. 2005). In the past decades the use of forest resources had to be restricted due to low growing stocks and devastated forests (Schuler 1981). With improved forest condition, forest management planners are called upon to build management plans for (larger) forest private properties taking into consideration objectives and needs of forest owners. These plans must be adjusted to the plans at higher levels and should ensure an overview of the entire forest resource, offer different economically valid management variants, determine priorities in management procedures and encourage entrepreneurship within the accepted forest management framework.

Efficient management of a private forest property is based on planning, whose main goals are to (Ripken 1993, Bachmann 2002):

- ⇒ ensure integral and uniform management of a private forest property,
- ⇒ define strategic goals,
- ⇒ optimize forest productivity in relation to site conditions, strategic goals and higher goals of regional plans.

The plan enables the achievement of the forest owner’s goals, efficient and competitive management and efficient control. It also points to the possibility of achieving the goals from higher priority higher-level plans (forest sustainability and financial consequences) and allows the use of the remaining maneuver space in planning. Planning at a private forest level is integral. More attention is paid to planning the felling volume. Since felling volumes and silvicultural activities are the result of planning, they are also a means for achieving goals within the private forest. Economic elements play an important role in new management plans for private forests.

The socio-economic structure of private forests in Slovenia is heterogeneous. Small private forest holdings up to 1 ha, which account for about 14% of the private forest area, are the most common. Holdings larger than 30 ha also account for about 14% of the private forest area, but are owned by only 0.1% of forest owners. In making decisions on planning in private forests, the size of the forest should not be the



only criterion; instead, account should be taken of the owner's need for timber and his possible willingness to participate in the forest management planning process. In general, the smaller the forest, the lower is the possibility of active and planned management. Planning for private forests can be differentiated in terms of approach towards forest owners (their interest and possibility), intensified management in one part of private forests and greater planning efficiency. At the same time, a plan for a private forest is a means for better confirmation of views of the forestry service towards forest owners and wider public (Bončina et al. 2003, Papler-Lampe et al. 2004, Ficko et al. 2005, Čavlović and Pelzmann 2003).

#### 4. Discussion and Conclusion – *Rasprava i zaključak*

Forest management planning has had a crucial impact on the increase in the average growing stock in Slovenia and Croatia and on the improvement of the structure and composition of former degraded forests, which is indubitable success. The present growing stock is very close to the values of the normal (targeted) growing stock, which is in Slovenia about 320 m<sup>3</sup>/ha (ReNGP 2007). The normal growing stock in Croatia is somewhat lower, due to the higher portion of even-aged forest management system (GFMP 2006). A rise in the growing stock is also partly the consequence of poor management or the general absence of management in private forests. This is confirmed by the analysis of stand density, which is often higher than the theoretical one or than stand density in the compared state forests (Ficko et al. 2008). Due to the greater importance of the forest as a renewable natural resource and the current forest condition, the planned felling volume will in future periods be higher than the current one. The manner in which forests will be exploited is also important (silvicultural system, timber harvesting systems and others). This will have a key effect on the protection and multipurpose role of forests.

Forest management planning is faced with great challenges. This aspect of forestry is still too past-oriented, probably out of tradition. Tradition is an important starting point for any activity, but in order to affirm and develop an activity, we must turn to the future. Plans are a necessary, if not a key element, for the achievement of the basic forest management principles, such as sustainability, multipurpose management and modern management. Before making a plan, it is necessary to clarify its rationale: why plan and for whom, what we want to achieve by planning, what will happen if nothing is planned (Buwal 1996a, Buwal 1996b). Planning should always be

based on reason and should always be efficient. The content and details of a plan must follow these requirements. In any case, the general belief that forest management planning consists of writing a plan should be refuted, since it is the planning process that is much more important than the product itself (plan).

Forest management planning offers an opportunity for forest owners and the public to promote forestry. It should be user oriented and include the planning process. The success of planning is partly dependent on the forest policy; therefore, management plans are instruments for the realization of the forest policy; however, success is largely dependent on the creativity of the forest service. An actual obstacle to successful development of forest management planning is the rapidly growing amount of legal regulations, which, similarly to other areas, turns creative experts into clerks. Excessive standardization restricts manoeuvre space for making good decisions and adjusting to the particularities of the field for which a plan is being made.

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## Sažetak

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### Perspektive uređivanja šuma: iskustva Slovenije i Hrvatske

*Polazeći od povijesnoga okvira nastanka i razvoja te iskustava duge tradicije uređivanja šuma u Sloveniji i Hrvatskoj, na temelju pregleda literature i dosadašnjih istraživanja cilj je rada definirati i raspraviti glavne probleme i perspektive šumskogospodarskoga planiranja.*

*Uvažavajući različitost koncepata uređivanja šuma između pojedinih država s obzirom na prirodne, socijalne i gospodarske okolnosti, ističe se značenje planiranja gospodarenja šumama na stanje i kretanje šumskih resursa. Planiranje gospodarenja šumama imalo je ključan utjecaj na povećanje prosječnih drvnih zaliha u Sloveniji i Hrvatskoj i na unapređenje strukture i sastava nekada degradiranih šuma. Sadašnje se drvene zalihe nalaze blizu vrijednosti normalnih drvnih zaliha, koje su negdje oko 320 m<sup>3</sup>/ha. Povećanje je drvnih zaliha također djelomice posljedica lošega gospodarenja ili općenito izostanka gospodarenja u privatnim šumama.*

*Perspektive budućega planiranja i gospodarenja šumama postavljene su na polazištima stalne i temeljne zadaće uređivanja šuma, a to je održivo gospodarenje šumama razvijanjem integralnoga i prirodni bliskoga gospodarenja. Zbog sve većega značenja šume kao obnovljivoga prirodnoga resursa i aktualnoga stanja šuma planirani će sječivi prihodi u budućim razdobljima biti veći od sadašnjih, a pri tome je važno na koji će se način (uzgojni sustav, sustavi pridobivanja drva i drugo) provoditi aktivno gospodarenje šumama. To će ključno utjecati na zaštitnu i višenamjensku ulogu šuma.*

*U okviru adaptivnoga pristupa gospodarnju kao glavnoga težišta budućega razvoja uređivanja raspravljani su elementi na kojima se ono zasniva: planiranje kao proces, inventura i planiranje, planiranje i izrada projekta, timski rad, značenje praćenja i analize gospodarenja, prostorne razine planiranja, kreativnost i ograničenja prilagodljivoga gospodarenja. Nadalje, kao bitne pretpostavke razvoja pristupa planiranja ističe se uključivanje javnosti i svih interesnih subjekata u proces planiranja gospodarenja šumama te uspostava učinkovitoga sustava planiranja i gospodarenja privatnim šumama i poduzetništvo.*

*Šumskogospodarsko planiranje očekuju sve veći zahtjevi i izazovi. Ono je još uvijek, vjerojatno zbog tradicije, previše zagledano u prošlost. Tradicija je značajno polazište za bilo kakvu aktivnost, međutim za afirmaciju aktivnosti i njezin razvoj nužna je okrenutost prema budućnosti.*

*Za ostvarivanje temeljnih načela pri gospodarenju šumama, kao što su trajnost i višenamjensko moderno gospodarenje, planovi su gospodarenja šumama ključni. Međutim, potrebno je pri planiranju raščistiti pitanja o smislenosti planiranja: zašto planirati i za koga, što se želi postići s planiranjem te što će se dogoditi ako se ništa ne planira. Potrebno je težiti prema tomu da planiranje bude svrhovito i učinkovito. Tim se zahtjevima mora prilagodavati sadržaj i detaljnost plana, uz pristup da je proces planiranja značajniji od samoga plana. Da bi javnost i šumovlasnici afirmirali šumarstvo, šumskogospodarsko je planiranje potrebno usmjeriti prema korisnicima uključujući ih u sam proces planiranja.*

*Uspješnost će planiranja ovisiti o šumarskoj politici s obzirom na to da su planovi gospodarenja instrumenti ostvarenja šumarske politike. Međutim, u značajnoj mjeri uspjeh će planiranja biti ovisan o kreativnosti šumarske službe, pri čemu se mogu očekivati ograničenja za uspješan razvoj šumskogospodarskoga planiranja u rastućoj količini pravnih odredaba i propisa i pretjeranoj standardizaciji, što vodi sužavanju prostora za prilagođavanje posebnostima područja za koje se radi plan i za donošenje dobrih odluka.*

*Ključne riječi: uređivanje šuma, prilagodljivo gospodarenje, proces planiranja*

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