Forest planning and public participation: a possible methodological approach

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Today public participation is considered to be an important element of forest planning. This paper illustrates a methodological proposal for integrating public participation in forest planning at a landscape scale. In order to present the conceptual context in which the proposal was elaborated and to make clear the reasons behind the current move towards public participation, I make an analysis of the significance, role and characteristics of participation in the management of natural resources based on experiences of the last decades as documented in international literature.

Introduction

Various reasons have contributed to the current renewed interest in forest planning: problems relating to the monitoring and management of landscape change, the new role of forests within the context of the network Nature 2000 (European Commission 2003), the strategic importance of forest coverage for the storage of carbon, the tendency towards a resumption of exploitation in some land areas. These are only some of the aspects which have recently attracted the attention of public opinion, of the competent authorities and of technical services, in particular forestry services operating in the management of natural resources.

If, on the one hand, the declining economic importance of timber production seemed to be leading irrevocably towards a progressive abandonment of management and, therefore, of planning, on the other hand, at a certain point it became clear that the new needs and expectations with regard to wooded areas, expressed at various levels of society, alongside a renewed interest in wood as a resource, might be opportunely considered and

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dealt with from a planning point of view.

In the light of socio-economic changes, however, it is necessary to review the objectives and strategies of forest planning. Considerations and operative proposals in this sense emerged from the activities of a study group that operated in the context of the Italian national research project "Ri.Selv.Italia", a long-term project oriented to problem solving in the forestry and environmental sector, promoted by the Italian Ministry of Agriculture and Forests in collaboration with regional administrations (Cantiani et al., in press, Ferretti et al. 2011).

One of the foremost needs concerns the desirability of articulating forest planning on two levels. Alongside the traditional tools of forest planning - the forest management plan - a "Forest Landscape Management Plan" should be contemplated (a forest plan with a land-use management orientation) in order to extend the scope of the analyses and appraisal phases of planning to include the forest ecosystems and livestock systems of a particular land area, irrespective of property boundaries. In fact, it is now widely recognized that this scale is the most suitable when considering the sustainability of the relationship between man and the forest and to guarantee the protection of the interests of the general public with regards to the forest itself. Furthermore, the use of such a scale is expected to facilitate linkages between forest planning and other planning tools, which, ever more numerous and often overlapping, influence land use today (Bettelini et al. 2000, Cubbage et al. 2007, Kant 2003, Schmithüsen 2007).

In the immediate aftermath of the Conference of Rio, particular attention was given to what was ecologically necessary and acceptable and also economically feasible in the concept of sustainable development.

More recently the idea has taken hold that the social dimension must be recognized as an integral part of sustainability in general and of the sustainable management of forests in particular (FAO-ECE-ILO 2000, Kazemi 2001b, Loikkanen et al. 1999). In this context, public participation in the forest planning process should be seen as an opportunity to promote the social sustainability of decisions and strategies in forest management (European Commission 2003, FAO-ECE-ILO 2000, Kazemi 2001b).

In this paper, after a critical analysis of the possible methods and tools to be adopted in the participatory process, I illustrate the methodological approach that I have developed in order to integrate participation in forest management on a landscape management scale. The methodological proposal is preceded by an historical overview of participation in the planning and management of natural resources; I then illustrate what the significance, role and characteristics of the participation should be, with specific reference to forest planning. In doing so, my intention is to outline the conceptual context in which the proposal was elaborated and to make clear the reasons underlying the shift towards public participation.

Participation in the management of natural resources: a glance at history

The participatory approach towards the management of natural resources was born almost simultaneously in both developing countries and in north America, albeit with different objectives and methodologies.

In the United States in particular, in the 70s and 80s there was a burgeoning of literature on the subject. These were the years which saw the birth of a new awareness of environmental issues in increasingly wider sections of the population, and at the same time a growing need for involvement in decision making processes which have a direct effect on people's lives.

As a result, conflicts arose which were not always easy to resolve, since they were often based on profoundly different ideological and cultural outlooks, which were highly complex by their very nature.

Here, I do not wish to analyse or discuss the vast quantity of case surveys on this subject provided by the American literature, even if much can be learned from them. However, it is appropriate to mention the twofold connotation of environmental conflicts, as emphasised by Walker & Daniels (1997) for the United States: on the one side conflicts are connected to private property, when the interests of private citizens are in contrast with decisions taken by administrators in the name of the public interest, whilst on the other, there are conflicts arising from

the diverse expectations of the general public with regard to the management of public property.

A classic example of the first category regards the location of facilities or infrastructure capable of giving rise to interference, disturbance or pollution, such as land-fill sites, motorways or residential estates, for example.

Decisions of this kind may provoke a reaction of refusal or protest on the part of the public, engendering a response which has been defined as the NIMBY reaction ("not-in-my-back-yard" - Delli Priscoli 1997).

Of a different nature are conflicts related to the management of public property, which, in the United States, accounts for about a third of the entire land surface and which, above all in some states, consists mainly of forested areas. The government agencies with responsibility for publicly owned forest management attempted to respond to the various interests expressed by society, which frequently reflect opposing visions of the relationship between man and the natural environment, by orientating management towards multi-functionality and multiple uses of forest resources. In many cases, this management philosophy exacerbated the reasons behind the conflict rather than minimizing them (Walker & Daniels 1997).

As a consequence, the need emerged for a participatory approach, sustained by and inserted in an institutional and legislative framework and, generally speaking, structured in rigidly formalised procedures. Such an approach, however, did not always produce the desired results (Germain et al. 2001, Grumbine 1994, Tabbush 2004, Vining & Tyler 1999). One of the causes of this failure can be found in what was seen to be the main objective of participation, which was to channel opposition and obtain legitimization and acceptance of the decisions taken by the authorities. This also appears to have been the case in experiences of participation applied to land-use management during the same period (Linder et al. 1992).

Daniels & Walker (1997), Delli Priscoli (1997), Mitchell-Banks (1997), Shannon (2003), Shannon & Antypas (1997), Walker & Daniels (1997), Wondolleck (1988) contain a rich and well documented bibliography relative to experiences in participatory forestry planning. In Daniels & Walker (1997) and Walker & Daniels (1997) in particular there is an interesting analysis of conflicts of an environmental nature, which, in some respects, reflects situations that may also be encountered in the forest planning sector.

At around the same time the participatory approach was also gaining ground in developing countries. In this case, however, the reasons for the participation and the objectives to be achieved were of a different nature.

Participation is based on principles of equity and social justice and, rather than focusing on obtaining consensus, conflict management aims to activate a process of empowerment in local populations. By empowerment we mean an increase in awareness of the individual's own rights and skills, a reversal, or at least, a modification in the relations of power and influence between local actors and the assumption of direct responsibility in the management of one's own land area. In this context participatory management necessarily assumes an experimental character: complex, often lengthy, it may require frequent readjustments (Borrini-Feyerabend et al. 2000). For this reason participation cannot easily be implemented within rigid and institutionalised frameworks, and requires a huge effort in terms of adaptation to each specific local situation.

There is a vast quantity of literature on the subject of experiments in the participatory management of natural resources in developing countries, and, despite the distance between these situations and those in Europe, it can provide precious information and useful points for reflection.

During the 90s, when a review of the objectives and methods of participation was under way in North America, a burgeoning of experiences in the forestry sector was taking place in Europe.

The participatory approach was being 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 forestation or anti-fire defence, for the creation of sustainable management standards, in the activation of permanent forums on issues related to forestry (Boon & Meilby 2000, FAO-ECE-ILO 2000, Jeanrenaud 1999, Jeanrenaud 2000, Zingari 1998).

In European countries, the trend towards participation was definitely influenced by the debate on sustainable development initiated during the 80s amongst organisations in the forestry sector and fuelled by the Conference of Rio and the pan-European Process initiated in Strasbourg in 1990 with the First Inter-ministerial Conference on the protection of forests in Europe, which resulted in the resolutions of Helsinki and Lisbon. The "Convention of Arhus", signed by the member States of the European Union in 1998, sanctions the right of citizens to have access to information, to regulations and to decision making processes related to environmental issues: it was a clear sign of an increased awareness with regard to participation in the environmental sphere.

The prevention or minimization of conflict,

thanks to timely involvement of the population, emerges as a frequent objective of participation, but the perspective from which this conflict is viewed has changed slightly compared with early American experiences: no longer is it seen as a negative phenomenon to be avoided but rather as an opportunity to generate learning and change, through a constructive confrontation. The primary aim of participation is, in many cases, to revive social acceptance of sustainable forest management, which, in some situations, is seen as an inalienable requirement for the conservation of biodiversity (European Commission 2003).

Conflict management, however, does not top the list of reasons which lead to the activation of the participatory process: often it is pursued as a means of sensitization, to encourage, that is, public awareness of the value of the forest (FAO-ECE-ILO 2000) and, in some cases to reinforce or recreate the link between forestry services and local populations (Buttoud 2002, Cantiani et al. 2002).

The first experiments were carried out primarily in northern Europe and Switzerland, where there is a deeply rooted tradition of direct public participation in decision making, but in recent years there has been a veritable explosion of interest everywhere in Europe in the theme of participation in various fields and also, it follows, in the context of natural resources planning and management in general and in the forestry sector in particular.

This trend is confirmed by the now numerous studies existing on the subject, despite the fact that not all of these experiments have actually been documented (Brun & Buttoud 2003, Buttoud & Yunusova 2003, Cantiani et al. 2007, Domínguez & Tena 2006, FAO-ECE-ILO 2000, FAO-ECE-ILO 2002, Farcy 2004, Finger-Stich 2003, Loikkanen et al. 1999, Martins & Borges 2007, Niskanen & Väyrynen 2000, Solberg & Miina 1997). One study in particular, carried out by a joint committee representing FAO, the United Nations Economic Commission for Europe and the International Labour Office (FAO-ECE-ILO 2000), provides an exhaustive overview, through a comparison of experiments carried out during the last decade of the 20th century in various European countries and in North America.

With regard to the situation in Europe, I consider highly significant the experiments carried out in two countries in particular, Finland and Switzerland, where interesting examples of participatory forest planning have been achieved, starting out with different assumptions, making these two countries true pioneers in the field.

In Switzerland the Federal forestry law, which came into force at the start of the '90s, introduced significant changes, one of which

was the articulation of forest planning on two levels. In the case of forest landscape management planning, the law introduced an obligation to ensure public participation in the planning process, similar to that contemplated by the law on land-use planning (Bachmann 1996, Bachmann et al. 1996a, 1996b, 1999).

Participation is deemed necessary given the huge importance attributed, at the forest landscape planning level, to the interests of the general public and the resolution of conflicts. As to the means by which participation may be achieved, the Federal law leaves ample freedom of choice to each single canton. The minimum requirements are, however: timely dissemination of information regarding the scope and time frame of the planning, public access to view the plans, analysis of proposals put forward by the population, answers to possible objections (Kazemi 2001a).

After an experimental phase, during which model plans (BUWAL 1996) were created throughout the Confederation, participatory forest planning was implemented intensively in all the cantons of the Swiss Confederation, adapting diverse methodologies to local situations (Bettelini et al. 2000, Cantiani et al. 2002, Coleman et al. 1999, Egli et al. 1997, Gordon 1999, Kazemi 2001a, 2001b, Remund & Von Schulthess 1996).

In Finland, participatory forest planning got under way as a voluntary based process, on the initiative of the Finnish Forests and Parks Service, which manages vast publicly owned forested areas.

Encouragement to move in this direction came from the realization that higher levels of education, the rapid circulation of information and growing environmental awareness had increased people's interest in exercising their own influence on decisions relative to environmental issues. The Forests and Parks Service, therefore, regarded it as their responsibility to integrate these needs in the management of publicly owned parks and forests (Loikkanen et al. 1999).

After several case studies carried out in relatively small land areas and in relation to specific issues (management of recreational spaces, wilderness areas etcetera), around the middle of the 90s participation became an integral part of forest planning at all levels (FAO-ECE-ILO 2000, Kangas et al. 1996, Loikkanen & Wallenius 1997, Loikkanen et al. 1999, Paldanius 1997) and was finally incorporated in the new Finnish forestry law in 1997 (FAO-ECE-ILO 2000).

In the first experiments participation was limited to the involvement of the authorities and organized stakeholder groups. Successively, however, it was extended to a vaster public and the approach also changed. Instead of being considered merely as a series of techniques to be applied mechanically in certain planning situations, it became a real "philosophy" of management and planning, based on open-minded attitudes and a continuing search for interaction with the public (Loikkanen & Wallenius 1997). In order to achieve this, above all it is indispensable that there should be a climate of dialogue, communication and sharing of responsibility within the forest service itself: in short, a climate of participation. Moreover, the staff, having to face tasks that require new competences and professional skills, must have access to specific training (Loikkanen et al. 1999).

In Finland today participation is firmly established as part of consolidated participatory practice (Leskinen 2004, Saarikoski et al. 2010).

In Italy there is currently a growing interest with regard to participation in forest planning, even if experiences in this context are still sporadic and for the most part experimental.

However, in spite of this increased attention and interest in participatory forest planning, there remains a certain degree of reluctance on the part of some administrations to move in this direction, also because, from the legislative point of view, the situation in the various regions and provinces is still quite fluid and there are still many questions that remain unanswered.

Moving away from contexts more directly connected to planning, it is possible, nonetheless, to identify several initiatives in the Italian forestry sector based on a participatory approach. This facilitates, on the one hand, the acquisition of useful experience and knowledge and, on the other it shows that a certain degree of willingness to adopt this kind of approach is gradually maturing. Experiments carried out in the sectors of urban forestry (Salbitano & Cuizzi 2004, Sanesi et al. 2005), of forest certification (Secco & Pettenella 2005, Secco & Pettenella 2006) and more recently within the International Model Forest Network (IMFN 2011) have provided many points for reflection also with regard to planning.

The characteristics and role of participation in forest planning

"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 or the outcome of the matter in hand" (FAO-ECE-ILO 2000, p. 9).

Elaborated by a team of specialists on the basis of the analysis of numerous experiments carried out in the forestry context, this deliberately simple but very interesting definition was suggested as a working hypothesis, with the accent on participation as a process. Participation was defined as a "voluntary" process to underline the fact that, even if it is contemplated in legal and institutional frameworks, participation cannot be imposed beyond the minimum level possibly fixed by law. Only through open-mindedness, constructive dialogue and freedom of choice in the distribution of tasks and responsibilities on the part of the participants, can the most satisfactory solutions and actions be achieved: in the case of a forest plan this essentially implies reaching a consensus regarding the choices of the plan and on the implementation of the actions contemplated by the same.

With regard to the definition, "intensity or degree of public participation" (FAO-ECE-ILO 2000, p. 19) the group of specialists identifies the feasibility of the process moving from a minimum level (simple exchange of information) to a higher level, at which decisions are made jointly by the participants. Between these two extremes lie various degrees of involvement, denoted by the gradually increasing influence of the public on decision making, which are actuated through the implementation of participation using methods and techniques that can require a progressively greater degree of interaction between the participants.

A great deal has been written and there has been much debate about the degree of participation, starting with Sherry Arnstein's (Arnstein 1969) original and much quoted model, which identifies eight different levels ranging from "manipulation", aimed at convincing the citizenry of the excellence of the plan through public relations, to "direct citizen control" throughout the planning process. It is the author's belief, however, that participation is only worthy of this name when citizens have effective decision making powers. From this model, Wilcox (1994) devised his own based on five levels: "information", followed by "consultation", both requiring the lowest level of participation, after which comes "co-decision making" and then "joint action" (not only are decisions shared but the plan is implemented jointly) and finally a level at which the role of the person responsible for the participation is limited to support for "independent initiatives" on the part of the community. According to the author, a true partnership (a convergence of diverse interests in order to achieve common objectives) is achieved only from the third level onwards; nevertheless, he does not suggest that one level is better than another, but maintains that it is essential, having carefully evaluated the specific circumstances, to choose the most appropriate level of involvement for the case in question. An increasing level of public impact is also described in the "Spectrum of Public Participation", produced more recently by the International Association for Public Participation (IAP-2 2007).

In practice, many examples of participation applied to forest planning show that true co-decision making is rarely achieved: in most cases it is the "decision maker" (the relative administration, the owner, the consortium of owners, etc.) who has the last word, albeit taking into consideration the interests, the wishes and the values expressed by the participants.

With regard to Switzerland, where the obligatory nature of forest landscape management planning was derived from the land-use planning regulations, the law itself specifies that the results of the participation are not binding for the "decision maker" since the influence of participation is recognized as being of a "political" rather than a judicial nature (Linder et al. 1992).

Where no legal provision exists in this regard, as in Italy, it is advisable that, from the earliest stages of participation, the way in which the decision-making process will be effected should be clear to all those invited to participate: who, therefore, will make the final decisions and what margin of manoeuvre the participants will have in influencing those decisions. A lack of clarity and transparency on these points at this stage would be an extremely serious mistake, capable of compromising the whole process of participation by undermining it at its very foundations.

There are other basic principles that characterize participation and that are underlined case by case in literature by several authors. I believe it is worth mentioning them, given that in practice they are often disregarded. On examining failed participatory experiments it soon becomes clear that this happened because, wittingly or unwittingly, one or more of these principles was neglected. In fact, the good outcome of the process depends for the most part on the attitude of the initiators or the persons responsible for the process itself, which then filters down to all the participants.

Before initiating a participatory planning, it is vital that the initiator, the planner and the person responsible for the participatory process must all have given due consideration to all these principles:

- Participation should be based on honesty and good faith. Numerous authors emphasize the "genuine" nature of the process. If it takes place, for example, solely in order to comply with a legal requirement, if participation is seen as a mere formality or is undertaken later to endorse decisions already taken, sooner or later people become aware of the fact: this is unlikely to encourage them to become involved and they may even feel inclined to boycott the process. In this same spirit the population should not be encouraged to have expectations that cannot be fulfilled.
- Participation must be integrated into a le-

gal and institutional framework and the results of the participatory process cannot be in contrast with legislative provisions, in particular ownership and exploitation rights recognized by law (FAO-ECE-ILO 2000). Moreover, in some situations, the customary rights of local populations are not clearly recognized by law and it is precisely in these cases that one of the principal functions of public participation can be that of providing an opportunity for recognition of these interests (Jeanrenaud 1999, 2000).

- Participation must be based on very precise regulations and these regulations must be known and accepted by all the participants. The roles of the various actors must be clear to everybody concerned, just as it must be clear from the outset how much influence the participants may bring to bear on decisions, in which phases of the planning they will be called upon to participate and by means of which instruments, and, lastly, what use will be made of the indications resulting from their participation (O'Brien 2006).
- An attitude of reciprocal respect, a willingness to listen and an ability to compromise are important prerequisites, whatever the participatory methods and techniques adopted. Obviously, when using methods that necessitate greater interaction between the participants, these attitudes should be particularly encouraged.
- Participation requires that we know how to combine scientific expertise with "local knowledge" (Daniels & Walker 1997, Loikkanen & Wallenius 1997). It is fundamental that information of a technical nature should be conveyed in a form and in a language that is clear and accessible for all the participants. Language has a very important function for the success of participation: the use of highly technical, abstruse language and abstract concepts can lead to false conflicts, due to misunderstandings, and tends to accentuate the social differences between the participants.
- Participation requires a readiness to invest a considerable amount of time. In the case of participation in forest planning this aspect is a real challenge: the times of the ecosystems whose management is being planned are very long; the economic interests and social needs, the administrators and the politicians change rapidly, as does the availability of economic resources to be invested in the process itself. Using a felicitous expression, Mitchell-Banks (1997 - p. 162), very aptly says that "patience" is an important part of participatory forest planning: the reciprocal involvement and learning process that derive from participation require time; "mistakes or misunderstandings are likely to occur. What is most important is that the mistakes or mis-

understandings are handled in a constructive fashion, in which the members are brought together rather than being driven apart". Numerous authors underline the fact that, in any sectors, participation requires a longer period of time. On the other hand, with regard to forest planning, it is obvious that, after adequate experimentation, a realistic compromise must be found between the wish to dedicate adequate time to participation and the need to contain the costs and respect the time constraints of the planning process.

- When getting a participatory process under way, one must be willing to accept that this may go in a different direction to that contemplated at the outset. It is also necessary to consider the possibility, that, despite the very best intentions, the participation process may fail to produce any significant results (FAO-ECE-ILO 2000).
- Participation requires extreme flexibility: a readiness, on the basis of lessons learned during the early phases of the process, to review initial assumptions and to consider the issues from a different angle, even if that means deviating from the model initially envisaged for the application of the participatory process.
- Last but not least, participation must be based on inclusiveness, or rather, the wish to take into account all the interests revolving around the object of the participation in question, one of the fundamental elements of participatory processes (Delli Priscoli 1997, FAO-ECE-ILO 2000).

To speak of inclusiveness raises the question of which public is to be "included", an issue which is generally not sufficiently taken into account when dealing with public participation. As several authors have rightly pointed out (Delli Priscoli 1997, Loikkanen et al. 1999, O'Brien 2005), there is not just one public, but many: representatives of institutions, more or less organized stakeholder groups (NGOs, associations, societies and various types of circles), groups that form spontaneously to address various issues and that may have deeply rooted ideological convictions and substantial political weight, and private citizens.

All of these must have the opportunity to express themselves, all of them are "public", even those who are not organized in groups or who, for cultural, social or economic reasons, have a low profile as stakeholders. Frequently, in fact, those who are potentially more closely affected by planning choices are precisely those who have less awareness thereof and less ability to manifest their own interests than others. This aspect is generally acknowledged in the case of developing countries (Borrini-Feyerabend et al. 2000) but it is often disregarded in the participative management of natural resources in developed countries. With regard to rural con-

texts, for example, operators in the primary sector have great difficulty in expressing their own opinions and expectations, despite the fact that they are charged with the delicate task of protecting the land in the interests of the general public.

An in-depth and lucid survey of the different behaviour of communities in rural and urban alpine areas was carried out by Andréa Finger-Stich (2005, 2006).

In my opinion, efforts to involve the population must be directed towards the categories most often neglected, even if it has to be recognized that such intentions are ambitious and that often, irrespective of the methods and techniques of participation adopted, success is sometimes difficult or impossible to achieve.

With regard to the role of participation in forest planning, in the past great importance was often attributed to aspects of achieving consensus and the resolution of conflict.

In actual fact, in more recent approaches there is a tendency to shift the emphasis from "the resolution of a problem or conflict" to that of "improving a situation" (Daniels & Walker 1997). In this sense, the role of participation is seen not so much as a means by which to obtain consensus (Anderson et al. 1998) but rather as a way to foster knowledge and reciprocal learning, to highlight opportunities and to identify common ideals and values. In short, this is the trend that characterizes what many authors refer to as "collaborative learning" (Buttoud & Yunusova 2003, Daniels & Walker 2001, Secco et al. 2011). Thanks to this approach it is possible to create the basis for the sharing of tasks and responsibilities, so that the process can continue to make progress.

As far as forest planning is concerned, above all on a forest landscape management scale, I believe that participation has today an important role to play, both from the point of view of the population and of those with responsibility for planning, primarily in order to identify the objectives of the plan. By keeping a constant flow of information moving in both directions, by combining technical know-how with local knowledge, by identifying all manifest or latent conflict from the outset, and managing them in a constructive fashion, the plan becomes a tool which respects local needs and is instrumental in the real development of the land area. It acquires greater strength, deriving from the fact that the objectives and strategies identified are not just ideas of technicians "at the top", but common objectives and choices.

Anyway the primary issues of the participation may differ depending on the specific local conditions. In situations, today ever more frequent, where indifference and lack of interest in forest management prevail, participation can play an important role in raising awareness, focusing the attention of the population on the functions and values of wooded areas. Furthermore, where traditional activities in the sector are becoming more and more marginal economically, notably in mountainous areas, but where a possibility of a revival exists, participatory planning can contribute to the rebirth of a sense of local identity by giving a voice to those who generally have none. It can also foster recognition of the role played by those who ensure the protection of the land through management, guaranteeing the safeguarding of protective functions, care of the landscape and conservation of biodiversity related to "cultivation stability". In such cases, participation can function as an "emancipator" for the local community. In situations where forest landscape planning also concerns protected areas, for the safeguarding of which a suitably orientated management plan is required, as will probably be the case more frequently in the future, participation can play a valuable role in overcoming the resistance that is often encountered in situations of this kind, by gaining the support of the population for the cause of the protection of their own land area (Bettelini et al. 2000).

Only through adequate experimentation can sufficient experience be gained in order to make participation an integral part of forest planning in Italy too, so that the planning process can develop following two guiding principles: one "political" and the other technical.

In order to better assess how participation should be integrated in planning it is advisable to divert attention from the plan as such - as a document that fixes the results of the planning at a given moment - to the cyclical planning process, or, that is, to that combination of activities that, starting from the motivation which sparked its initiation, lead to the elaboration of the plan, to the implementation of the strategies identified by the plan itself and to control. The latter allows for a continuing adaptation to situations arising both as an effect of implementation activities and as a result of changes in the external conditions (socio-economic context, political situation, scientific knowledge, natural events).

The involvement of the population can and must take place in all the phases of the cycle, right from the outset of planning, and its function does not come to an end with the realization of the plan. The degree of involvement can vary, since there are some phases of a more typically technical nature, where the role of experts and the importance of scientific know-how may have to prevail. Today it is unreasonable to think, however, that the actions contemplated in the plan can be achieved if the fundamental choices of the planning have not been shared by the population and if, during the implementation phase, a climate of dialogue and collabora-tion is not constantly fostered.

The forest landscape management plan, at the level of which policies for the sustainable management of mountainous and rural areas are established, would seem to be that in which the participation of the public may be most favourably integrated.

The integration of participation in planning requires accurate organisation of the participatory process. The following factors should therefore be carefully considered:
• the reasons for the participation and its objectives,
• the socio-economic and cultural characteristics of the land area in which one is operating,
• the type of interests in play (local and concrete or general and abstract, short- or long-term),
• the availability of resources (in terms of finance, time and professional expertise).

On the basis of the above list, it is necessary to assess:
• to what degree of involvement the participation should be extended,
• to which phases of the planning process it is to be applied to,
• what the most suitable methods and instruments for the specific situation might be.

Methods and instruments for the participation

Methods of participation

In this paragraph a general overview is given of the type of methods that may be adopted for the participation. To simplify I will use the term "method", even if some authors (FAO-ECE-ILO 2000, Linder et al. 1992) speak about models of participation, meaning "different institutional forms of public participation, characterized by particular structures and procedures" (Renn et al. 1995, in FAO-ECE-ILO 2000, p. 33). The aim of the paragraph is not to illustrate in detail the different methods, but to group them into categories in order to underline the methodological approach.

Depending on the approach chosen to solicit the involvement of the public and on the main functions of the participation, the methods can be grouped as follows (Linder et al. 1992):
• methods orientated towards the involvement of a vast public: "simple" participation of a large number of people. Consultation belongs to this category;
• methods orientated towards the participation of groups comprising representatives of the various interests at stake: the "qualified" participation of a few allows for forms of participation requiring high levels of competence. These include various methods based on open or closed working groups, that is to say, in which the number of participants may or may not be predeter-

mined at the outset;

- methods orientated towards mediation between various stakeholders; negotiation and other conflict management methods belong to this category.

From a different perspective, the various methods can be subdivided into active and reactive (Linder et al. 1992):

- participatory methods of an active nature are those that involve the public directly in identifying the planning objectives and the strategies for achieving them. Some procedures based on working groups belong to this category;
- participatory methods of a reactive nature are those whereby the population is invited to express its opinions on a draft or on several planning options that have already been elaborated. Consultation falls into this category, as does participation carried out in working groups, where members are asked to express their opinions on various options submitted for their scrutiny, and also, according to Linder et al. (1992), negotiation, at least in the form in which it was originally conceived in the '70s in the United States.

A further framework for participation is based on the degree of interaction required of the participants (Loikkanen et al. 1999) and ranges from methods that do not require any interaction between the participants (for example consultation carried out by means of interviews or questionnaires), to methods requiring a certain degree of interaction (for example, consultation that also includes public meetings), and finally to methods that allow for a high degree of interaction, like those based on working groups made up of representatives of the various interests at stake.

The above mentioned has the sole aim of providing a general conceptual reference. In practice, participation must not be confined in overly rigid procedures and various approaches may be used in different phases of the planning process depending on the specific situation: it may be necessary, for example, to follow an information and consultation phase, involving a vast public, with a phase in which participation proceeds in restricted working groups, after which the results of the group work may once again be subject to consultation.

In any case, whatever the methods or combination of methods adopted, information constitutes a fundamental premise for participation: both at the outset, in order to launch the participatory procedure and stimulate involvement, and during all the planning phases, so that people can express their views on the basis of well founded opinions and follow the progress of the planning with full knowledge of the facts. Correct and exhaustive information on technical and scientific aspects is, in fact, indispensable for

the identification and the definition itself of problems through public debate (Shannon 2003).

To this end, it is advisable to provide objective and updated data, combining information of a qualitative and quantitative nature if need be and, if necessary, proposing it in a graphic form that is comprehensible for all concerned.

Some authors (for example Wilcox 1994) make a distinction between information that only proceeds in one direction (towards the public), and communication, that takes into account the answers from the public and that is, therefore, based on a flow of information in both directions. Very often, however, the two terms are used without this distinction.

Techniques and instruments

Opting for one method of participation rather than another requires the use of adequate techniques and instruments.

For example, for the consultation method, questionnaires, interviews (Hislop 2004), press releases, information evenings are all suitable tools; in the case of participation carried out in working groups or by negotiation, greater emphasis should be placed on techniques aimed at creating a climate of mutual understanding and a sense of common identity or at the resolution of problems, such as brainstorming, role play, etc.

For the successful management of groups it is often necessary to involve a facilitator to take on the task of encouraging interaction between the members and reinforcing the group dynamics. There is also a technique, the so-called Delphi method, which has proved widely successful in allowing members of a group, usually experts from various organisations and institutions, to interact without meeting up in person (Gokhale 2001, Richey et al. 1985).

Today there are many new instruments available that offer interesting opportunities and whose use was unthinkable only a few years ago: for example, the use of Internet to disseminate information and activate discussion groups, or the possibility of resorting to geographical information systems or computer simulations to facilitate the visualization of various scenarios or to make possible the geographical location of a problem (Soliva 2007, Wollemberg et al. 2000).

There is no fixed and precise rule for the choice of the most appropriate techniques and instruments: this must depend not only on the method of participation adopted, but also on a careful appraisal of the objectives to be achieved and of the social, economic and cultural context in question.

In the forest context, for example, when dealing with groups which are not too numerous, field trips can prove to be particularly useful since they provide the participants with an opportunity for direct contact

with the object of the planning, thereby fostering understanding of the problems, exchange of information with the technicians, the manifestation of specific interests and the creation of a relaxed atmosphere and reciprocal trust.

The use of sophisticated information technology supports is not advisable in highly rural contexts, in which such instruments could prove to be ineffective or even damaging, discouraging the participation of a large slice of the population. In general, use of the Internet to activate a forum should be carefully assessed because, depending on the local conditions and the issues at stake, it could lead to overestimating the opinions of organised groups and of socially superior sections of the population, as demonstrated by an experiment on national scale carried out in France (Roger-Veyer 2000, in FAO-ECE-ILO 2000, p. 82).

Today various studies, guides and manuals are available, which illustrate possible instruments and techniques for use in participation: the problem does not lie in finding documentation but in finding one's way amongst the vast amount of publications and Internet sites at hand.

A few personal considerations

Before concluding this chapter I wish to spend a few words on some aspects which should be taken into account when choosing a method of participation. The following observations are based both on my personal experience of study cases in Italy and in Switzerland (Bettelini et al. 2000, Cantiani et al. 2002, 2007, De Meo et al. in press) and on the analysis of the international literature cited in the paper.

From an analysis of the literature it emerges that many authors display a critical attitude towards consultation, considering it an ineffective method of participation, often only a facade, and sometimes even counter-productive in situations where only better organised groups and more determined and combative actors are encouraged to express their opinions, with the risk of exasperating disputes. However, the limits often ascribed to consultation are due rather to the way in which the procedure has been undertaken than to the methods themselves. In fact, for years, consultation was associated with the decision making processes of official bodies and formulated in very formal protocols, with the sole aim of satisfying legal requirements or to legitimize decisions already taken (Germain et al. 2001, Tabbush 2004).

Effectively, this often led to: tardy involvement of the population, only partial transparency of the procedures, extremely technical contents and a deliberately cryptic use of language, a tendency to overestimate the contribution of organised stakeholder groups and scarce consideration for non organised

groups and the weaker social classes.

In the context of forest planning, there are, nonetheless, situations in which consultation may prove to be the most suitable participatory method: for example when more general and long-term interests are at stake, when it is clear that the social and cultural context is such that the use of participatory methods of an active nature are to be excluded or when the aim is to involve as many sections of the population as possible (Bettelini et al. 2000). Though it may be true that consultation offers no guarantee that the opinions of the population will effectively influence the decision making process, it is equally true that the weight these opinions bring to bear on the decisions depends on when participation is integrated in the planning (Buchy & Hoverman 2000). It follows, therefore, that the effectiveness of the consultation goes hand in hand with its timely implementation. Consultation may also prove to be a more suitable approach for specific phases of the planning process.

In all situations, in order to produce satisfactory results, consultation must be carefully organised. The contribution of the participants must be given the greatest possible attention and be used to maximum advantage; the techniques and instruments best suited for the specific situation must be studied. For example, questionnaires, if formulated from the outset with a clear idea of what is to be gleaned from them and how the results are to be analysed, can be effective in obtaining information and a clearer picture of the interests existing amongst the population. If well organised and well publicised, a survey by means of questionnaires can prove to be a useful instrument in giving a voice to those who do not usually dare to express their point of view.

Should the decision be made to base the participation on working groups, made up of representatives of the various interests at stake, first and foremost it is essential to be completely clear as to the nature of the objectives to be achieved, or rather, as to which participatory approach is to be adopted: mainly this will mean assessing whether or not it would be appropriate to initiate a procedure of negotiation.

Negotiation is preferable in situations or in specific phases in the planning during which concrete conflicts of interest arise (for example, regarding the choice between several possible options); it is not so appropriate in abstract phases, such as the identification of the problems that the planning is confronted with, and it does not lead to results when there is a clash between fundamental and conflicting values that leaves no room for manoeuvre.

Even if many authors, for the most part those operating in the urban sector or in developing countries, tend to underline its im-

portance, negotiation is not always the best approach in the forest planning sector: for example it is not necessary in the initial phases of the planning, when the focus is on identifying the interests at stake and the objectives of the plan and neither is it particularly suitable for the formulation of long-term strategies for the achievement of particular objectives; by contrast, it can be indispensable, in situations where important and conflicting interests regarding forest management exist or when, in the case of problems relating to nature conservation, it is necessary to find a common solution that best fulfils the expectations of all the participants.

When participation is organised around group activity, a preliminary consideration should be the optimum size of the group. The number of members cannot be too high: this depends both on the issues to be addressed and on the techniques to be adopted. Indications from literature vary: however, a maximum of 20-25 participants is suggested for negotiation groups or for other methods of a reactive nature (Linder et al. 1992), whilst a much lower number (not more than 8) is suggested for the conflict management method elaborated by Walker & Daniels (1997); Loikkanen et al. (1999) recommend an optimum number of 5-12 participants for working groups when using an active approach.

A procedure based on the participation of groups gives rise, in any case, to the problem of representativeness: when having to limit participation to small groups it is not easy to succeed in including all the stakeholders, just as it is not always clear how representative of particular interests each member is.

Should representatives of institutions be present in the group, the decision maker in person or external experts, it is essential that all the participants should be clear as to the roles that these figures play within the group; the same applies in cases in which the planner is called upon to be the group leader, the facilitator or expert at one and the same time.

For the smooth functioning of the group it is often advantageous to resort to an external professional, specialised in facilitating or in mediation. Some authors attribute different roles to the facilitator and the mediator: the task of the facilitator is solely to assist the group in carrying out its activities, without participating in the debate itself, and to ensure that the group respects the rules agreed upon; the mediator, as well as acting as a facilitator, should also contribute to the elaboration of a wide range of options to be discussed by the group, and encourage the members to communicate with each other and to identify the deeper causes that might lead to situations of conflict (Borrini-Feyerabend et al. 2000). In practice, it very often

turns out that the two figures play an identical role, even if mediation skills prove to be particularly important in the negotiation process.

In all situations, the facilitator is required never to express personal opinions and not to make decisions on the issues being addressed. It is important for this figure to be seen as independent - ideally it should be a person who enjoys the respect and esteem of the local community - and capable of communicating and, above all, listening. Attention is often drawn (Daniels & Walker 1997) to the ability to listen, both on the part of the moderator of a group and of the participants of the group themselves.

A further aspect which is often underlined, particularly in relation to procedures that contemplate mediation between several different stakeholders, is the necessity to distinguish between the interests at stake and individual positions (Borrini-Feyerabend et al. 2000, Daniels & Walker 1997, Delli Priscoli 1997, Mitchell-Banks 1997): the interests at stake correspond to people's real concerns and fundamental needs and individual stances correspond to the proposals made in attempt to satisfy those very interests. Since numerous different stances can satisfy the same basic interest, the fact of placing the accent on the interests at stake makes the identification of a zone of compromise easier and facilitates conflict management.

Suggestions for the formulation of participation in a forest landscape management plan

The following is a methodological proposal for integrating public participation in forest planning on a landscape scale.

To ensure success, participation must be carefully studied and organised in great detail. The management of its development must be entrusted to a person, with overall responsibility, who, particularly in the case of forest landscape management planning, may be other than the planner. In the case of participation based on group activities, this is also advisable when faced with the management of problematic groups: in this case it is particularly important to have full control over the dynamics of the participatory process, which is extremely difficult when the same person also has to deal simultaneously with the technical contents.

The person responsible for the participation may avail him or herself of the collaboration of a group that may be defined as a "planning support group" whose task it is to take on the organisation and development of the entire participatory process.

I shall now suggest a procedure to be used as a reference when a decision is taken to activate a participatory process in the context of a forest landscape management plan.

Phase 1: Preliminary assessment

There is a whole series of analyses and appraisals that need to be undertaken before opting for participation by whoever, or whatever body, takes on responsibility for initiating a participatory process (local regional forestry service bodies, park management bodies, etc.).

The steps to be taken may be listed as follows:

1. identification of roles and responsibilities of the main actors, or that is:
   - identification of the financer of the project (in Italy: Ministry, Regional Administration, Autonomous Provincial Administration, Mountain Community, *i.e.*, the body that coordinates the municipalities located in a mountainous area and is responsible for administration and economic development, etc.),
   - identification of the land use body within whose scope the plan will be executed (Mountain community, Consortium of municipalities, Park, etc.);
   - verification of whether the financier and the land use body are one and the same entity;
   - identification of the decision maker;
   - establishment of the role of the forestry services within the public participation process;
   - selection of the person responsible for the planning process.
2. appraisal of the social, economic and cultural characteristics of the region in question, in order to assess whether there is homogeneity in this regard or whether the situation is more complex;
   - assessment of the availability of resources that can be invested in the participation in terms of time, money, professional skills, technology (availability of geographical information systems and communication tools, etc.);
   - consideration of the intentions of the financer and of the land use body and their interest in initiating a participatory process, in order to raise their awareness of the implications of the participatory process (risks, supplementary costs, etc.).

On the basis of this assessment and analysis, the feasibility or otherwise of successful participation can be established and, if this proves to be the case, also the degree to which it should be limited to a minimum level or assume a greater role in the planning process.

When opting for the first solution (minimum level), the planner can take on direct responsibility.

The minimum contents of the participation should be the following:
- communication that a planning process is to be initiated;
- updating on the progress of the plan, through timely information;
- opportunities for the population to see the drafts of the plan and make proposals and objections;
- consideration of possible proposals and answers to possible objections.

When deciding to extend the scope of the participation, it is often necessary to create a planning support group.

Phase 2: The creation of planning support groups

The planning support group must comprise:
- the person with overall responsibility for the planning;
- the person responsible for the participatory procedure;
- one or more local referees (persons who have the trust of the community and who are able to maintain active contact with people, thus providing key elements for the group activities);
- if necessary, an implementer (a figure with responsibility for all logistical and secretarial aspects);
- a facilitator, if the method requires it;
- possibly one or more observers (during the drawing up of the documentation the opinion of an external and impartial observer can be useful when it is necessary to give feedback to the participants or to carry out an assessment of the adopted approach).

One or more of the aforementioned figures may coexist.

The support group has the following functions:

1. to define the objectives of the participation;
2. to identify and contact, thanks to local referees, all those persons potentially interested in or touched in some way by the planning and to assess their degree of influence;
3. to create and keep updated a list of all those potentially interested in or touched by the planning, also including all those who, for various reasons, are not participating actively, but who wish to be kept informed about the progress of the planning process;
4. to decide the most appropriate method or combination thereof for planning purposes and for the local context;
5. to draw up a draft of the participatory plan;
6. to make summaries, prepare documentation and give feedback to the participants (the documentation must be concise and presented in a clear format and written in accessible language);
7. to assess the efficacy of the adopted approach at the end of each important phase of the participatory process.

It is very important that the members of the group should make their choices working in close collaboration and that the person responsible for the participation should have in-depth knowledge of the local situation and maintain constant contact with the region.

Phase 3: Drawing-up a "participatory plan" draft

Once the method or combination of methods most suitable for the specific context has been identified, a draft of the participatory plan is drawn up and should specify the following:
- the planning phases to which participation is to be applied;
- what kind of approach should characterize each phase;
- the most suitable way for transmitting the necessary information;
- the time frame to be respected.

The true effectiveness of a participatory process can only really be assessed during the implementation of the plan. In this respect, it is advisable to contemplate adequate monitoring of the results of the participation, particularly when still in the experimental phase, which makes it possible to understand its extent and assess its influence on planning.

A lack of monitoring has often made it difficult to compare different participatory experiences and to interpret the real impact of participation on the sustainable management of natural resources (Buchy & Hoverman 2000).

Conclusions

I hope that this study has contributed to clarifying at least some of the fundamental aspects of participation in relation to forest planning, an extremely vast topic and one that is difficult to deal with exhaustively in the few pages of a paper.

Today participation gives rise to a great deal of enthusiasm and expectations, but at the same time it also arouses mistrust and fears. Personally, I believe the participatory approach can represent an interesting opportunity for forest planning, providing that its potential and limits are concretely assessed with regard to the specific situation to which it is applied.

In fact, experience teaches that, in certain situations, the quality of the involvement of the population can prove to be just as important for the progress of the planning as the excellence of the technical solutions. On the other hand, participation cannot be considered a panacea, nor is it realistic to think that there exist, at a methodological level, suitable and applicable recipes for every situation.

One of the problems frequently encountered when initiating a participatory process is the difficulty in involving the population. In Italy, as in other countries in southern

Europe, generally speaking there is not a tradition of active public participation in decisions regarding issues of public interest, particularly in rural areas, where a certain degree of resistance can be expected, at least initially, with regard to involvement on aspects of forest planning. On the other hand, clearly it is easier to mobilize the interest of the population for a specific project whose repercussions for people's lives are immediately evident, than it is for forest planning, which requires medium- to long-term thinking.

Some situations exist, in which participation is not necessary and can even become counter-productive: this happens, for example, when the attractiveness of direct participation proves to be very low compared to other ways of influencing the decision-making process (boycotts, petitions), when a choice has already been made, upon which there is no willingness to debate or when forest planning touches aspects or routine issues that fail to arouse the interest of the population. In most cases, however, interest in participation depends, for the most part, on the information policy implemented by the person who initiates the process and on the attitudes manifested during its development.

There are some mistakes that may seriously damage participation, but these can be avoided with a little common sense. Amongst these I particularly wish underline the following:
- tardy initiation of the participatory process at an advanced stage of the planning;
- neglect of some of the actors. This is a trap that it is easy to fall into either accidentally or intentionally, in the latter case often in an attempt to exclude actors considered to be "at risk". As a result it is possible that important opinions, local skills and knowledge are not taken into account and there is a risk that the excluded actors, if they are determined and combative, may attempt to prolong the planning unnecessarily or hinder the successive approval of the plan and the implementation of the actions contemplated therein;
- adoption of techniques that are inappropriate for the participatory method chosen or for the specific phase reached in the process, or unsuitable for the social and cultural characteristics of the public in question;
- use of language that is too technical and obscure for most people;
- implementation of a participatory procedure that has no apparent link with technical planning.

The last point, in particular, has interesting implications for forest planning. In fact, those responsible for participation need to have in-depth knowledge of issues dealt with by planning and to maintain constant and close contact with the land area in question throughout the entire process. When analysing examples of participatory planning in the context of natural resources management it becomes clear that one of the most frequent causes of failure arises from proceeding along two separate tracks, technical and "political" planning.

Particularly in the case of forest planning, it can be risky to entrust the direction of the participation to a specialist in participatory techniques who has no forestry knowledge. When it is not the planner in person who assumes this role, the person responsible for the participation should be a forestry engineer with specialised training who, possibly by forming a group, is able to "support" the planning and stay involved right up to the end of the process. From this point of view, planning in the forest context presents several advantages compared to other sectors. In fact, the forest planner is on site on a daily basis and for long periods of time, often working side by side with the local people: this makes contact much more natural and greatly facilitates two-way communication and a convergence of scientific expertise and local knowledge.

And this is the line of conduct followed in pilot schemes carried out in south-central Italy, from 2006 onwards, in the context of the research project "Ri.Selv.Italia" and which is gradually becoming accepted practice in operational procedures in this country. The first results obtained by adopting the methodological approach illustrated in the paper within the study cases have in fact been very encouraging (De Meo et al. in press, Paletto et al. in press). In particular, the creation of a planning support group proved to be very effective in obtaining a concrete involvement of the public in the identification of the objectives of the plan.

I would like to conclude by emphasizing that the participatory approach in forest planning and generally speaking in planning for the management of natural resources opens new and interesting vistas for the forestry engineering profession: this clearly implicates the acquisition of new competences, skills and specific aptitudes, in order also to be able to deal with aspects linked to the social dimension of sustainability in the future.

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