Forest Resources

Applicability of Public Participation for the Finnish Forest and Park Service

by

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Abstract

Under what circumstances and in what ways can public participation be utilized in managing Finland's national forests? In the first chapter, a framework for answering this question is set by analyzing Finnish legal, cultural, historical and political background. The frame defines the Finnish Forest and Park Service's (FPS) decision making space within Finnish society. After the frame is set up, the needs, premises and requirements for participatory decision making within national forest management are evaluated.

In the second chapter, literature is reviewed on how public participation is currently being applied within natural resource decision making in the US and Canada. First, the usefulness and necessity of public participation is analyzed from a natural resource agency perspective. Then, the most salient barriers for effective public participation are identified along with strategies suggested for effective public participation. Based on this literature review, criteria for effective public participation in Finnish Forest and Park Service are defined.

In the third chapter, a public participation model is presented for the Finnish Forest and Park Service. The proposed public participation model integrates the current multiple use planning approach with the participatory planning system. The model is organized into four phases suggesting a clear temporal flow for the decision making process: (1) defining the planning situation, (2) direction setting, (3) implementation and (4) evaluation. Based on phase one, public participation will either be initiated or the conventional multiple use forestry planning approach will be applied. The assessment of recommended level of shared decision making authority is the single most important factor in differentiating between these approaches.

The step by step process described includes identifying the key attributes and making recommendations to approach constructively unique planning situations. In addition, information exchange and

participatory planning techniques are analyzed and categorized. Some promising participation techniques for the Finnish context are described in more detail, and a model for information exchange is presented. In the fourth chapter, implications of the Finnish Forest and Park Service's current approach to forest planning are assessed. Then the likely benefits from implementing a participatory planning system are explored. In light of these results, it is recommended that the Finnish Forest and Park Service continue strengthening its voluntary approach to institutionalizing public participation as an integral part of the agency's natural resource decision making. This might be done by initially adopting the public participation model developed by the author.

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What is being called for by Finnish society?

There are clear indications that the traditional forestry paradigm, i.e., timber production orientation, in Finland -- as in other western democracies -- is under severe environmental and social pressure (Palo 1993). Increasing wealth and material prosperity combined with growing environmental awareness and the shrinking of our "global village" accommodates social pluralism to an extent never before experienced. Moreover, the imbalance between representative and participatory decision making, evident in western societies, manifests in the universal trend to 'think globally and act locally'. This ideology is gaining more acceptance as an overall environmental strategy in striving towards sustainability clashing inevitably with corporative (authoritative) traditional Finnish forest policies.

The traditional scientific paradigm still held by the majority of forest professionals focuses on the tangible resource (Wondolleck 1988). A strong societal emphasis on ecological values and environmental awareness further reinforces the paradigm. Accordingly, current turbulence in national forest policy derives from forest managers and other (political) decision makers having focused almost unidimensionally on timber production, and only recently on ecosystem management, largely ignoring other values of the forests (Palo 1993).

Finland committed to practice sustainable forestry by verifying the global Agenda 21 -program and the final declaration on sustainable forest management from the United Nations Conference on Environment and Development in Rio de Janeiro 1993, which was further operationalized and reinforced in a meeting of European Forestry Ministers in Helsinki 1994. According to these international agreements the Country is obliged to practice ecologically, economically and socially sustainable forestry. Among the emphasized issues was one on enhancing participation opportunities for local inhabitants (Maa-ja metsätalousministeriö 1994).

Although forest industry still remains the backbone of Finland's national economy, Finns' interest in alternative forestry uses has rapidly increased. For example, the demand for forest ecosystem conservation and interest in forest recreation have grown rapidly. Such demand is likely to continue in Finland due to diversification of value systems.

On the other hand, as a result of the nations focuse on a long-term enhanced forestry policy vision, extensively approved in the 1960's, Finland's forests have more timber than at the turn of the century. The current "over supply" accommodates alternative forest uses more than before, although the commercial use of Finnish forests will remain very important (Palo 1993, Maa- ja metsätalousministeriö 1994). Consequently, forestry policies and practices have become under growing scrutiny since the end of 1980's. Finnish citizens are not only voicing their concerns about environmental issues but, more importantly, how decisions about natural resources are made, and how public agencies representing them, are to be made more accountable to them. In other words, Finns are demanding more opportunities to participate in natural resource decision making.

Therefore, because the multiple use issues -- particularly those related to forest conservation and recreation -- have gained more importance in overall forest management, the greater has the need accumulated to delegate substantially more decision making authority to forest constituency groups in order to minimize unproductive conflicts. In order to respond to the demand, Finland's Forest and Park Service might actively search for and modify its current timber production management philosophy to a more participatory, multiple use-oriented one. Consequently, the Finnish Forest and Park Service might make major decisions only after reconciling multiple-use interests. The argument holds especially true, when the constituency groups become increasingly organized, as is the case in Northern Lapland. Unilaterally imposed decisions only diminish the Finnish Forest and Park Service's societal authority and create unnecessary controversy over the fate of publicly owned forests, thus making making it more difficult for the FPS to accomplish its mission. If the FPS does make decisions authoritatively without honestly striving to accommodate public views, it will be bitterly criticized at least by some interest group(s). Moreover, the Finnish Forest and Park Service might not keep pace with the process of social change, including the changing societal values Finns hold toward their national heritage. Apparently, there is a growing social demand for a new environmentally sensitive, multiple use-oriented forest policy in Finnish public land management (Palo 1993). The Environmental Impact Assessment, currently being reviewed by the Parliament, is the first law to mandate public participation in land use

planning -- beyond formal hearings -- as a part of natural resource decision making. At the same time, only limited national traditions and expertise exist to accomplish this mandate efficiently. To respond to this growing social demand the Finnish Forest and Park Service has voluntarily initiated a project on public participation. This study will complement other activities already undertaken in the project.

In the US, a long tradition exists for incorporating public opinions in natural resource decision making, and much research has been conducted in this field. Because Finland and the USA as western democracies have several of commonalties (Lime et al., 1986), a good deal about public participation can be learned from the US experience, and then transformed to the Finnish context. This paper is an attempt to respond to the call for socially acceptable public forestry in Finland's national forests.

Study Objectives

The objectives for this study are to:

- Develop a framework for public participation in the Finnish Forest and Park Service based on the assessment of needs, premises and requirements for, and restrictions to public participation in Finland.
- 2) Assess how public participation is applied currently in natural resource management in the USA and Canada; describe the major barriers these countries have encountered for effective public participation; and determine how these barriers might be overcome in adopting public participation strategies in the Finnish context.
- 3) Create guidelines for the Finnish Forest and Park Service's multiple use forestry and recreation planners and managers to help them (1) evaluate the usefulness of public participation in multiple use forestry planning, (2) create public participation programs tailored for specific situations, (3) search for, modify and apply effective public participation methods, (4) evaluate public participation programs undertaken, and (5) build new expertise in the field.

Developing a Framework for Public Participation

The purpose of this section is to identify the constraints and opportunities which comprise the Finnish Forest and Park Service's (FPS) decision making space regarding public participation. First, cultural and societal concepts and elements related to natural resource decision making in Finland are described. The social demand for more participatory decision making is analyzed from the perspectives of both the Finnish Forest and Park Service and Finnish society. Then, the role of public participation in addressing the evolving social values and interests is examined. In addition, it is predicted how social change might affect the FPS's decision making space in the future. The analysis concludes by identifying the needs, premises, and requirements for defining specific criteria relevant and effective for public participation by the Finnish Forest and Park Service. These criteria are developed later based on the US and Canadian experience.

The framework of this study was developed by applying the method of focused synthesis (Majcharzak 1984) in analyzing both formal and informal sources of information. Formal sources were the laws, statutes and administrative guidelines, journal articles, an attitudinal survey on FPS's employees perceptions about the usefulness of public participation in their work (Mikkola 1994), and the Finnish Forest Reserch Institute's annual statistical forestry year book. The more 'informal' information sources reviewed included newspaper articles, brochures, an organizational study on the FPS's image among its external publics, lecture notes, personal letters, and discussions with experts in the field.

Precepts, Traditions and Norms Relevant for Public Participation

Geography and Demographics of Finland

Finland -- Suomi in Finnish --, situated between the 60th and 70th degrees of latitude, is one of the four Scandinavian countries. Finland shares common boundaries with Sweden, Norway and Russia. One third of the country lies above the arctic circle; Finland is the world's northern most country where large scale agriculture is practiced.

Due to the Gulf Stream (i.e., a the trans- Atlantic ocean current starting from the Caribbean), climates of Finland and Minnesota are similar: winter lasts four to five months in both countries, but summer is shorter and somewhat cooler in Finland. However, the temperatures in Minnesota are more extreme. Winter is Finland's longest season with an average of three (in the south) to nine months (in the very north) of snow cover.

Finland is the sixth largest country in Europe¹. The nation's total land area is 338 000 sq.km (130,500 sq.miles.), consisting of 10 percent water (187, 888 lakes and 5100 rapids) 65 percent forest, 17 percent wetlands and unproductive forest lands and eight percent cultivated land. The amount of land resources are ample, i.e., seven ha (17.3 acres) per capita.

Finland's population is approximately five million and the average density of 16.2 inhabitants per square kilometer (40 per sq. mile) is equivalent to that of Oregon. The southern and central parts of Finland are much more densely populated than is the case in the north. The majority (93.6 percent) of Finns speak Finnish, a language belonging to the Finno - Ugrian language group, only about six percent have Swedish as their mother tongue, and less than one percent speak Sami². Most Finns are Lutherans by religion (89 percent), and only a small fraction (1.1 percent) belong to the Finnish Orthodox Church. In an

When compared to the US Finland would be the sixth largest state; Oregon is two-thirds of Finland's size.

² Three of the six major dialects of Sami are spoken in Finnish Lappland.

intercultural sense, Finland has traditionally been the 'Western window' to the East. Finland is one of Europe's four neutral³ countries and a parliamentary democracy.

History of Finland

After six centuries of Swedish rule (from 1154 to 1809) and one century of Russian domination (from 1809 to 1917), Finland gained its independence in 1917. Finland was at war with the Soviet Union during 1939-1940 and 1941-1945, as well as, with Germany during 1944-1945. The hardships and costs of these wars were enormous. Over 100, 000 men were killed; over 95 percent of the human constructions (i.e., buildings, bridges, roads) in Lapland were totally destroyed⁴; more than 400, 000 people in Eastern Karelia lost their homes and were relocated in Finland through a specific land reform; and the war debts to the Soviets were tremendous. But, all these hardships were overcome -- even the war debts were fully paid⁵ -- through collaboration, hard work and utilization of natural resources. The experiences shared among Finns during these hardships and afterwards unified and strengthened the homogeneity of the Finnish culture beyond what it had been before the Second World War.

The Role of Forests in Finland

History of Forest Utilization

Finland's forests have satisfied the needs of its inhabitants over centuries in a variety of ways (Palo 1993). Finland has a long tradition of forest utilization. Traditionally, the forests have provided Finns their livelihood. Vast areas of pine forests were used for tar production, which was the country's main export after furs, from the 14th to 18th centuries. Sales of firewood to Tallinn (Estonia) and Stockholm (Sweden) date from the 16th century. Large scale swidden (a type of slash and burn culture) extended

³ It appears very probable that Finland will become a member of the Europen Union - pending the results of a national vote on the issue and subsequent parliamentary ratification process in September 1994. The negotiations were (successfully) carried through by March 1, 1994.

⁴ by the retreating German forces.

⁵ Finland is the only country which has paid its war debts fully. Paying the debt forced Finns to build their machinery industry and greatly enlarge the metal industry on which it was based.

through the 18th and 19th centuries. First, sawn goods were exported in the 18th century, but still two-thirds of all wood exported consisted of firewood. Later, in the 19th and early 20th centuries to protect the crown's forests from exploitation a national forest law was passed in 1851, and based on the law the Finnish Forest Service was established to wisely manage and protect the state owned forest reserves (Zetterberg 1987). The law was essentially Finland's first nature conservation act. The establishment of steam operating mills in the late 19th century meant a large increase in wood consumption. Income from wood sales triggered diverse economic and social development, and the jobs created by wood sales were important for the growing population.

Intensive forestry, including extensive timber production, growth site preparation, required regeneration, and stand improvement strategies, were initiated only after the Private Forestry Act was enacted in 1928. The act introduced the philosophy of sustainable timber production: "Forest use must not lead to deforestation". By the end of the 1930's, the forestry industry had become Finland's most important domestic and export industry. The significance of wood processing reached its peak in the early 1950's when over 90 percent of Finland's foreign currency earnings came from exports of forest products. More recently, the comparative importance of the forest sector has declined with diversification of Finland's economy. By 1993, the forest industry share of export earnings had fallen to 36 percent, an amount equaling 33 billion FMK⁶ (six billion \$ US) (Seppälä 1994).

The Finnish forest industry's total output relative to other industry sectors is predicted to steadily decline in relation to other industry sectors, albeit not in absolute terms⁷. It appears that private forest owners' willingness to sell their timber at current market prices is the major limiting factor for expansion of the industry. These days, most forest owners can afford to use their forests for other than commodity production. Apart from that, the forestry industry employs directly approximately 200, 000 Finnish citizens. (Central Association of Finnish Forest Industries 1988, Pekka Kauppi 1994).

⁶ Forest industry's net effects on the national economy are still in the 1990's over 50 % of all exports, because of the high level of domestic raw materials used in the production processes.

⁷ In 1992 Finland's world market share of the highest (LWC) quality paper exports was 25 %.

Effectively managed forests have supplied steadily increasing quantities of raw wood, and yet the total volume of Finnish forests has increased since the 1960's. Currently, Finnish forests contain more timber than they have for centuries, and the current stock of 1800 billion cubic meters is growing at an accelerating pace. In 1993, the total standing stock of Finland's forests, after having excluded the fellings and natural mortality, grew by 30 to 40 million cubic meters (Metsätilastollinen vuosikirja 1993).

Three-fourths of Finland's total area is covered with forest. Of that, 63 percent fall into the ownership of 300, 000 private citizens, which means that nearly every third family owns some forest and, moreover, almost every Finn has relatives or friends who own forestland.

Even in the 1990's, about three-fourths of the forest industry's round wood consumption is produced by private forests. From the mid 1970's to mid 1980's the Finnish Forest and Park Service's share of raw wood sold to the forest industry has been about twelve percent, the municipalities and parishes have supplied four percent, and the forestry companies have produced nine percent from their own forests.

Cultural Meaning of the Forests to Finns

The Finns' relationship to their forests derives from dual origins: biological and cultural. The way

Finnish people have lived in and from forests historically suggests that those who have survived are the
ones who have been best adapted to forests. Their relationship to forests has been very respectful and
even partly religious; people lived in the forests, from the forests and with the forests. (Pihlström 1994).

"Even today, such [luck promoting] customs exist: the Christmas tree, maypole, Midsummer birches, birch whiskes in the Finnish sauna, ritual tree plantings, etc. In addition to the tree, the forest, as both a protecting and frightening maternal symbol, can be considered as an archetype. Intensive forestry diminishes the archetypical contents of forests, which may be one reason behind critical attitudes towards modern forestry" (Reunala 1986).

Finns' relationship with their forests can also be verified in the current settlement patterns where villages are typical only near the sea coast and at advantageously located former trading posts, such as river confluences or higher hill tops. Elsewhere, houses were built in the forest, separate from neighbors. In addition, a special feature of the Finnish building tradition is that the forest is allowed to grow close to the buildings (Pallasmaa 1987).

"The shelter of forest cover has been a fundamental factor for the formation of the Finnish people and it has also played an important role in the defense of independent Finland. Clearcuttings, forest roads and modern reconnaissance technology have recently diminished the protective shelter of forests" (Raumolin 1987).

Finnish artists have derived their innovation to a great extent from forests over the time frame of human existence in these northern lands. The oldest rock paintings date back some 8000 years and have been conserved in Finnish granite rocks.⁸

"Finnish literature has abounded with forest topics since ancient folklore. We have a literature of floaters, loggers and paper workers of industrialized Finland, not to speak of hunting literature. A major theme is "from forest to town", where the first work, Aleksis Kivi's "Seven brothers", is a landmark in Finnish literature" (Suhonen 1987).

Later, Finns' relationship to their forests changed to a more utilitarian one, where forests themselves are seen as natural resources for humans to extract and use to build social welfare. Despite the enormous change brought by international trade, forests are still a major element for modern-day Finns, including a source of self-identities.

Current Uses of Forests

The Finnish nature conservation system, the concept of Wilderness, and the 'traditional right of common access' are very distinct from US custom. These concepts have evolved as products of millennia long cultural evolution, where forests and other ecological conditions have played a central role.

The concept of Finnish wilderness differs significantly from the US one. The Finnish word for wilderness is "erämaa", which essentially means a hunting or gathering area. Trips far away to remote 'hunting forests' were made long after the permanent settlements were established. On the other hand, the Sami culture does not include a concept of wilderness; the natural environment has always been a home for these nomadic people who used to follow and guide their reindeer herds in Northern Finland from the 17th century until 1857⁹ (Hallikainen 1993, Zetterberg 1987).

Forests mean several things to Finns: They still provide a direct source of livelihood for 10 percent of Finnish citizens who work either in the forestry or tourism sectors - the latter is gaining more

⁸ These paintings were produced with a special 'redclay technique' by members of hunter and gatherer cultures.

⁹ When the boarder between Finland and Norway was established.

significance. Forests also provide additional income to many rural people through berry, mushroom and lichen gathering, as well as, reindeer herding¹⁰. Most nature conservation areas are forested or partially covered forested marshlands. In addition, forests form the major recreational settings for Finns. Many of these forest uses typically occur simultaneously on same land area, irrespective of ownership¹¹. Thus multiple use is common even in privately owned forests, which are open to non-motorized public recreational use based on the traditional common right of access.

"In Finland, the common right of access to all natural (undeveloped) areas allow Finnish people access to all forest areas.... The only restriction is that the user of common rights does not damage growing trees or crops, and does not remove soil material. Picking [wild] berries, mushrooms and flowers is allowed. "everyman's" right includes the right of access to the land, but not for the right for the quality of the environment favorable for recreation. Only in areas, which are designated and managed for recreation, there are concerns for the quality of the environment. Only recently public opinion has paid attention to landscape issues of natural areas." (Sievänen 1992).

The "everyperson's right" is important for contemporary Finns, as they spend on average 200 hours annually in outdoor activities. Most popular activities include cross-country skiing, snowmobiling, hiking, hunting, fishing and boating (Sievänen 1992). These activities are carried out to a great extent in settings were the forests play a dominant role.

Only in the 1990's have preservation values held by Finns toward forests increased into major proportions. Although many Finns still want to use their forests, two -thirds support expanding forest conservation areas (Palo 1993).

Private Forests

The Finnish government has promoted good forestry practices through legislation and authoritative supervision. Private property rights in Finland are among the strongest in Europe. Despite this, these private property rights are constrained by several laws and statutes, which are strictly enforced by forestry authorities. Until recently, the main function of these laws has been to enhance timber production.

¹⁰ There are 10, 000 reindeer owners in Lappland.

¹¹ Until recently, the US land management philosophy encourages separation of different forest uses.

Intensive forestry practices discriminate against common rights toward lands, and appear to be one of the major sources of natural resource conflicts. Private land owners are not obliged to manage their forests for recreational purposes. Therefore, recreational pressure is focused on larger, unified forests which, for the most part are located on government owned forests managed by the Finnish Forest and Park Service (Sievänen 1992).

Old Growth Forests

Most old growth forests¹² in Finland are located on state owned lands, and as a result, are under the Finnish Forest and Park Service's control. These forests are among the last refugees for a wide variety of endangered and threatened species (Ympäristöministeriö 1992). Therefore, many of these forests have recently become part of the controversy occurring between environmentalists and the FPS's traditional forest management unit (i.e. logging branch) which is backed by timber dependent communities (Lehtinen 1992). In several forest districts, especially in Southern and Central Finland, if the FPS is to meet its financial output goals, it has to cut old growth forests. The secondary or tertiary forests have not yet reached a stage where they could be utilized in a economically and/or silviculturally sound way.

The Finnish Nature Conservation Union argues that according to projections based on current forestry practices, the last old growth forests not yet preserved would be cut within a couple of decades (Halkka

practices, the last old growth forests not yet preserved would be cut within a couple of decades (Halkka 1993). On the contrary, Pentti Takala the current CEO of the Finnish Forest and Park Service claims that the old growth forests¹³ within the forest district of Kainuu, Northern Finland, would be sufficient for at least 30 years at the current logging rate (Takala 1993).

Finnish Forest Policy

According to Eljas Pohtila, the chief of the Finnish Forest Research Institute, Finland's traditional forest policy has come to the end of it's usefulness. He argues that forest researchers must ascertain what kind of policy is required for the future (Korpimo 1993). Furthermore, Risto Seppälä, the head of the multiple

¹² No generally accepted definition exists what constitutes old growth; most Finnish forests have been used by humans in some way since the last ice age (i.e., 10, 000 years ago).

¹³ forests over 140 years of age

use research division in the Finnish Forest Research Institute, contends that despite visible signs of change, one can not argue convincingly that Finns are consciously heading or striving toward a new forest policy. On the contrary, the change resembles drifting from one conflict to another. He argues that we have entered a unique historical period of opportunity, which enables us to conserve more forests and to better accommodate all forest uses without unreasonably limiting the forest industry's raw wood acquisition. (Seppälä 1993).

The most difficult problem related to national forest policy is to equally take the economical, ecological, social and cultural aspects into account. Because foresters have traditionally received an education heavily weighted toward timber production, they have adopted the norms, beliefs and attitudes of the traditional forestry paradigm and thus it is very difficult for them to accomplish their task in a balanced way (Palo 1993).

Palo (1993), the professor of national level forest economics at the Finnish Forest and Research Institute, conducted the most comprehensive forest policy analysis ever done in Finland. In his model (p. 393-394) for a new environmentally sensitive forest policy strategy, he identified four goals in striving toward the proposed vision of a humane and sustainable future¹⁴ within Finnish forest use. His main conclusion was that the time is ripe for Finland to radically modify its national level corporate forest policy toward a free-market oriented system.

Cultural Values

Although individualism is one of the corner stones of human rights pursued in democratic countries, it has never been valued as highly in Finland (nor other European countries), as in the US. In Europe, common good is valued more highly than individual freedom (Hofstaede 1980 in Lustig 1988).

Hofstaede (1980 in Lustig 1988) described four dimensions along which cultural value systems can be ordered: power distance, uncertainty avoidance, individualism-collectivism, and masculinity-femininity.

"Power distance indicates the degree to which the culture believes that institutional and organizational power should be distributed unequally.... Uncertainty avoidance indicates the

¹⁴ as defined by the Brundtland's Commission

degree to which the culture feels threatened by ambiguous situations and tries to avoid uncertainty by establishing structure. "(Lustig 1988).

Forty different countries were ranked according to these dimensions with scores ranging from zero to forty, and a low ranking indicating a high rating on that dimension. Finland and the US score quite close (around 30) in regard to power distance and uncertainty avoidance. The differences become more pronounced with regard to individualism; Finland (17) was only a moderately individualistic culture compared to the US (1). Furthermore, in terms of perceived gender differences, Finland (35) was a highly egalitarian culture when compared to the US (13), where masculinity was valued much higher.

Finland is the promised land of special interest groups. On average, Finns belong to ten different affiliations and/ or organizations, and there are nearly 20 official political parties registered in Finland. Currently, three organized national level environmental organizations exist: (1) The Finnish Nature Protection Union, (2) The Nature Union, and (3) The Green Party. In addition, several single issue interest groups exist. The environmental movement -- both national and international -- and all the international agreements on biodiversity and sustainable use of forests have strongly influenced the public attitudes and the way public agencies, the Finnish Forest and Park Service included, accomplish their business these days. Nature conservation has risen to one of the nation's top priorities in the 1990's.

Finnish Governmental System

Finland is a representative multi-party democracy. The government's role has traditionally been strong in creating a welfare society¹⁷. The legislative power in the nation is divided between the Council of State, the Parliament and the President, while the executive power in Finnish government is divided between the President, the ministries and the public agencies; the national court system arranged in three hierarchical levels hold the adjudicate power.

¹⁵ Rio 1993

¹⁶ The meeting of European forestry ministers at Helsinki after Rio in 1993.

¹⁷ A state categorized under the Scandinavian model.

The Finnish Forest and Park Service is a governmental agency under the administration of the Ministry of Agriculture and Forestry¹⁸; the Council of State appoints the Managing Director and the Board of Directors; the Finnish Parliament annually approves the objectives for the FPS. These objectives include in addition to the financial outcome objectives, societal service oriented functions such as determining the amount of land purchases for conservation areas, and the amount of exchange lands (purchases administered by the FPS) for these operations. Land purchases for new national parks and other conservation areas are financed from the national budget. (Metsähallitus - Valtion liikelaitos 1994).

The Finnish Forest and Park Service

The Mission

Sustainability and how it is operationalized plays an essential role in defining the mission of the Finnish Forest and Park Service. Historically, sustainability within the forestry context has been an economical timber production-oriented concept. The main goal of Finnish private, as well as public, forest policy has been to maximize and enhance the productive condition of forests based on the principle of enhanced yield. Present use should advance future opportunities, which is a step beyond the traditional notion of sustainability; the mission states that utilization of forest resources today may not reduce a future generation's forest utilization possibilities.

In 1991, the Finnish Forest and Park Service changed its mission statement from enhancing timber reserves to sustainable management of natural resources, with special attention to recreation and nature protection. The change in direction emphasized the importance of multiple use production in forest management. The Environmental Guide (1993)-- described separately under administrative guidelines -- was prepared to accommodate these needs, and as a tool to create an better image for the FPS.

The mission of the Finnish Forest and Park Service is to manage, use and protect the state owned forest, land and water resources with the central goal of sustainability. Accordingly, the FPS's mission is to offer and develop services for the needs of its clients and Finnish society as a whole. In accomplishing its

¹⁸ in matters concerning nature protection, under the control of the Ministry of Environment

mission, the FPS provides timber and manages national nature conservation areas for societal benefit.

For recreationists (i.e. clients), the FPS offers various recreational services and opportunities for fishing, hunting and camping around the country (Metsähallitus - Valtion liikelaitos 1994).

Structure and Functions

The first forestry plans for Finland's national forests were prepared 125 years ago. The Finnish Forest and Park Service has experienced various stages of managing national forests from the role of property guardian of the tsaristic era to the role of sustenance product accommodator, extensive forest utilizer, and finally reconciler of different land management needs (Kotimaki 1993 in Timo Kukko 1993).

Recently, the Finnish Forest and Park Service's activities have contributed to Finland's national budget. By selling timber from state lands, the FPS has paid the wages for its 3,229 employees and has financed the operations related to its other functions mandated by law. The organizational units responsible for these functions are: (1) the nature conservation unit, (2) the recreational services unit (which actually was self sufficient in 1992), (3) the seedling production unit, and (4) the information services unit. In 1992, despite a national economic depression and the sale of 58, 000 hectares (150, 000 acres), the FPS's profit was 117, 609, 000 Fmk (20 million US \$) (Metsähallitus 1992).

In 1991, nature conservation and forest recreation were established as separate organizational profitsteered outcome units in addition to the traditional forest management unit. Since then, these functions have been taken into account through all functional units and applied to the entire land base within the Finnish Forest and Park Service's administration.

At the beginning of 1994, the Finnish Forest and Park Service became a public corporation. Currently, it has to function under competitive market conditions in fulfilling its mission as stated most recently by the 1993 National Forest Management Act (Laki Metsähallituksesta), although other laws described below set constraints and objectives for the FPS's forest policies. In practice this means that operations are

¹⁹ Finland's toughest since 1930's

financed mainly by the income generated by business activities. In addition, these are societal and authoritative functions which are financed through the national budget (Metsähallitus - Valtion liikelaitos 1994).

The FPS administers 8.5 million hectares (21.3 million acres) of forest land, which comprise one-fourth of Finland's total land-base. Of these forests administered by the FPS, 3.2 million hectares (8 million acres) are classified as primary timber production forests; 3.9 million hectares (9.8 million acres) consist of legal conservation areas, special purpose forests, and other general utility forests; and 1.4 million hectares (3.5 million acres) are nonproductive forest lands (i.e., mountainous areas, wetlands, etc.) (Metsähallitus - Valtion liikelaitos 1994).

Image

The continuously growing sensitivity and awareness of environmental issues, the changes in public values related to forests, and the current role of the FPS, have forced the agency to pay more attention to its image. In order to determine its current external profile, the FPS ordered a study from a recognized private communication consultant firm, Tietopaketti OY. According to Tietopaketti OY (1993), the top priority functions of the agency as perceived by its major interest groups including the 'general' public are prioritized (According to perceived importance) as follows:

- Management of state owned forests (9.4)
- Sale of round wood to forest industry (8.6)
- Logging operations in state owned forests (8.5)
- Nature conservation in state owned forests (8.5)
- Management of national parks and areas (8.5)
- Biodiversity management (8.4)
- Preservation of endangered and threatened species (8.0)
- Forest hut system maintenance (7.9)
- Employment opportunities in rural areas (7.8)

²⁰ according to the author, there exists no general public

- Maintenance of fire places (7.8)
- Management for fishing and hunting opportunities. (7.7)

The importance weights (in parenthesis) are averages across all external interests and/or individuals involved in the study. The study population was based on a stratified-random sample. The range varied from ten (extremely important) to four (not important at all).

The focal areas where improvement was perceived necessary by the subjects were: (1) general efficiency, (2) ability to keep up with the change, and (3) the process of balancing operational priorities (i.e., setting goals) with mandated functions and national objectives (Tietopaketti OY 1993).

Experiences with Public Participation

The FPS has experimented with public participation on two separate large scale land management occasions. One of them has been developing a management plan for Hammastunturi Wilderness Area and the other one was a joint research project with the Finnish Forest Research Institute on allocating recreation versus preservation uses in Ruunaa - a national recreation area administered by the FPS. Experiences with these processes will be described separately. In addition, an attitudinal survey of the Finnish Forest and Park Service's employees' perceptions about public participation was administered in the summer of 1993. The most salient results will be explored.

The Case of Hammastunturi Wilderness Plan

Hammastunturi is the first wilderness area to receive its management plan and public participation was applied in creating the plan. The process progressed as follows.

According to Veijola (1993) -- the district forester of the Nature Management District of Northern Lapland --, the forester responsible for developing a plan lives and works in the area under consideration. The planner is obliged to keep lines of communication open. In addition to initial meetings and hearings arranged for the different communities and/or interest groups, those individuals who are interested always have opportunity to voice their concerns to the planner.

After the initial stage of public involvement the draft plan was sent to the organized stakeholders for revision and comment, and the written critique was incorporated into the 'final' version of the wilderness

management plan (Tynys 1992). Community-based negotiation (i.e. advisory) committees functioned as steering groups in the planning process (personal letter from Pertti Veijola 1993).

The management plan developed for the Hammastunturi Wilderness is currently being reviewed by the Ministry of Environment²¹. The Finnish Forest and Park Service claimed that all parties were heard in identifying the main issues and allocating the wilderness into different land use classes (core and peripheral areas) prior to developing the draft plan (Tynys 1992).

Despite this intentionally open and integrative approach taken by the Finnish Forest and Park Service, a delegation of Sami people did not accept the plan. This delegation demanded that the plan had to be developed according to a more collaborative process in cooperation with the Sami people (Helsingin Sanomat, May 21, 1993). The stance was widely anticipated based on different interpretations of land ownership and stewardship between the Sami people and the FPS²². Later, it became known that the local reindeer herding organization was not unanimously behind the final plan, either. Three reindeer herders made a written appeal contending that the FPS was about to destroy their basis for livelihood. They demanded that the planned forest cuts must be removed from the plan, because these practices threaten their livelihood and ultimately their ethnic identity. These herders backed their claim by a 1976 UN stipulation (section 27) ratified by the Finnish government concerning minorities and their cultural rights. The stipulation states that humans belonging to ethnic, religious or linguistic minorities shall not be denied their right to enjoy their culture, practice their religion nor use their own language (Länsman et al. 1993).

²¹ The Ministry of Environment must confirm the wilderness management plans for them to become effective.

The Sami people's traditional livelyhood has been reindeerherding from the 16 th century on. In former days they used to be nomadic people moving freely along their stock between grazing lands without administrative constraints until the border between Norway and Finland was closed in 1852 and the border between Sweden and Finland was closed in 1889 (except for a few official checkpoints). This combined with the decision made by Finnish Senate to establish the official reindeer herding organization in 1898 changed the Finnish Sami peoples' nomadic way of life to a more settled-down-one.

The Case of Ruunaa

The case-study performed by the Finnish Forest Research Institute in cooperation by the Finnish Forest and Park Service examined the usefulness of an application of an analytical hierarchy process as an integral part of participatory forest decision making. This game theoretic approach was applied to determine the value tradeoffs of various interest groups toward predefined alternatives. These alternatives allocated a forest area between recreation and preservation use (Kangas and Matero 1993).

The study determined that the formal interest groups found the participatory approach taken a constructive way of dealing with the planning situation. The approach provided relevant information as a basis for the Finnish Forest and Park Service to make final decisions. Kangas and Matero (1993) conclude that the process based on an analytical hierarchy process can be applied to public participation in situations where there exists distinctive decision or planning alternatives. Although not everyone will always be satisfied when using the technique, the process can be used to find solutions which would satisfy as many participants as possible.

A Study on The FPS Employees

The increasing emphasis on social aspects of forestry has been one of the major reasons behind the Finnish Forest and Park Service's initiative to launch a multi-year project on public participation. One activity of this project was an attitudinal survey²³ -- on the Finnish Forest and Park Service's employees' perceptions about public participation --administered in the summer of 1993. The objective of the study was to explore how the FPS employees at various organizational levels perceive the need for collaboration with various interest groups. The following description is based on a draft version of the study (i.e., a masters thesis) prepared by Mikkola (1994).

In the study nine out of ten participants claimed that it is useful or very useful to incorporate affected publics in forest planning in the Finnish Forest and Park Service. The following planning situations / areas were perceived as most appropriate for public participation: (1) recreation (92 %), (2) special

 $^{^{23}}$ N = 246, response rate 72 %

purpose forestry (e.g. game management) (85 %), (3) wilderness management (80 %) and (4) nature conservation (78 %).

According to Mikkola (1994), most subjects perceived that more collaboration is necessary for effectively accomplishing their day-to-day work—about two-thirds were interested in participating in experiments of participatory planning and nearly three-fourths were attentive to training in the field, but most perceived that there rarely exist opportunities for such activities. Although many individuals would be willing to apply more participatory techniques in traditional forestry planning, more comprehensive forms of collaboration are avoided because of the fear that public views can not be sufficiently accommodated. The financial output objectives of the agency effectively constrain opportunities for innovative decision making and for involving publics in the process. Consequently, planning becomes rigid and formalistic, undermining the possibility for utilizing issue specific and flexible planning techniques.

The participants in the study perceived the public's lack of knowledge as problematic. It is easy to demand an array of effects when you are ignorant, indifferent, or do not have to care about the implementation costs of your proposal. Approximately 25 percent of the subjects were satisfied with current planning procedures. They believed that the agency's objectives will be met with the current level of participatory decision making described in the 1993 Ympäristöopas (i.e., Environmental Guide). According to the study, this opinion is based on the fear of losing decision making authority and having more constrained decision making space in the future.

The more the subjects perceived the agency's mission as a multiple-objective-optimization task, the more positively they viewed collaboration with different interest groups. Such an orientation was held by most managers in the highest leadership positions, among those professionals working in nature conservation or forest recreation areas, and by female, as well as, younger and highly educated employees.

Currently, some of the subjects already work in close contact with their constituents. These subjects value the special knowledge and expectations the constituents possess - especially, site-specific

information about conservation areas and well articulated recreational needs. Although individual people quite frequently contact the Finnish Forest and Park Service, their contributions are not seen as very important. Organized interest groups are seen as much more beneficial to work with, and are even queried for specific opinions. On the other hand, those citizens affiliated with environmental activist or extreme nature conservation groups are avoided to the greatest extent possible²⁴.

In general, the subjects believed that more collaboration means not only more work, but also more demanding work. In addition, more than five out of six subjects believed that public participation is a avenue for reducing the amount of conflict between the Finnish Forest and Park Service and its liaisons, although, not all conflicts could be eliminated by this approach. Some subjects perceived that the costs of more participatory planning would be inappropriately high. On the other hand, those with personal experience dealing with issues emanating from the publics, argued that in many cases no resistance was encountered: These participants recognized that involving the public could reduce total project costs considerably.

Furthermore, respondents generally agreed that principles of collaboration with the publics that should be agreed upon within the agency. Different interest groups should participate in forest planning if the FPS perceives them to be affected by the proposed actions. Need for collaboration, selection of parties, and the participation techniques to be applied should be assessed on a case by case basis. Practical guidelines and examples that would include such issues as how to share the decision making authority and accountability were requested. Public participation was seen as a mechanism for delivering the message that the Finnish Forest and Park Service is a reliable, accountable and knowledgeable forest ecosystem manager, determined to serve the larger society, and ultimately to manage public forests for the benefit of individual citizens.

²⁴ The subjects perceived that it is necessary to collaborate with authorities (75 %), community councils, travel organisers and nature conservation groups / associations (67 %), recreation, outdoors, and sports clubs (50 %). and private citizens (27 %) all cases.

²⁵ This paper intends to provide answers to these issues.

Laws and Regulations

This chapter consists of Finnish laws, statutes²⁶, amendments and administrative guidelines pertaining to the Finnish Forest and Park Service's administration of government owned land base. Only stipulations pertinent to accomplish the objectives of this paper are covered.

National Forest Management Act and Statute(1993)

(Laki ja asetus Metsähallituksesta 1993)

The Law

The goals, objectives and constraints for the Finnish Forest and Park Service are judicially defined in the National Forest Management Act and Statute. According to the Act (section two), the mission of the Finnish Forest and Park Service is to manage, use and protect the state owned forest, land and water resources with the central goal of sustainability. The FPS should take into account the preservation and enhancement of biological diversity when managing for the objectives of sustainable use and nature preservation. The FPS's responsibilities include timber production, logging, marketing of raw wood, nature conservation, and the provision of recreational services. In accomplishing these tasks, the FPS must take labor management aspects into account as specific constraints (i.e. it must provide a certain amount of employment opportunities defined more specifically in the statute).

Further, according to National Forest Management Act section five, the Finnish Forest and Park Service must manage its obligations efficiently and profitably ensuring that the societal demand for services and products will be met. (This will be accomplished by taking into account the needs of its clients and the Finnish society as a whole.) The Finnish Parliament sets annually the financial and nature conservation objectives²⁷ for the FPS.

²⁶ In the Finnish legal system, statutes are laws which describe the Acts (i.e. main laws) more specifically. They are also modified more frequently to meet better the changing societal and/or environmental conditions. E.g. The endangered and threatened species are annually stipulated in a statute by the parliament.

²⁷ They include the objectives to establish new conservation areas and to reserve exchange lands to accomplish the former one.

To accomplish the Finnish Forest and Park Service's societal functions (more specifically defined in section two) special funds can be incorporated into the national budget, or considered when setting the annual financial outcome objectives (section seven).

The services provided by the FPS are free market priced. All the societal services defined in the eight different laws listed in section two can be priced lower than the current market monetary values indicate, or they can be kept totally free for citizens. The Forest Management Statute defines these functions more precisely and explains the principles to be applied in their pricing (section nine)

To accomplish the FPS's societal functions, provincial advisory committees will be set up to protect local interests. This procedure is defined more explicitly in section five, seven, nine, ten, and eleven, of the National Forest Management Statute (section 13).

The regulatory policies to which the FPS should conform, in relation to its duties, are defined more precisely in the National Forest Management Statute (section 15).

The Statute

The national property administered by the FPS includes:

- 1. all the nature conservation areas established by the Nature Conservation Act (71/23)²⁸;
- 2. the wilderness areas established by the Wilderness Act (62/91); and
- 3. all other protected areas confirmed by the national board, areas stipulated in international agreements concerning Finland; areas belonging to protected areas under ratified formalized area plans; and all the areas purchased for the state as nature conservation areas (section eight).

The Ministry of Agriculture and Forestry sets the advisory committees for three year terms in the counties of Lapland, Oulu, and Northern Karelia. Each advisory board consists of a eleven members,

²⁸ The marking (71/23) means that the law is from 1923, and the existing statute defining it is from 1971.

which should represent the local interests, timber production, business, environmental protection and national-level public interests in a balanced way.

The function of these advisory committees is to:

- 1. submit statements to the FPS about geographically salient issues in relation to the use of the land and water resources administered by the FPS.
- 2. take initiatives in order to secure the local interests in accordance with the FPS's forest planning process. (section 10).

The Nature Conservation Act (1923)

(Luonnonsuojelu laki 1923)

The Law

Finland's Nature Conservation Act (1923) is currently under comprehensive review in the Parliament. The original act has been augmented several times with species specific conservation stipulations. The Nature Conservation Act (1923) does not protect the critical habitat of endangered or threatened species. This is one of the major reasons behind Finland's current nature conservation strategy to establish a comprehensive network of nature reserves, nature protection areas and national parks. Only in these areas will the flora and fauna be legally protected.

The Wilderness Act (1991)

(Erämaalaki 1991)

The Law

Finland passed its Wilderness Act in 1991, which means that Finland is the only European country with officially designated wilderness areas. The Act established 12 wilderness areas of approximately 1.5 million hectares (3.75 million acres) in Lapland (Northern Finland) to protect the wilderness character of the areas, to protect Sami culture and traditional sources of livelihood, and to enhance multiple use of nature. The Finnish Forest and Park Service has the land management responsibility over these areas.

Consequently, Finnish wildernesses areas are essentially non-motorized²⁹, multiple use areas accommodating diverse uses: traditional sources of livelihood (e.g., reindeer herding, berry picking, fishing, and trapping), forest recreation, limited timber production, nature conservation, and research. Timber production warrants some discussion as it is not found in wilderness definitions of other countries. The decision to allow for limited timber harvesting in wildernesses was a compromise to ensure local employment³⁰. The law specifies areas where harvesting is allowed. Forestry practices can be applied on one-third of the coniferous forests, which comprise 4.5 percent of the total wilderness land base; no clear cuts are accepted, instead, the FPS is required to create 'natural' logging methods to imitate natural dynamics of those northern ecosystems.

In addition to being substantively contradictory, the wilderness law leaves much space for operations through the development of actual management plans and through evolving management practices. The FPS has created guidelines for structuring these management plans. According to the guidelines, wilderness management plans will be divided into overview, detailed description and supplemental sections. The overview section consists (1) of a holistic description of the area and the objectives, (2) a general description of the geographic land use of the area, and (3) a forest management plan including the monitoring and research needs. The more detailed section includes specially tailored plans regarding future development of the different multiple use activities identified in the overview section. These may include:

- important areas for reindeer grazing
- game management areas (e.g. mating areas of wild forest grouse and how they should be incorporated into the comprehensive plan)
- fish stocking
- managing recreational fishing
- development of structures and services related to recreation and hiking
- maintenance and building of equipment and buildings

²⁹ The locals can apply for special off-road-vehicle or snowmobile permits to practice their traditional sources of livelyhood.

³⁰ The FPS's Nature Management District of Northern Lappland employed directly approximately 50 persons in 1993.

- restoration of natural conditions and management of cultural sites
- development of information and interpretive / outfitter services within the wilderness area
- research and monitoring projects concerning the wilderness area
- establishment of new routes for off road vehicle travel for local people in practicing their traditional sources of livelihood

(Erämaakomitean mietintö³¹ 1988).

The Environmental Impact Assessment (proposal)

(Ympäristövaikutusten arviointi laki (1994))

The Proposal

The proposal for the Environmental Impact Assessment Law is based on the European Commission's directive on environmental regulation. It aims at creating consistent rules for assessing environmental impacts in Europe according to a defined set of criteria for human actions (Kuronen 1993). The law will require that citizens and authorities shall be heard and that a unified template for the assessment report be used before the responsible agency can make its decision.

The purpose of the law is to promote environmental impact assessment and its consistent evaluation within planning and decision making and, in addition, to ease citizens opportunities in receiving information related to decisions affecting them and to enhance their participatory opportunities in decision making (section one).

The law will be applied according to its statute in cases which might have substantial negative environmental impacts. When evaluating the significance of these environmental impacts, special attention is paid to: 1) the location of important natural and cultural values, fragile environments, human health, living conditions and comfortability; 2) the extent of the proposed activity; 3) the potential interaction effects with other actions (e.g., activities adjacent to nature conservancy areas, the management of endangered or threatened species, or the management of valuable cultural and historical landscapes) (section four).

³¹ Report of the Wilderness Committee

According to the process defined by this law, environmental impacts have to be clarified before any actions significantly affecting nature are initiated (section seven). The impact assessment statement required by the law should be extensively communicated to the publics and hearings should be arranged within the potentially impacted geographical area (Description of the Environmental Impact Statement proposal ...). Accordingly, all interested individuals and parties are requested to give their comments on the proposed project and its different alternatives. In significant (often) interest group-related actions, merely informing is not always sufficient. To avoid generating unnecessary conflict, public participation procedures can be applied, which means that the parties concerned should be incorporated into the planning and decision making process (Ehdotus YVA laiksi 1993).

The Finnish Forest and Park Service accomplishes the objective of the law by combining the assessment procedures with the normal forestry planning and decision making process at the local (district) forest level. Information about critical environmental factors is gathered along the forest inventory phase and combined to treatment area or drainage specific geographic data files. These pertinent factors include information about area specific nature conservancy values.

The current debate about the Environmental Impact Statement law focuses on the public's role in the decision making process. Hannele Pokka, Finland's current Minister of the Law, supports the view that publics should not be incorporated into the process until the problem is identified and the alternatives are generated. Moreover, publics should be excluded from the Environmental Impact Statement process except for the opportunity to comment on the alternatives proposed by the authorities. Thus, publics would not be granted any real decision making authority over the process nor its outcomes.

On the contrary, Ilpo Kuronen from the Finnish Nature Conservation Union argues that the first phases in the decision process are crucial, since at this point decisions are made about the different alternatives, impacts, and standards to be applied in addition with the various ways of measuring them (Kuronen 1993).

Administrative Rules and Guidelines

The Metsätalouden ympäristö opas (Environmental Guide, 1993) and the Finnish Forest and Park Service's guidelines for multiple use forestry planning and management will be described. These guidelines are generated by the agency to comply with the laws and statutes described above.

The Finnish Forest and Park Service's Management Guidelines

The following description is based on the Environmental Guide (1993). According to the Finnish Forest and Park Service's guidelines, practicing forestry on state owned lands is a societal activity. Finnish citizens have the right to access information regarding their environment. Consequently, all planning within the FPS should be open to the public. Except for business secrets, forestry plans will be presented to all interested parties and individuals. The goal is to improve the agency's credibility and prevent future conflicts. Moreover, positive cooperation with different interest groups can bring new dimensions and benefit the planning process itself (Metsätalouden ympäristö opas 1993).

In the case of area or site specific interests, local residents and other interest groups can be informed during the planning phase about chosen forestry practices before the plans are implemented. Such cases shall be decided by the local forests, and the means for keeping in contact with one's publics should be based on the local situation and conditions. The need for flexibility is emphasized to keep in touch with forest constituencies. It is possible to make changes in the original plans based on public participation by taking the different land use forms into account. The authority to make such considerations is reserved by the FPS (Metsätalouden ympäristö opas, 1993).

The Finnish Forest and Park Service has already utilized certain forums regarding public participation - especially within the reindeer herding area in northern Finland. These situation-specific dealings with the public are aimed at when the FPS district level office arrives at the conclusion that it is necessary to search for alternative solutions together with the interested parties. In conclusion, the Environmental Guide (1993) emphasizes that the time devoted for societal relations is time used to ensure future operational premises.

Multiple Use Forestry Planning in the Finnish Forest and Park Service

National forest planning is accomplished at the district level using geographic information system based centralized databases. These databases are based on forest inventories and are updated whenever forestry practices are carried out.

The multiple use planning system currently applied by the Finnish Forest and Park Service includes both technical (feasibility) and value-laden (strategic choice) decisions which are made by the resource manager. The value decisions include decisions about recreation opportunity classes, conservation preferences and management restrictions before the data will be entered to the planning model. These attributes (related to the inventory data) are entered either as special information in the database or treated as constraints in the optimization function. Once a database for a forest compartment (i.e. treatment area) is updated, simulations are run. As an outcome, several silviculturally feasible options are produced. These alternatives are then scrutinized against the strategic objectives set at the district level in choosing the most beneficial plan³² from the agency's perspective. (Laamanen et al. 1993, Kukko 1993). The most effective management constraints are those in the optimization function; all restrictions attributed to the data are either accommodated (e.g. locations of endangered and threatened species) or optimized (e.g. maximize the area for berry picking) in the process (to the extent possible) under the constraints set (strategically) by the experts. Accordingly, the real decisions concerning strategic planning are made at the district level.

³² combination of alternative time-bounded forestry practises

Needs and Premises for Public Participation in National Forest Management

This section analyzes the existing needs and potential for public participation in natural resource management in the Finnish context. It lays the general groundwork for focusing on specific criteria for public participation in the Finnish Forest and Park Service. These criteria will be defined after the US and Canadian experience on the subject has been explored.

Social Demand for Public Participation

Diversification of Values

"We treat resources as private, individual entities. Yet they, like us, are but temporary convergence of mutually reinforcing networks of interaction" (Burch 1976). This is to say, that what is considered a natural resource today might not be considered as such in the future; or conversely, what is seen lacking value to humans today may be valued highly tomorrow (Rolston III 1988).

As our global village shrinks in size all the time and the human population continues to grow, the scarcity of natural resources becomes more and more obvious. Extraction based utilization is not the only way of using our natural resources. Alienation from other humans and from nature itself combined with higher levels of disposable income, more leisure time and increasing amounts of pollutants have fostered a whole new set of environmental values. The societal value base has accordingly diversified, and there is no retreat to past times. Inevitably, fundamentally differing values held toward the 'correct' or 'best' way to use scarce natural resources clash as the developing situation brings them together.

The key concept here is values, namely vastly differing values held toward natural resources. Values are strongly held belief systems about how things ought to be, which cannot be changed quickly. For most of us, they are a central part of our self-identity and, in many cases, we have heavily invested time and money in promoting our values. Thus, it is almost impossible to abandon one's values within a short time-frame.

Although situation specific, manifested conflicts, called disputes, can in some occasions be resolved - more often managed - for the mutual satisfaction of the parties involved, rarely or never can the underlying differing values be reconciled in order to resolve a fundamental value conflict (Daniels 1993, lecture notes). A logger can not simply cease being a logger overnight, neither will a highly biocentric environmentalist be able to change from preservation interests over night. Such changes require long-term socialization and / or learning process to occur.

The universal process of social differentiation is a mechanism-- related to values held by various groups -which contributes toward the continuation of conflicts. Groups maintain and negotiate their social identities by creating unique value hierarchies (related to the natural resources), and mediate them through conflict. They simply cannot switch from tightly held positions into interest based negotiation, because their distinctive attributes of group identity would otherwise be diminished. Further, this would lead to the loss of support for their self-identity and ultimately threaten the existence of their identity (i.e. reason for being formed in the first place) (Daniels 1993 lecture notes).

In addition, the global trend of western societies, to think globally and act locally, is gaining wide acceptance as an overall environmental strategy in striving toward the politically favored concept of sustainability. Different perspectives and interests give rise for potential disagreements and conflict; the more specific the interest groups or parties, the higher the potential for conflict (Gray 1989). Moreover, the clash of different interests and priorities is frequently manifest in land use conflicts (Wondolleck 1988). "In failing to view their role as managing for changing forest social values, foresters were often shocked and reactionary to socio-political communication from their citizens that forest priorities and management practices should change" (Kennedy 1985). These arguments also hold true also in the Finnish context.

The ways forest resources are used in Finland are changing. New ways of making a living based on forest resources are evolving to accompany wood production and wood processing industries. One of the most

visible examples of a clash between values is that of commodity use versus preservation of natural resources. Pressures to save the last 'virgin' or old growth forests and scarce ecosystem biotopes have risen to new heights, clashing with a traditional timber production paradigm. Based on the traditional right of common access, people can recreate in managed forests --which are mainly on private lands-- as much as they will. Thus, private and FPS owned managed forests accommodate many forest uses.

Nevertheless, privately managed forests do not provide for everything people value about forests (e.g. nature preservation, pristine recreational settings), and therefore, Finns expect the FPS (lands) to provide for such opportunities.

According to Uusitalo (1986 in Palo and Hellström 1993) the demand for forest recreation in Finland will grow significantly in the future. As a consequence, he assesses that Finnish forests will differentiate into three major categories, namely, (1) timber production forests, (2) managed forests geared to serve recreational purposes, and (3) preservation and research forests.

These pressures are likely to affect the Finnish Forest and Park Service's revenue generating potential by permanently reducing the stock available for timber management. These operational constraints can be alleviated either (1) by reducing the annual financial objectives for the FPS, set by the Ministry of Agriculture and Forestry, or (2) by limiting the role of the non-profit units of the agency by mandated constraints. The latter alternative might be politically unfeasible and might not be necessary. Recently, Juhani Viitala, the chief executive of the Ministry of Agriculture and Forestry has expressed that the government is willing to reduce the financial objectives for the FPS in the North to enhance biodiversity protection through old growth conservation (Helsingin Sanomat January 22, 1994).

Nevertheless, whichever approach is taken, the need for public participation is likely to increase. To ensure that the agency reflects public consent in a rapidly changing social environment, it is necessary to incorporate public views in the decision making process. The public possesses the ultimate power over the Finnish Forest and Park Service through legislation via the elected Parliament and thus their concerns will be heard.

Another mechanism to heighten the need for a more participatory decision making system in the Finnish Forest and Park Service is the growing pressure to utilize FPS's lands for advancing national nature conservation programs. The Finnish government has the right to redeem environmentally critical habitat areas from private landowners for sufficient compensation. But, this is a limited strategy to achieve nature protection because (1) two-thirds of the total land base is privately owned, (2) property rights in Finland are among the most comprehensive and rigorous in Europe, and (3) there are always a scarcity of state funds to allocate for such land purchases. Accordingly, pressure has mounted to either create conservation areas on national forest lands or to utilize them for land exchange operations to create conservation areas on suitable private lands. Given movement toward a new nature conservation act, which may be developed over the next two years to (Ilpo Kuronen 1993), the latter option might become more viable.

Moreover, membership in the European League would oblige Finland to modify its Nature Conservation Act, which accelerates demand for equitable land exchange arrangements from national forest lands. In order to prevent subtractive justice from occurring, policies and principles for the process of acceptably distributing costs and benefits related to land exchanges need to be established. Public participation might offer an egalitarian means for mediating such potentially contentious actions.

Defining Sustainability Applicable for Public Participation

Finland has recently signed two important international forestry agreements (i.e. UNCED 1993 in Rio and European Ministerial Agreement on Sustainable Forestry 1993 in Helsinki), which set ecologically, economically and socially sustainable uses of forest resources as goals in forestry. Currently, many research projects are under way in Finland as in other countries to define the criteria for economically and ecologically sustainable forestry. However, to date the social aspects of sustainability and the integration of economical, ecological and social sustainability have received very little attention (Hytönen 1994, Maa- ja metsätalousministeriö 1994).

The social aspect of sustainability³³ includes changing social conditions and the dynamic nature of social values. A new forest policy might address more explicitly prevailing social and ecological values and preferences, thus expanding notions of sustainability. The traditional definition of sustainability, i.e., sustainable yield, satisfies only the economic dimension within natural resource management. Recently, there has been a growing emphasis on the ecological dimension of sustainability, which is evidenced at various levels in forest management and policy. For example, all Finnish forestry laws are currently under revision to more fully accommodate growing ecological demands on viable forest ecosystems (Helsingin Sanomat 1994). Certainly, sustainability is not a fixed condition (Cordray and Gale 1993, Dixon and Fallon 1989, Stockdale 1989).

The interdependency of the economic, ecological and social dimensions of sustainability should not be forgotten. "It is clear that social stability will only be achieved through economic strength, which can only be maintained through environmental integrity" (Owen 1993).

Sustainability is a term that has evolved from the concept of "sustainable development", defined by the World Commission on Environment and Development (1987) as the ability to meet current human needs without sacrificing the earth's capacity to sustain life and subsequently a future generation's opportunities to meet their needs.

"Sustainability means achieving a balance between human impacts and the capacity of natural world - a balance that can be sustained indefinitely. A balance between these elements will demand the adoption of a new ethic, new lifestyle and new expectations to ensure our collective survival. ... Many of the world's most critical issues - whether environmental economic or social - are rooted in, and have their greatest impact at, the community level. ...Because emerging problems and opportunities may change the picture of what constitutes sustainability in individual communities, it is not a "fixed" condition" (Strategic Directions for Community Sustainability, BC Round Table. 1993).

³³ The anthropocentric perspective for sustainability is applied. "Without doubt, the anthropocentric perspective dominates, the paradigm of sustainable development. ... Although it may be possible to develop an approach to sustainability that is nonanthropocentric, it would at present at least, have to rest on intuitive appeal." [This is because] rationalism is a product of anthropocentrism".(Shearman 1990)

The following principles compiled by the BC Round Table (1993) provide guidelines for achieving sustainability at various levels. Public participation can be seen as an important mechanism for achieving these six principles listed below:

- 1. Limit our impact on the living world to stay within its carrying capacity (its ability to renew itself from natural and human impacts);
- 2. Preserve and protect the environment (conserve the life support systems, biological diversity, and renewable resources);
- 3. Promote long-term economic development that increases the benefits from a given stock of resources without drawing down on our stocks of environmental assets (through diversifying and making resource use more efficient);
- 4. Meet basic needs and aim for a fair distribution of the benefits and the costs of resource use and environmental protection;
- 5. Provide a system of decision-making and governance that is designed to address sustainability (is proactive, participatory, long term); and
- 6. Promote values that support sustainability (through information and education)."

"Sustainable governance refers to all processes and institutions by which society sets priorities, makes decisions, and implements those decisions. From a community perspective, it is the process of managing community activities based on ecological limitations, economic viability and social equity. It emphasizes integration, coordination and participation through public participation and collaborative planning and decision-making" (British Columbia Round Tables 1993), (underlining added).

Sustainability is a value-laden concept (Shearman, 1990). In general, much of the recent discussion of it has focused on the ecological and economical dimensions of the concept, omitting the social and procedural aspects of it. The discussion is consistent with the strengthening of representative governance and the growing suspicion of political processes and authoritative institutions. The Finnish Forest and Park Service is no exception in this regard. As a consequence, public awareness and frustration over perceived procedural ineffectiveness, i.e., perceived unfair decision making practices, has resulted in heightened conflicts regarding the wise use and preservation of our natural resources. This is seen not only as erosion of the FPS's national image, and growing civil disobedience among environmentalists, but also in the growing number of legal appeals, published critical articles, time devoted by media to

examine environmental issues, and the increasing power of alternative non-political (activist) movements.

A fundamental premise for long term organizational viability of the FPS is to broaden the definition of success to encompass all three dimensions of sustainability. If the Finnish Forest and Park Service falls short in adhering to the principles of sustainability, its ability to accomplish its mission might be severely undermined. At worst, the FPS's authority could effectively be weakened and its obligations to society fundamentally scrutinized, which would result in diminished decision making space for the agency in the future.

For reference, it is useful to compare what has occurred in other countries regarding the unresponsiveness of public land management agencies toward changing societal values. In New Zealand, for example, the publics' reaction toward a similar situation was dramatic: the New Zealand's Forest Service was totally abolished in 1988 for not responding sufficiently to the changing social values and corresponding expectations. The natural forests were incorporated into the nation's nature conservation system, and the plantation forests were leased to private forestry companies, and are currently privatized (Roche 1990).

One might assume that sustainable forestry in Finland's public lands needs to be defined more broadly than is currently the case³⁴. The accelerating pace of social change makes it imperative to institutionalize mechanisms to cope democratically with the dynamic processes and priorities related to natural resource management. The decision processes for accomplishing these goals must be adaptive and responsive to changing societal values. Public participation is one avenue for accomplishing this goal.

³⁴ Marjatta Hytönen from Finnish Forest and Research Institute is currently working on her doctorate thesis to accomplish this goal.

Societal Premises for Public Participation in Finland

Above it was noted (when analyzing the societal needs for public participation in national forest management) that the demand is growing for the Finnish Forest and Park Service to incorporate publics meaningfully in decision making. In this section, the existing premises in Finland for accommodating public views in multiple use forest planning are assessed.

Cultural Premises

The Finnish culture is eager to share organizational power, not particularly concerned about avoiding uncertainty, collectivism oriented, and provides its female citizens opportunities to participate in societal activities³⁵ (Hofstaede 1980 in Lustig 1988). These cultural values derive from undifferentiated societal experiences, common history and a high level of formal education³⁶. Consequently, the potential for different interest groups to understand each other in Finland might be fairly high, and thus it might be argued that in Finland there might be good prospects for institutionalizing public participation as a successful decision making mechanism (for negotiating social order).

Legal Premises

Finnish laws do not mandate public participation. Although the stipulations concerning advisory committees in the National Forest Management Act and Statute will guarantee that the local organized interests will be heard before final decisions are made, in practice, people (i.e., users) have little direct control over decisions, since (1) the advisory committees have no real decision making authority beyond making initiatives and commenting on proposed actions, and (2) only formal interest groups can participate.

When it comes to procedural justice, the Finnish agencies-- including the Finnish Forest and Park Service
--have not been legally obliged to incorporate public participation procedures in their decision making

³⁵ Finland was the first European country to grant women the right to vote; this occurred in 1906.

³⁶ In Finland, there are 20 universities and colleges, and approximately 50 percent of youths continue their studies after making their way through high school.

processes. This reflects the strong elite power structure which still is part of the country's historic³⁷ ruling tradition. This representative tradition, where authorities have played a central role, is changing, toward a more diversified direction. The proposal for an environmental impact assessment law (discussed earlier) and the fact that all Finnish forestry laws are currently under Parliamentary review serves as strong evidence for such societal change.

Furthermore, in Finland one must be a land owner to make appeals in land management issues regarding that land base. Accordingly, the fear of litigation, in terms of costs, does not play an important role for the Finnish Forest and Park Service in accommodating publics' interests in decision processes. In other words, because Finnish parties cannot simply walk out of the process and appeal the decision, an incentive exists for them to participate. The lack of fear for litigation provides more potential for successful consensus decision building, since not all parties need participate or agree with the generally accepted (consensus) decision.

³⁷ Finland as Grand Dutchy of Russian Empire 1809-1917

Public Participation in Natural Resource Decision Making in the US and Canada

This chapter reviews the role of public participation in natural resource decision making in the US and Canada since public participation has a longer history in these countries than in other places. First, alternative public participation definitions are explored. Next the discussion focuses on the reasons for applying public participation in the management of natural resources. More specifically, factors and elements are described that might affect the potential of public participation as a successful natural resource decision making tool. Finally, the barriers related to traditional public participation methods for effectively dealing with the publics are discussed and recommendations are made to overcome them.

Defining Public Participation

Broadly speaking, public participation can be viewed as the participation of any person in purposeful activity directed at a governmental decision maker with the intent of influencing his/her decision or action (Potter and Norville 1983) "A public consultation program is a mechanism that allows all parties to ensure that their views are heard. It also permits decision makers to feel more secure in the understanding of key issues before reaching a decision" (Priscoli, J. and Homenuck, P. 1990).

More specifically, "Public participation [or involvement³⁸] is the process by which public concerns, needs, and values are incorporated into governmental decision making. Public participation is two-way communication, with the overall goal of better decisions, supported by the public" (Creighton, J. 1993).

And further, "Public participation is a mechanism by which the public is not only heard before the decision, but also by which it has has an opportunity to influence the decision from the beginning to the

³⁸ Public participation, public involvement, public decision making and citizen involvement are used interchangeably in the literature. No clear distinctions are drawn between them. Thus, public paricipation is used to refer to all of these concepts.

end of the decision making process. "What gives legitimacy to a decision made using public participation is the fact that the public is able to influence the entire process" (Creighton, J. 1993).

Public participation may be understood as a strategy by which the have-nots can take part in determining how information is shared, setting goals and policies, allocating resources, implementing programs distrubuting benefits (Arnstein 1969). Thus, it is a mechanism for social control. It also can be seen as a evolutionary process of social change in the form of community participatory design, "where citizens, resource professionals and politicians work together to resolve legitimate disagreements and fairly allocate environmental resources" (Sewell and O'Riordan 1976).

For Arnstein (1969), public participation means power sharing. She proposes the classical eight step "Ladder of Citizen Participation". The lowest step of the ladder is "manipulation" followed by "therapy". They both are essentially nonparticipatory, and involve ways to educate and civilize the public. Steps 3, 4 and 5 are "informing", "consulting" and "placation", which constitute "degrees of tokenism" whereby publics are listened to, but not granted real decision making authority. In the latter steps power is delegated to citizen groups in one form or another. For example, step 6 is "partnership", step 7 is "delegated power" and finally step 8 is "citizen control (Arnstein 1969).

Knopp and Caldbeck (1990) argue that public participation lies on a continuum with public unidimensional input at one end and participatory democracy at the other. They propose that "Participatory democracy exists, when individuals have a known and quantifiable effect (more than zero) on the [resource allocation] decision"; further they suggest the following four guidelines help in the quest: (1) there should be little room for variation in meaning and manipulation; (2) tradeoff decisions among the perceived benefits of the various alternatives are made by the individuals; (3) in order to arrive at a collective decision, individual preferences should be combined in a clear, easily understood manner, so that citizens know how they have affected the outcome; and (4) finally, the results must be utilized holistically. They especially recommend using a participatory democracy approach in conjugation with forestry planning that affects recreational opportunities.

Participation also is a strategic tool used by the initiator to create images and enhance public acceptance of outcomes. For the publics, participation constitutes a commitment to and an act of personal and community development. (Parenteau 1988). Finally, Burch (1976, p. 42) argues from a Marxist perspective that public participation "may be seen as a part of a extinction frenzy or as a social mechanism for maintaining survival stability... [its] primary function is to maintain confidence in the existing social order".

Why Public Participation Is Necessary in Natural Resource Decision Making

Public participation in the US is mandated by law

Public participation in forest planning is guided by several laws among which are the following: the Federal Advisory Committee Act of 1972 (FACA), the National Forest Management Act of 1976, the National Environmental Policy Act of 1970 and 1992 (NEPA), and the Federal Land Policy and Management Act of 1976.

Public participation is an important tool in managing conflict

"Public participation should be seen as the means to gain better accountability from our social institutions and a way in which new adversaries may gain standing. In most cases, our interest is in having decisions which both maintain the resource and efficiently serve the people" (Burch, W., 1976). Perhaps its most important contribution is the potential to keep conflicts from escalating, and promises for resolving specific disputes³⁹.

Rational decision making implies values

Rational decision making implies that 1) the problem is identified, 2) goals and priorities are specified, 3) alternative means are evaluated, 4) decision criteria are adopted, and finally 5) the decision is made

³⁹ with best alternative negotiated agreements (BATNA) for the affected publics

which maximizes the attainment of the goals (Kweit & Kweit, 1987). All of these decision making stages, except the latter one, include value decisions, which are inherently political in nature. They determine the outcomes of natural resource⁴⁰ allocations in terms of who gains and who loses.

Most natural resource decisions made by public agencies are inherently political. "A decision is political by its nature if it distributes benefits and costs to different segments of the public - regardless of whether or not it is made through a political process" (Creighton, 1985). Benefits and costs within a natural resource context refer not only to the economic standards of measurement and monetary equivalents, but also the conflicting uses and values related to them, i.e. the normative standards by which we judge how things ought to be (Brown, 1984).

Problem definition is an integral part of the decision making process. In decision making, it is crucial how we define the problem because definition limits the feasibility of viable, alternative solutions (Kweit and Kweit, 1987). In addition, a definition of a problem is based on our cognition, activated schemata and prevailing paradigms (Kuhn, 1970). Obviously, the different publics, both internal and external., perceive issues and conflicts very differently.

Furthermore, Ozawa (1993) suggests that natural resource problems within the current multiple use forestry context are often wicked by nature, i.e. there is no single correct formulation, no standards of objectivity to measure goal achievement against, and no evidence for indicating when all viable solutions have been found. Consequently, it can be logically argued, that the real (value-based) decisions have been made when the problem has been articulated. If publics are excluded from this phase of the process, it is possible that some specific interest group will not accept the final decision - no matter how rigorously their cooperation sought for later.

Developing our capacity to frame problems as messes⁴¹, learning how to manage through complexity and uncertainty, constitutes a major challenge in our turbulent times. In turn, developing our capacity to frame problems as wicked problems - learning how to deal with those

⁴⁰ What is a the link between value and resource? "The human interest, making something a [natural] resource, lights up the value" (Rolston 1988).

⁴¹ "Problems which cannot be solved in relative isolation from one another form messes (King, J. 1993).

sorts of problems for which there are no "solutions" - constitutes an even greater challenge in our increasingly pluralistic times (King, J. 1993).

The value dimension is often not explicitly defined when benefits and costs are evaluated, and yet it is primarily this dimension which forms the essence of many environmental conflicts (Creighton, 1985).

One could argue that value free social entities are non-existent; this applies as well to public agencies and their policies. Because the goals of natural resource managers are generally commodity-oriented (i.e. utilitarian biased) and do not reflect current public opinion, management plans need to be revised in order for them to be rational (Tanz and Howard 1991, Kweit and Kweit 1987, Brunson 1992).

Our point is that diverse values are held by different interest groups of individuals - what satisfies one may be abhorrent to another, so that what comprises problem-solution for one is problem generation for another. Under such circumstances, and in the absence of an overriding social ethic, there is no determining which group is right and which should have its ends served. (Rittel and Webber 1973 in King, J. 1993)

Through a public consultation program, attitudes and values held by the affected publics toward the management of natural resources can be identified and addressed. "Developing alternatives based on all major value positions held by the public[s] ensures that the planner is not an advocate for some groups, and an adversary to others. It is also a clear communication to the public that the agency is responsive and accountable to all the publics." (Creighton, 1985)

Moreover,

"...science is most effective in achieving objectives, not defining them. Given the initial realities of social problems, the deficiencies of technocratic applications are obvious. Expert social analysis places a great deal of faith in the "logic of choice drawn from economics, statistical decision theory, and operations research to aid in decision making in a way regarded as ethically neutral. But the logic of choice depends on prior specification of objectives, or agreement about the nature of relevant benefits and costs. Only after these objectives are agreed upon is it possible to pose the problems of choice in a technical and neutral way" (Kweit & Kweit, 1987).

Wondolleck concludes that

"...because of the wide range of different values involved in national forest management, the Forest Service is unable to objectively [or even intersubjectively] to represent each one in decision making. [And] there often is no agreement on what the boundaries of analysis should be at the outset nor on what the conclusions of this analysis indicate should be decided. [Furthermore,] [n]ot do only the experts disagree about the appropriate conclusions to draw from environmental analyses and hence what decisions should be reached, they additionally disagree about how much and what type of information is needed before a wise decision can be made."

Natural resource decisions consist both of technical and value components

Most natural resource decisions are mixed decisions composed of both technical and value-laden dimensions. Value decisions are those that are concerned solely with the resolution of important normative or societal issues. Generally they involve issues of social behavior and do not require a commitment of social expenditures or resources. The technical decisions are those that are solely based on the application and extrapolation of scientific issues. Furthermore, mixed decisions represent issues which have both technical and value components. With mixed decisions, the best solution is to use a mixture of experts and representative publics in the decision making process since scientific methods cannot be used to answer the value based questions which ultimately are subjective in nature (Desario and Langton, 1987).

Owners of resources should have a say in how they are managed

According to Wondolleck (1988) publics have received considerably more power over natural resource decision making since several recent developments in law have legitimized many uses and, thereby, the claims of their advocates. Moreover, she argues that "[t]he land management paradigm, premised on rational, scientifically based resource conservation and use, is not equally able to accommodate the more recent and highly judgmental preservation and noncommercial objectives" (Wondolleck 1988).

Considering that natural resources are not "owned" in the same sense as private property, the different values that people ascribe to such resources should be identified and debated before decisions are taken (Priscoli and Homenuck, 1990). "In the case of publicly owned forests, the public must be involved in determining what resources are to be valued, and what relative weights to attribute to each resource so valued" (Tanz and Howard, 1991). Moreover, Brown (1984) concludes that all allocation decisions concerning publicly owned resources should be determined in a context that is mindful of the real ownership of the resources. Furthermore, Burch (1976) argues that public participation should be seen as a means for gaining better accountability from our social institutions (i.e. public agencies) and a route for redistributing power - handing out standing for adversaries. Often it is in our interests to maintain the resource base and to serve the people simultaneously. Usually these approaches are at opposite ends, and

constant tinkering is required to ensure that the best allocation choices are made. The more complex the society, the more energy and time is required simply for maintaining the assignment of right allocation mechanisms to appropriate resources. Of course, there are always such resource decisions where it simply is enough to know that things work (Burch 1976). Unfortunately, natural resource issues very rarely fall under this category.

In a very real sense, it is a question of how democratic we consider our society. "In a democracy, it is the public that determines where it wants to go, and the role of representatives and bureaucratic staff is to get them there. In other words, ends should be chosen democratically even though means are chosen technocratically" (Kweit & Kweit, 1987).

It also is a question between representative and participatory democracy. One can argue that much of the adversary conflict, discontent and suspicion toward our public agencies results from too much emphasis on representative (i.e. authoritarian) means of imposing decisions in the name of public good. "As stewards of publicly owned resources, resource managers have no more right to make these value-based decisions than any other member of the public" (McMullin and Nielsen, 1991).

As opposed to bureaucratic decision making, democratic decision making is based on the assumption that all who are affected by a given decision have the right to participate in the making of that decision.... The criteria for evaluating policy in a democratic process are the accessibility of the process and/or the responsiveness of the policy to those who are affected by it, rather than efficiency or rationality of the decision. (Kweit and Kweit 1987). (underlining added).

Complexity of Natural Resource Conflicts

Natural resource decisions are complex in fundamental, interdependent, and dynamic ways. This multidimensional character can promote impasse and negative escalation, often decreasing the quality of resource management and leaving affected or interested citizens dissatisfied.

Daniels et al. (1993) suggests seven sources of complexity which demand adoption of more rigorous and active public participation programs in natural resource decision making than currently is the case. The sources of complexity, discussed earlier, are: (1) values or deeply held beliefs; (2) multiple parties, where groups or representatives may change over time; (3) multiple venues; (4) cultural differences; (5)

scientific uncertainty or the assertion that "there is no objectivity - there is only multiple subjectivity";

(6) legal constraints; and (7) the entrenched conflict industry⁴².

The existence of natural resource decision making complexities point to the necessity of utilizing all relevant knowledge and available support from stakeholders. On the other hand, the mere exposure to and growing awareness of complexities in a situation or issue can serve an important function in making difficult political decisions more acceptable (Grima, 1985).

Barriers for Effective Public Participation

Barriers to effective public participation ca be classified as personal, political and structural. The personal and political factors will be discussed together, since they comprise the backdrop for applying participatory decision methods. Structural barriers, on the other hand, are more process oriented, and may be more easily overcome as suggested by the guidelines in the next chapter.

Personal, Political and Scientific Barriers

The natural resource agencies' traditional values and attitudes form effective barriers to meaningfully incorporating public interests into decision making processes. This is partially due to managers' commodity orientation and partially due to their general lack of communication skills.

Professionalism tends to discredit publics as unknowledgeable and regard them as an emotional or ineffective information source that requires education. This attitude stems from both conformist training and authoritarian organizational cultures. The technical jargon used by resource managers tends to discourage the publics' expression of emotional values. Hall (1981), defines technical communication or jargon as "high context", where the words carry much more implied information than explicitly expressed information. In addition, natural resource managers are reluctant to deal with politics, which essentially is the allocation of benefits and costs. These attributes, combined with a lack of training in dealing with value-laden questions and unreceptiveness to alternative opinions or solutions, creates discrepancies among the communication styles of professionals and publics (Magill, A. 1991).

⁴² In Finland, entrenched conflict industry is not a relevant factor contributing to natural resource conflicts.

A more subtle but fundamental result of technical training is its effect on how questions are framed and what solutions are considered. Technical orientation frames can evade a bias. Experts tend to see technical solutions to a problem where a politician may see only political solutions. Technical thinking also may ignore many of the more integrative approaches to solving a problem (Miller 1985). Advocacy and political preferences may be masked by scientific rationality, resulting in policy-makers granting more weight than intended to scientists opinions (Nelkin 1979). This may not be a conscious decision by the scientist, but more a reflection of the professional norms that value rational expression but not emotion or opinion.

Professional norms such as rationality and objectivity can be a significant and intransigent barrier to communication and subsequent public participation management.. Some professionals think that "we know best, so we should decide", an attitude that works to exclude the less well-informed people [i.e. external publics] from the decision making process. This attitude generates antagonism in the public (Brunson 1993, Magill 1991). The objectivity valued as a professional norm can be perceived as aloofness, prompting a more adversarial position by new user groups (Fortmann 1990).

Resource managers and landowners as well as different publics can relate to the land in fundamentally different ways, generating unseen friction over the validity of perceptions and suitability of outcomes. This can be attributed to the disparate mental frames (i.e. perspectives) applied by different parties. Framing is not only the key in examining such constructs as preferences and orientations, it is also the lens for deciphering how past experiences, social context, and message reflexivity (i.e. exchange) influence social interaction (Putnam and Holmer 1992).

Resource managers who endeavor to practice objective management typically focus on balancing costs and benefits of various options over the entire landscape. Even in such situations where the overall goal is to accommodate all interests in order to maximize the common good, geographically specific, attachment-oriented user concerns are often discredited (Mitchell et. al. 1993). Besides ignoring a rich, though unorganized source of information, the manager does not factor in the role of clients.

Walker and Daniels (1993) encapsulate the above managerial barriers into three major categories, namely, aptitude and motivation (referred to above), and structure (discussed below).

Procedural and structural barriers

Traditionally, public participation has been defined as sharing information about a decision already made (i.e. informing), or at best, promoting decisions. The latter provides a few opportunities for cosmetic modifications to be made through the process via ad hoc committees, comments or public hearings.

Natural resource agencies generally have not been willing to share their decision making power more than mandated by law. This has resulted in rigid, universal formats disregarding situational constraints and opportunities. Accordingly, the processes have been largely ineffective and unsuccessful when measured against their ability to reduce appeals and litigation (Daniels, S., 1992, Wondolleck, J., 1988).

According to Walker and Daniels (1993), traditional public participation is structured according to an internal/external, or us versus them context which fosters competition rather than collaboration. This results in adversarial relations with agencies working as independent entities. It prohibits the use of more creative problem solving approaches. Motivation to collaborate is reduced if a leader retains the role of sole decision maker, the "formal authority" (Folger and Poole 1984). Collaboration is also impeded because not all players are treated equally and group decisions may be overridden (Walker and Daniels 1993).

The US Forest Service (USFS) decision making process is based on a specific land management paradigm and the traditional public participation approach has done little to overcome barriers of distrust. It provides no mechanisms for assuring the validity of different interest group claims, nor is binding agreement potentially reached. As a result, any effort to collaborate does not succeed. Instead, all incentives promote continued fighting and the use of alternative venues (Wondolleck, 1988).

Public participation that takes place in a hearing format is often reactive, because fundamental decisions have already been made and only marginal changes in policy are likely (Krimsky, 1984). Other forms of

public participation that are initiated, such as citizen advisory boards and study groups, are more interactive, but because of the necessity to limit the number of participants they are not always feasible (Petersen, 1984). Small group meetings allow greater interaction, but do not guarantee acceptance of policy outcomes. Gericke et al. (1992) found that Forest Service planning concentrated public participation efforts in small group meetings at every stage of the forest planning process, but this approach did not seem to deter appeals of the Final Plan.

According to the evaluation of Blahna and Yonts-Shephard (1989), the US Forest Service has not attained some of the public participation goals contained in The National Forest Management Act of 1976. The barriers to effective public participation were (1) the complexity of the planning process; (2) lack of agency guidance in conducting interactive public participation; (3) a desire to avoid conflict; and (4) internal power struggles. In summation, it can be inferred that traditional public participation is not sufficiently situation specific nor flexible enough to be responsive to public interests and demands. In response, new, more collaborative processes are advocated to better address the aforementioned deficiencies. Although there is very little research and experimentation done to ground these new theories in natural resource fields, the few studies that have been conducted show that public participation and collaboration are the only feasible ways out of the current litigious grid lock situation.

Wondolleck (1988) states that "It is the paradigm which needs adjustment; it is how these many conflicting values are considered that is critical to reform." Further on she concludes that" [experts] all are not able to represent the many interests at stake, no matter how systematic, how thorough or how objective [representative] they may try to be. These disputes must be resolved through direct involvement of affected interests." It is the process which counts, rather than the outcomes. In addition, emphasis must be placed on resource use, not simply on the resource base.

On the other hand, many well established theoretical constructs can be readily applied from such disciplines as sociology, social-psychology, anthropology, and communication-- particularly from conflict and negotiation literature. Blahna and Yonts-Shephard (1989) believe that comprehensive planning also requires a greater degree of integration between the public participation and social impact

assessment functions. Between public participation and social impact assessment processes there should exist a link that provides insights to create more efficient public participation programs.

Requirements for Effective Public Participation

Effective public participation programs should provide incentives for affected parties to collaborate rather than to compete. Wondolleck (1988) has devised five objectives which should be met in order to achieve this goal: (1) Build trust, (2) promote understanding, (3) incorporate value differences into the process, (4) provide opportunities for joint fact finding, and (5) provide incentives for cooperation and collaboration.

The following seven criteria for enhancing public participation programs are adopted from Blahna and Yonts-Shephard (1989): (1) public participation should be conducted early in the planning process, 2) public participation should occur throughout the planning process, 3) participation and input should be representative of all interested citizens, 4) participation processes need to be tailored for specific needs, 5) agencies must be able to demonstrate how the input affected the decisions made, 6) public participation programs need to be agency directed, and finally 7) interactive methods and two-way communication should be given more emphasis in the processes. In another words, "...if one understands public participation as a multi-party communication and decision-making task, then the tactics that contribute to success are common sensical" (Daniels 1992).

The publics will not cooperate to their maximum and will remain relatively skeptical towards the outcomes of the process, if any of the following three conditions prevail: 1) they do not know to what extent they can influence the final decision (i.e. unclear expectations exist related to decision making authority); 2) they do not have a clear picture of the process (i.e. they do not know the structure, timing, or life-span of the issue); and 3) there is ambiguity related to the openness of the process. The third condition involves whether or not information is shared equally, whether or not concerns or value-based interests are expressed candidly, or whether or not information is equally accessible (Ozawa, 1993).

Because of the complexity of natural resource issues, aggressive information and education components are necessary to ensure that the public understands the underlying constraints, dynamics and different trade-off possibilities warranted by the situation. Through public education process, professionals must clarify their own assumptions and explicitly communicate them to the publics. By the same token, jargon should be explained and technical definitions made understandable for all participants. When this is done in a interactive fashion, points of contention, leaps of abstraction and lags in knowledge will be detected and addressed. A sufficient base of shared meanings will be generated. Only when these requirements are carried out will there be potential for constructive conflict management within the public participation process.⁴³

According to Wondolleck (1988), agency officials should participate in the process to represent those voices that would not otherwise be heard, as well as provide the necessary information, expertise and administrative constraints. She argues that "[a] process focus immediately raises questions such as what information do we need, who should be involved, where can we get the information needed, and, what are the likely problems we will encounter and how might we overcome them? "Basically, these are all requirements of an effective negotiation process (Lewicki and Litterer 1986). "Because the outcome of a bargaining process usually represents a meeting of the minds, negotiation is more likely to produce results that accurately reflect the preferences of the parties"; and "[p]erhaps the strongest argument in favor of negotiation of environmental disputes, however, is that it makes it far more likely that substantive issues will be addressed" (Bacow, L. and Wheeler, M. 1984).

Ozawa (1993) asserts that effective two-way communication is accomplished by using the following transformative communication techniques: 1) equal access to information and encouragement of expertise use by disadvantaged / less informed parties; 2) facilitation of communication: translation of jargon into lay persons' language, monitoring language used, and backtranslation (i.e. rephrasing and rewording in order to clarify issues not understood); 3) encouragement of questioning across specialties

⁴³ Susskind and Cruikshank (1987) advocate a mediation process with a facilitator as a third party neutral to address these requirements.

and interest groups; 4) sequencing the discussion of technical information and analysis before decision alternatives are generated; 5) arranging for opportunities to form resource-sharing coalitions; and 6) distinguishing between brainstorming (creating) and committing (claiming) stages of the participation process.

Walker and Daniels (1993) recommend ... "correctly select[ing] those situations where collaboration is an appropriate strategy, and structur[ing] the process so that it is easier and more rewarding to cooperate than compete". This might be accomplished by applying Thomas's (1990) adaptation of Vroom and Yetton's decision making model. It appears to be a powerful tool in selecting the correct strategy for choosing the appropriate level of shared decision making authority between the agency and the publics.

The Vroom-Yetton theory (1973 in Thomas 1993) builds on the premise that the same amount of group involvement is unlikely to succeed in all circumstances. In general, when acceptability of the decision is important, the participation level will be higher, where as when the emphasis is on professional standards, less involvement may be appropriate. According to the model, all such cases⁴⁴ where (1) the publics' acceptance of the decision is a critical factor and (2) the exclusively managerial decision is rejected require either segmented public consultation, unitary public consultation, or public decision. They are all participatory levels that are more substantive than promoting the final product. (Thomas, 1993).

The modified Vroom-Yetton model takes the legal and political constraints of the decision making space into account. Thus, the zero option - "a program so rigidly constrained by law and so lacking in latitude for public influence that public involvement makes no sense" - is a feasible one on the continuum from "autonomous managerial" (i.e. no participation) to "public decision" (i.e. consensus decision) (Thomas 1990, Vroom and Jaego 1993).

⁴⁴ For example, in the case of recreation oriented, multiple purpose forests, and/or wilderness areas.

Criteria for Effective Public Participation for the Finnish Forest and Park Service

Much of the US and Canadian experience in public participation is relevant to the Finnish context because of cultural similarities. Therefore, most of the guidelines proposed for public agencies in literature concerning natural resource decision making is applicable also for the Finnish Forest and Park Service. Some of the most salient criteria to which the Finnish Forest and Park Service might adhere are reviewed below.

Conflicts Should Be Utilized

"If one accepts the premise that foresters manage resources to accommodate immediate and long-run social values, and that many forest social values conflict with one another, then foresters can be viewed as conflict managers. In what they do (and fail to do) foresters can usually intensify or dampen social conflict over forest values" (Kennedy 1985).

Conflicts are not inherently negative or positive; it is rather the manner in which they are managed which counts, although, traditionally, conflicts have been seen as something to be avoided, if that is not possible, or at least suppressed. This belief has led to self-fulfilling prophesies via reification and rigid behavioral patterns (Tjosvold, 1991).

Postponing or avoiding tactics need to be changed for the Finnish Forest and Park Service to actively engage in conflict, in order to minimize its negative and maximize its positive, outcomes. Accordingly, publics should be granted more decision making authority in the process than is generally recommended by the Environmental Guide or the proposed Environmental Impact Assessment Law. Means to accomplish this end should not be traditional public relations approaches. Instead, participatory decision making processes should be utilized to focus on interests underlying positions of various forest constituency groups.

Public Participation Programs Should Be Situation Specific

The Finnish Forest and Park Service should create public participation programs at local or district levels and tailor them according to area specific constraints and opportunities. The mere information sharing level (which essentially is one-way communication) appears to be an inadequate approach. Instead, more active participatory processes are called for to accomplish the objectives of the National Forest Management Act.

Public Expertise Should Be Utilized

Efficient management of national forests, the original or moral intent of the Finnish Forest and Service's privatization process, calls for creative and innovative problem solving which, in turn, builds on utilizing all available resources. Successful management requires contacting the publics early in and carrying their efforts through the entire decision making process. Ultimately, agency credibility will only be achieved through such public participation programs where the publics perceive that they have been treated fairly. Decision building (i.e. collaborative problem solving) diminishes frustration and taps the pool of expertise and knowledge held by the publics.

Communication Plays a Pivotal Role in the Process

In Finland, like elsewhere in western world, a fair amount of technical jargon and value-laden concepts are used within the profession of forestry. The effects of jargon combined with ambiguous, often debatable silvicultural prescriptions and/or practices applied in the field, contribute to misunderstandings and communication deficiencies between experts and citizens. For example, no common definition exists of what constitutes "old growth" nor what constitutes a "clear cutting". These sources of misunderstandings need to be excluded by translating forestry jargon into lay persons' language when dealing with the publics.

Publics Should Make the Real Value Decisions

The owners of the national forests, i.e., the Finnish citizens, should make the value based judgments associated with natural resource management issues. This should occur when there clearly exist

conflicting expectations or interests between various forest constituencies toward the wise use of a national forest.

Expectations And Roles Should Be Clarified

It is the publics' responsibility to determine how Finland's national forests should be managed, and what means are acceptable to accomplish these ends. The Finnish Forest and Park Service's duty is to scope whether a decision making situation warrants public participation and to what extent the decision making authority should be granted to the (external) publics. The evaluation should be based on well defined procedures and generally accepted decision rules concerning public participation.

In addition, the Finnish Forest and Park Service's task should include planning for and carrying out the public participation program in an organized and documented mode. This requires commitment, expertise, and good communication skills from forest managers. The FPS also needs to provide expertise for guiding the process, as well as the necessary resources, knowledge and information about the substantial and legal issues at stake for the key publics to effectively reach well informed and effective value decisions. Moreover, the publics must be guaranteed in advance how their opinions will affect the decisions to be made, and what their role will be in the overall process.

Criteria in a Nutshell

In conclusion the following are recommended for the Finnish Forest and Park Service: (1) The public participation goals should be stated explicitly to promote useful interaction among identifiable interest groups; (2) the FPS needs to formulate a strategy for incorporating these various interests into an overall plan by explicitly laying out the planning process and the objectives to be achieved; (3) publics' expectations, in terms of their decision making authority and roles in the planning process, need to be clarified; and (4) ground rules should be formulated and agreed upon to enhance the potential for constructive (joint) decision making in order to protect the planning process from destructive conflict escalation.

Consequently, the Finnish Forest and Park Service is encouraged to incorporate the following principles adapted from Daniels (1993)⁴⁵ into its overall management strategy.

- match the design of the public participation program with the situation
- view the planning process as continuous dialogue
- treat everyone's interests with sensitivity and respect
- provide leadership in terms of making bold proposals
- establish responsibility to guide the public participation process, which enables the publics to operate from the basis of informed judgment.

⁴⁵ established by Daniels (1993) for USFS

Public Participation Guidelines for the FPS

The guidelines presented are based on the current public participation and communication literature in the US and Canada, but as concluded earlier, they are assessed applicable for the Finnish Forest and Park Service to a great extent. Current knowledge will be applied to overcome the barriers and deficiencies related to the traditional public participation approach. These guidelines are based on the philosophy of participatory democracy which states that those individuals who perceive being affected by certain decisions should have an effect on the decisions concerning themselves (Parenteau 1988)⁴⁶.

A Model for Participatory Decision Making

A specific collaborative model to effectively plan and carry through public participation programs based on Gray (1991) will be proposed for the Finnish Forest and Park Service. The model consists of the following four major phases⁴⁷:

- 1. Problem Setting
- 2. Direction Setting
- 3. Implementation
- 4. Evaluation

The programs created for case specific forest planning situations—by following the proposed guidelines—will be tailored to address the requirements and opportunities identified in the analysis of Finland's cultural and legal system as well as the laws and guidelines constraining the Finnish Forest and Park Service's decision making space. More specifically, the criteria for effective public participation stated in the previous chapter will be addressed. When following the proposed guidelines, the needs, goals, and objectives of the Finnish Forest and Park Service will also be effectively addressed.

These guidelines could be integrated as a part of all forest decision making for the Finnish Forest and Park Service (see Figure 1,below).

⁴⁶ This is one of the basic principles of the Finnish Environmental Impact Assessment Act (described in Chapter One).

⁴⁷ Gray's (1991) proposed collaborative process consists of the three first phases; evaluation is part of the implementation.

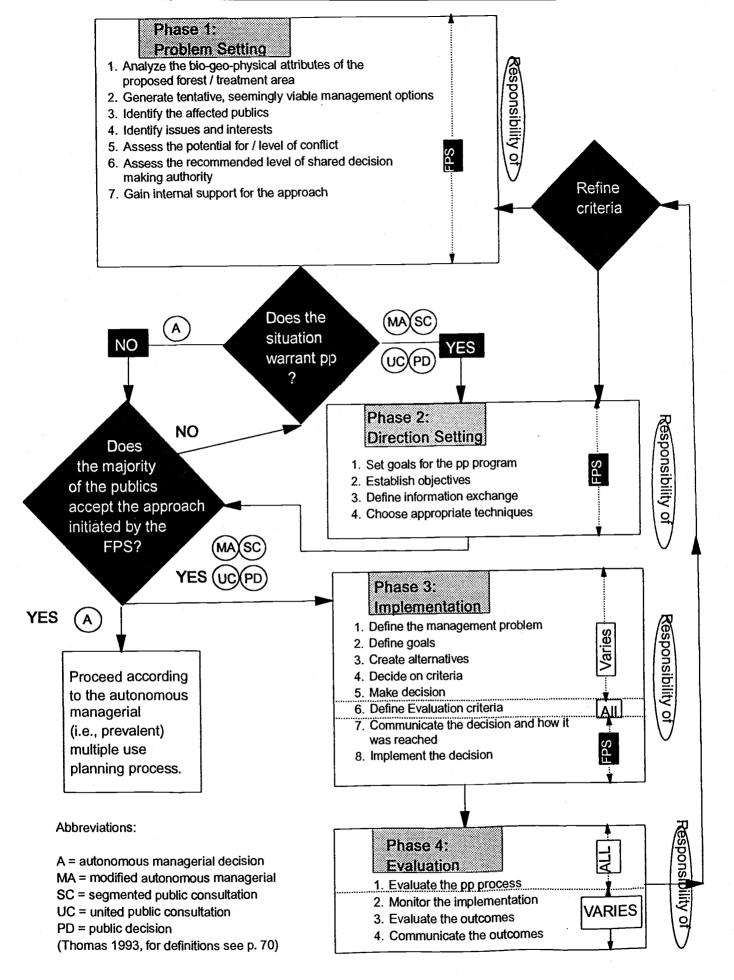


Figure 1. Proposed model for multiple use forest decision making in the Finnish Forest and Park Service.

Phase I - Problem Setting

This phase identifies (6) whether the publics should be incorporated in a specific forest decision making process, and if so, how much decision making authority needs to be granted to them. In addition, the questions: (3) who should participate, (4) what are the management concerns (i.e., issues and interests), (5) what is the conflict situation, and (7) whether the agency staff involved supports the strategy proposed, will be elaborated upon. All this will be assessed after the responsible managers have (1) defined the planning situation and (2) generated tentative, seemingly viable management options based on the agency's multiple-use philosophy.

1. Analyze the Technical Planning Situation

The technical, bio-physical forest planning inventory database will be updated after each forest management operation undertaken, as explained in the current multiple use forest planning guidelines (see FPS multiple use forestry planning process, p. 18). When the time for revising and or generating new forest plans arrives, baseline information for the proposed planning situation need to be compiled, processed and subsequently synthesized.

2. Generate Tentative Management Options

The information will be used in generating tentative management options based on the Finnish Forest and Park Service's mission, prevailing management guidelines and the responsible managers experience on user preferences. The knowledge from this initial planning stage will be used as a basis of assessing the potential for public participation.

3. Identify the Publics

Deciding who should participate in the decision making process should be based on careful analysis of the situation at hand (Tanz and Howard, 1991). It is important to emphasize that participation is based on perceived benefit or threat (Creighton, 1993). Thus, strictly physical or geographically defined target audiences are not sufficient bases for determining the actual interest of the publics. "The idea of community expands our definitions of the affected public and of participation. Rather than a discrete number of organized interest groups, we see a loose, fluid structure of social actors involved in and

affected by forest planning decisions" (Shannon, 1990). Moreover, "identification of interests should reach organized interest groups and beyond to find people affected who do not have an organized voice" (Fraser, nd).

"Another factor to consider in the choice of a vehicle for participation is whether the impacts of a policy are differential (substantially affect some distinct population or community more than others) or uniform...To insure an element of justice and secure public confidence in decisions, safeguards must be built into the process to avoid a partnership of elites. Divergent groups in the community should be effectively represented, especially those who would bear disproportionately more risk.... Representation in decision making should be skewed in favor of those who must bear the greater risks." (Krimsky, 1984).

Three implications stem from this "weighted input principle": First, affected parties need to be identified; second, the access of decision process for this subpopulation must be determined; and third, the suitable means of public participation to enable efficient interest advocacy need to be matched (Krimsky 1984).

One should focus on the following attributes when defining the publics:

publics

- groups having strong economic interest in the outcome of the decision
- groups currently using the area or services
- groups been most affected by proposed management decisions
- other highly motivated groups or citizens
- other government agencies

issues (ranking high on social dimensions)

- protecting cultural traditions
- providing equal access to services or use
- protecting biological diversity
- ensuring social equity
- conservation preservation issues (strongly held values)
- managing highly visible and scenic landscapes
- managing popular recreation areas
- managing forests adjacent to inhabited areas (especially urban centers)
- managing forests adjacent to national parks and other conservation areas
- managing forests with a strong multiple use history (zoned either in time or space)
- preserving and or managing old growth forests

A list of public contacts (i.e. a list of key representatives for each interest group) should be developed through a comprehensive analysis of the social environment. As one proceeds to identify relevant publics they can be used to further identify affected parties.

Blahna and Yonts-Shephard (1989) recommend being specific when categorizing the different publics, as well as, being aware of the representation problematics. In other words, it is necessary to understand the gaps in the representativeness of the input. It is easily biased towards consumptive and local use (Mitchell et. al 1993). Moreover, it is the mangers' responsibility to represent the views and interests of those physically underrepresented in the planning process.

It should also be remembered that there is no such thing as the general public. As a result, there is no single public participation process which fits all situations. Rather, the public participation program needs to be tailored to the publics of the specific planning situation at hand (Tanz and Howard 1989). Another thing to keep in mind, is that publics are constantly evolving, with different interest groups / people getting involved at different stages of the process. The same holds true for the intensity of the actual participation.

Generally speaking, public participation will increase as the decision making process progresses. A significant problem related to this, is that newcomers without knowledge, in terms of past public participation achievements, will question them and their underlying assumptions. As a result, it is imperative to keep accurate and up-to-date documentation (Creighton 1993). When planning for participation situations, it is necessary to reserve adequate resources for the purpose and take imposed restrictions into account (Landre and Knuth 1993). In addition, Landre and Knuth (1993) recommend stating the limits of the public participation process explicitly, while keeping the process open.

"Public participation programs need to balance early involvement for those people who have a continuing interest in a problem with opportunities for the involvement of a broader public at those points where their participation will be most effective" (Creighton 1993). "Balance, of course, is in the eye of the beholder (Frazer). Furthermore, because only a limited segment of the public will actively participate

in the process, they should be kept informed about the public participation process development and be encouraged to participate. Different avenues - both formal and informal - are needed to accomplish this goal (Landre and Knuth 1993).

4. Identify Issues and Interests

A crucial step for agencies is to clearly identify the value choices inherent in administrative decisions, even if decisions were nominally based on technical information (Yates, 1981). For accomplishing this task the following is recommended: (1) Relate issues to the interest groups - different interest groups could be met separately on an informal basis; (2) probe for interests, priorities and tradeoff possibilities; (3) build good working relationships on the prenegotiation phase (Fisher and Ury, 1991, Lewicki and Litterer, 1985); and (4) establish credibility for agency personnel and the decision making process. (Susskind and Cruikshank 1987, Fisher and Davis 1987). The latter (4) can be achieved through contacting local leaders prior to the decision making process (Landre and Knuth 1993).

Thomas (1993) recommends that it is advisable for managers to (1) anticipate and initiate issues rather than being passive; (2) seize the initiative for structuring, but not manipulating the nature of the issues, in terms amenable to solutions; (3) make all quality requirements explicit at the out set for all arising issues - what ever the source; and (4) only attempt public participation if (a) the public holds all necessary information, and/or (b) public acceptance is necessary for the implementation and acceptance is unlikely without participation.

5. Assess the Potential for Conflict

In a potentially contentious case, it is advisable to start by making a comprehensive inventory of the salient physical, biological, economical and social attributes of the situation. If warranted by the preliminary findings, a conflict assessment should be carried out. The framework developed by Daniels, et al. (1993) might be applied to give a clearer understanding of the origins, nature, dynamics, and possibilities for conflict resolution. The framework comprises of a set of questions for systematically assessing conflict situations.

The Finnish Forest and Park Service should utilize the services of private consultation companies with expertise in environmental and social impact assessment procedures when (1) the issues are highly controversial by nature and there is great potential for conflict, (2) parties are already in strong conflict or (3) when stakes are high. What is critical is that the third party be accepted by all parties and perceived as impartial.

It can be concluded that it is necessary to inquire deeper than whether or not a particular action will be acceptable to the public; the attitudes held by different interest groups also need to be identified.

(Creighton, Chalmers and Branch, 1983).

6. Assess the Level of Shared Decision Making Authority

In order to choose the applicable level of shared decision making authority with the publics, Thomas' (1990) version of Vroom and Yetton's contingency theory for organizational decision making to the public domain might be applied. This approach is based on a sequenced inquiry about how strong would the publics (1) commitment and (2) perceived level of acceptability be for a quality decision to be made and successfully implemented. To ensure that sufficient background knowledge for applying the Vroom-Yetton model is available at this stage, it is recommended that the inventory / scoping phase in assessing the potential for conflict be adjusted according these informational needs (see Defining the Situation, above).

To determine the respective levels of acceptability and "quality", and to subsequently choose the appropriate recommended level of shared decision making authority, a manager needs to determine answers to the following seven questions adapted by Thomas (1993) from the Vroom-Yetton model (1973)⁴⁸:

What are the quality requirements that must be incorporated in any situation? These
requirements include professional standards, cost constraints, and any legislatively
mandated standards. The problems that confront public managers invariably involve 1 or

⁴⁸ The Vroom-Yetton (1973) model was originally geared toward organizational decision making.

more of these requirements. There must be defined constraints at the outset if they are to be represented in the eventual solution.⁴⁹

- Does the manager have sufficient information to make a high-quality decision? Managers
 may lack either technical information or information about client (i.e. public) preferences.
- 3. Is the problem structured in such a fashion that alternative solutions can not be defined? Some problems come as predefined choices rather than being open-ended (e.g., Should a facility be built here?; instead of: where should a facility be built).
- 4. Is public acceptance of the decision critical to effective implementation? For public managers, "effective implementation" means both successful physical implementation, the concern of Vroom and Yetton (1973), and implementation achieved without public outcry.
- If public acceptance is necessary, is that acceptance reasonably certain if the manager decides all? Involvement can be an unnecessary complication if acceptance is already assured.
- 6. Does the relevant public share the agency goals for solving the problem? Agreement on goals gives the manager more reason to share decision-making authority.
- 7. Is the preferred solution likely to result in conflict within the public sector? Conflict within the public may suggest a higher level of public involvement in order to shift the focus from the agency to the publics.

By following the Effective Decision Model flowchart the correct level for public participation (1-5) should be chosen (see figure 2, below).

⁴⁹ Vroom and Yetton recommended asking if quality requirements exist. The question is modified here based on the finding in initial test that all decisions facing public managers a public paricipation appear to bring quality requirements (Thomas 1990, 1993)

- 1. What are the quality requirements?
- 2. Does the manager have sufficient information to make a high quality decision?
- 3. Is the problem structured such that alternative solutions are not available for redefinition?
- 4. Is public acceptance of the decision critical to effective implementation?
- 5. If public acceptance is necessary, is it reasonably certain if the manager decides alone?
- 6. Does the relevant public share the agency goals to be obtained in solving the problem?
- 7. Is conflict likely within the relevant public on the preferred solution?

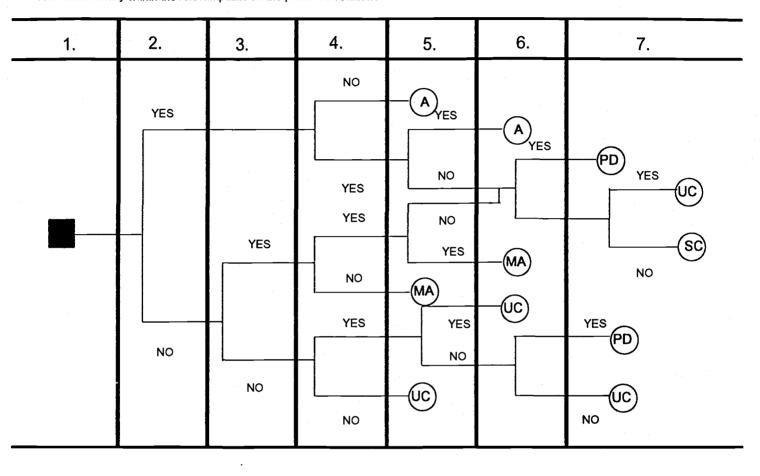


Figure 2. Effective Decision Model (Thomas 1993).

The shared decision making levels in the flow chart refer to⁵⁰:

- 1. **A**: An autonomous managerial decision (A1): The manager solves the problem or makes the decision without public involvement.
- 2. MA: A Modified Autonomous decision (A11): The manager seeks information from segments of the public, but decides in a manner that may or may not reflect group influence.
- 3. SC: A Segmented Public Consultation (C1): The manager shares the problem separately with selected members of the public, getting ideas and suggestions, then makes a decision that reflects group influence.
- 4. UC: A Unitary Public Consultation (C11): The manager shares the problem with the publics as a single assembled group, getting ideas and suggestions, then makes a decision that reflects group influence².
- 5. **PD**: A Public Decision (G11): The manager shares the problem with the assembled public, and together, the manager and the public attempt to reach agreement on a solution. (Thomas 1993)

These five degrees of shared decision making authority between the agency and the publics capture the principal degrees of public involvement. They can further be easily translated to a broader set of specific public participation mechanisms (see table 1: "A Matrix Guide to Public Involvement" in Thomas 1993). This approach is taken when categorizing some of the participatory techniques applicable to the Finnish context (see tables 1a and 1b on pp. 80 and 81).

7. Gain Internal Support for the Approach

Before starting the actual planning process it is wise to assess how the different internal publics⁵¹ within the FPS will evaluate public participation and relate it to the planning situation. Internal power struggles must be addressed and resolved, and agency personnel must be unanimously behind the strategic approach taken. They must either approve these guidelines or define some other way to deal with the situation. This may involve, for example, conventional forest planning methods in conjugation with a media campaign. Only when this is accomplished should external publics be invited to participate in decision making. The key point is that internal consensus must be gained before progressing further.

⁵⁰ The abbreviations in brackets are used as such by Thomas (1993) and Vroom and Yetton (1973).

² Involving "the public as a single assembled group" does not mean literal involvement of the entire public. The phrase means that the entire public has the o public participation ortunity to participate.

⁵¹ These internal publics consist of the foresters responsible for the planning process as well as higher level officials and other personnel which will become in contact with the potential participation process at some point.

A worthwhile goal would be to integrate these guidelines with the FPS's current multiple use planning system. This would require modifying and fine tuning the guidelines based on first hand experience.

Ultimately the guidelines will be internalized by the forest managers and subsequently institutionalized as a routine day-to-day practice. Eventually, the internal screening phase should become unnecessary.

Phase II: Direction Setting

All rational actions are based on careful planning and this is the case with preparing public participation programs. At this stage it is recommended that the responsible program manager plan through the decision making process, i.e., predict what needs to be accomplished and when, and how to integrate public participation activities.

After deciding on the general approach to apply public participation in the decision making process, and after deciding the appropriate level of shared decision making authority and identifying the affected publics, the goals⁵² for the specific public participation process need to be defined. Then, based on the goals identified, a general design for the public participation program can be created.

1. Set Goals

As a general rule, public participation should broaden the perceived options, not narrow them. This means that applying public participation only for making minor adjustments to management plans will create only distrust, bad faith and public controversy towards the Finnish Forest and Park Service. This holds true especially when there clearly exists social demand for more fundamental changes (Krimsky, 1984).

2. Establish Objectives

Establishing public participation objectives means that it is necessary to define what needs to be accomplished with the publics at each stage in the process in order to attain the goals already defined.

These goals might include the following: Build support for implementation; increase awareness; define resource use goals in keeping with public sentiment; foster positive relationships between community [or activity based user] groups and the agency (Landre and Knuth 1993).

Objectives related to the rational decision making stages, might include: (1.1) Obtain a thorough understanding how different interest groups view the management situation; (1.2) Identify the level of public interest toward the forest area; (2.1) Formulate an extensive list of possible management alternatives; (3.1) Develop a well informed understanding of the impacts of these management alternatives on various forest uses as perceived by the different interest groups; (3.2) Assess the relative merit assigned to management alternatives by various interest groups, and (4.1) Determine the most acceptable management alternative (Creighton, 1993).

The Finnish Forest and Park Service should use public participation early in the decision making process so that publics can help identify questions or concerns when they can be meaningfully addressed (Krimsky, 1984). The citizens involved should be able to make a real difference on both the process and its outcome (i.e. the plan). Essentially this means ensuring the publics easy access beginning at the problem identification stage. If the FPS excludes publics from this (initial) decision making stage, where the questions (to be answered later) are set, then when disagreement arises, it may be difficult for the decision making body (i.e., the agency and the participating public) to return its examination more fundamentally on the issue. (Krimsky 1984, Landre and Knuth 1993, Potapchuk, 1991).

3. Define the Information Exchange

"The exchange of information in negotiation is also at the heart of the concession-making process. Through the information presented by each side, a "common definition" of the situation emerges". (Lewicki and Litterer, 1986).

The public must receive (1) adequate information in advance of the planning situation, (2) the procedures to be applied, and (3) the role they are expected to play. It is also important to generate clear expectations with regard to (4) the decision process, (5) the degree of shared decision making authority, and (6) how and to what degree the participation will affect the final outcomes. (Parenteau, 1988, Knopp and Caldbeck, 1990, Landre and Knuth, 1993). A failure to define expectations or to meet them can severely

jeopardize the success of a participation program, and further, cause distrust between the agency and its clients (Potapchuk, 1991).

In order for the Finnish Forest and Park Service to accomplish the public participation objectives (discussed above), certain information is needed from the publics. It is also necessary to provide sufficient information to the publics to permit them to participate. The term "information exchange" will be applied. Moreover, it might be necessary for the FPS to provide a 'scientific liaison advisor' to translate the technical jargon used in the planning process into lay-persons' language. "The goal is to demystify scientific arguments, while at the same time raising the technical competence of the nonscientist" (Krimsky, 1984).

At this information exchange stage we are focusing on what should be accomplished. According to Creighton (1993) information exchange must be associated with each public participation objective⁵³. The nature of the process is clearly interactive, based on two-way communication at each step. Furthermore, in order to provide the public with up-to-date information during the planning process, it is necessary to keep accurate minutes, and provide concise information written in understandable language. (Creighton, Chalmers and Branch, 1983).

A model decision making process with appropriate information exchange related to the public participation objectives (defined above in Establishing Objectives') is presented in Appendix 1.

4. Choose the Appropriate Technique(s)

"As an over all objective, the vehicle [i.e. technique] of public participation should be chosen to optimize the attainment of public confidence. That is to be distinguished from a call for an efficient outcome. Four factors that can help insure public confidence are accountability, openness, objectivity, and awareness of social good" (Krimsky, 1984)

According to Creighton (1993), the Finnish Forest and Park Service needs to identify both the public participation objectives related to information exchange and the affected publics before assessing which public participation techniques to apply. It should be kept in mind that no single technique is applicable

⁵³ The information provided might be valid for several objectives.

over the full range of situations, and the choice of technique, participation style and participation level should be contingent on the situation and conflict structure.

When choosing the best technique or combination of techniques to fulfill the goals and objectives, attention should be paid to the following factors and issues:

Characteristics of the Issue

• Duration of the decision making process

The challenge is to keep the process visible over inactive periods.

Technical complexity

The more technical the issue the higher the level of information exchange is required.

- Existing level of interest
- Importance of issue to groups

Characteristics of the Publics

- How Informed are the publics on the issue?
- Hostility of the Publics?

If a high level of hostility exists, avenues for venting anger / pressures must be provided before constructive participation can occur.

- How experienced are the publics with various public participation formats?
- Size of the audience
- Divisiveness / Unity of the Publics

Consider applying consensus processes or some form of alternative dispute resolution system.

- Geographic Compactness / Dispersion of the Publics
- Outside Interests
- Maturity of the Issue(s)

Is the time ripe for resolving the issue?⁵⁴ Have the issues been sufficiently differentiated?

- Existing Institutions
- Agency Credibility

The less credibility, the more visible the public participation program needs to be to generate trust.

⁵⁴ author's addition

Management Support

• Political Sensitivity

The issue may affect a particularly salient constituency, involve the subject of a prior campaign, or be of great philosophical concern. In these cases, it is advisable to include the person who is highly sensitive about the issue.

• Precommitment to a Single Alternative

If one really wants to hold to an alternative, it probably is wise to forget the public participation decision making process⁵⁵.

Resources

When resources are extremely limited, it is advised to concentrate public participation activities at key decision points, before you come committed to a preferred alternative (Creighton, 1993).

In this study, a clear distinction is drawn between "information exchange" and "participatory" techniques, both of which are necessary for carrying out successfully public participation programs. First the information exchange techniques are discussed.

4.1 Information Exchange Techniques

For each public participation objective related to the decision making process there will be an information exchange. At this stage, the messages to and from the publics need to be identified for each phase. For example, when identifying the problem the publics should be made aware of the public participation process and their opportunities for participating. On the other hand, the FPS wishes to know how different interest groups perceive the issue. This perception is reflected by the publics definition of the problem, its impacts, and the intensity of stakes. (Creighton, 1993).

An information program should be planned for the purposes of informing the publics about (1) the future planning process, (2) the major issues involved, (3) the opportunities for participation, (4) what has been accomplished so far, and (5) the information necessary for effectively entering the next stage of the decision making process. "As technical decisions behind policy choices become more difficult for the public to comprehend, planners and policy makers must place additional weight on educating and involving the public" (Krimsky, 1984).

⁵⁵ author's addition

Lewicki and Litterer (1986) argue that the more open the data applied in the decision making process are to public verification, and perceived to be balanced, impartial and legitimate, the better off the party (i.e. the FPS) will be in advocating its position, and the more persuasive it will be in achieving a settlement.

The techniques presented below (in table 1) can be used for accomplishing the above (1-5) defined tasks⁵⁶:

⁵⁶ See Creighton (1993) and Fazio and Gilbert (1986) for descriptions and more detailed information concerning the applicability and appropriatness on most parts of these various techniques.

Technique / objective	(1)	(2)	(3)	(4)	(5)
, 	Future planning process	Major issues	Opportu- nities for participa- tion	History of the process	Neces- sary informa- tion
advertisements	X		X		
analysis of media		X			
briefings	X	X	X	X	X
brochures	X		X	X	Х
exhibits					X
feature stories	X	X	X	X	X
electric mail systems	X	X	X	X	X
personal letters	X	X	X	X	X
news conferences				X	• •
newsletters	X	X	X	, · X	X
news inserts	X	×	X	X	X
news releases	X	X	X	X	X
open houses	X	X	X	Х	X
presentations	X	X	X	X	X
press kitts	X	X	X	X	X
radio announcements	X	X	X	X	X
radio programs	X	X	X	X	X
report circulation				X	
slide shows				X	
study groups	X	X	X	X	X
technical reports / planning documents				X	X
tours				. X	Х
videos				· X	X

Table 1. Information exchange techniques according to their usefulness in the public participation processes.

4.2 Participatory Techniques

Participatory techniques are necessary for involving the publics actively in the planning process. Their function is to raise the potential of the process beyond one-way (i.e. informing) and two-way (consulting) communication into the sphere of interactive planning. It is good to keep in mind, that "[t]he effectiveness of public participation does not result from choosing a single public participation technique, but from combining information and participation techniques into a total program" (Creighton, 1993).

Because an enormous number of different participation methods exist, and numerous participation techniques have been documented, only the ones which appear appropriate and applicable for the FPS's decision making context, are presented (see table 2).

Decision Level / Public Participation Technique	Modified Autonomous Managerial	Segmented Public Consultation	Unitary Public Consultation	Public Decision
analytical hierarchy processes	X	0	X	N/A
arbitration	N/A	N/A	Х	0
citizen advisory committee	X	0	X	N/A
coffee klatches	X	0	N/A	N/A
comments	• 0	X	N/A	N/A
consensus process	N/A	N/A	X	Ο
Delphi technique	X	O	X	N/A
field trips / excursions	X	0	X	N/A
focus groups	Х	0	X	N/A
hotlines	0	X	N/A	N/A
interactive cable TV	X	0	N/A	Ń/A
interviews	0	X	N/A	N/A
key contacts	. 0	X	N/A	N/A
mediation	N/A	N/A	X	0
multiattribute techniques	X	0	X	X

Table 1a. Potential public participation Techniques according to the shared decision making level between the FPS and its publics.' X' stands for ' is applicable', 'O' stands for ' optimum', and 'N/A' stands for 'not applicable'. The classification is based on the reviewed literature and authors intuition.

Decision Level / Public Participation Technique	Modified Autonomous Managerial	Segmented Public Consultation	Unitary Public Consultation	Public Decision
negotiation with advisory committee	N/A	Х	0	х
nominal group technique	X	X	0	X
open house	0	X	N/A	N/A
panel / round table	X	0	X	N/A
public hearings (formal)	0	N/A	N/A	N/A
reports from key staff	O	N/A	N/A	N/A
review boards	X	0	x	N/A
Samoan circles	N/A	0	X	N/A
satellite conferences	N/A	X	0	X
sauna sessions	Х	Χ	Ο	Χ
surveys and polls	0	Х	N/A	N/A
task force	X	0	X	N/A
work shops (large group)	X	0	N/A	N/A
work shops (small group)	N/A	X	0	N/A

Table 1b. Potential public participation Techniques according to the shared decision making level between the FPS and its publics.' X' stands for ' is applicable', 'O' stands for ' optimum', and 'N/A' stands for 'not applicable'. The classification is based on the reviewed literature and authors intuition.

Phase III: Implementation

1. Invite the Publics to the Planning Process

Essentially, inviting the publics to participate in the planning process is the beginning of the participatory process.

2. Assess the Publics' Representativeness

Affected publics, forest constituencies, and external as well internal assessments are necessary to ensure the representativeness of the publics (Fazio and Gilbert, 1986). It is recommended that an external review process be used to validate findings because of the sensitive political nature of the aforementioned activities (Blahna and Yonts-Shephard, 1989). If all interests are not effectively accommodated, the agreements reached through the public participation process may not be durable.... [o]wnership can only be shared if the people to be engaged have a direct influence on the planning process as well as the outcomes (Fraser, nd).

3. Define the Management Problem

The Finnish Forest and Park Service should initiate the public participation program by defining the problem together with affected publics; consensus among affected publics must be generated before proceeding any further. This might require several iterations (Blahna and Yonts-Shephard, 1989)

4. Define Goals

Generate goals which address the publicly accepted problem definition.

5. Create Alternatives

The Finnish Forest and Park Service should create alternatives together with the publics. If the agency has already defined alternatives before arranging opportunities for the publics to interact with the agency, these alternatives structure and limit unnecessarily the decision space. This will make it more difficult to decide on acceptable management options with the publics at a later stage (Thomas, 1990).

The FPS should utilize creative problem solving approaches at this stage and list critical factors / dimensions that could be considered or utilized. The agency should be prepared for several iterations.

One should differentiate between creating and claiming stages. One should not evaluate ideas when brainstorming, since doing so creates controversy, undermines the potential for creativity, and removes the edge for generating innovative solutions (Ozawa, 1993, Susskind and Cruikshank, 1987). At this stage one needs to apply integrative or principled negotiation strategies: "Separate the people from the problem; focus on interests, not positions; invent options for mutual gain; and insist on using objective criteria" (Fisher and Ury, 1992).

6. Decide on Criteria and Evaluate Alternatives

Agree with the publics on the criteria or standards before evaluating the alternatives.

7. Make the Decision

Choose the alternative that best meets the goal and objectives specified (in 3.1 and 3.2).

8. Define the Evaluation Criteria

Before implementing the public participation program, the criteria for evaluating the process should be defined-- preferably with the publics, because what constitutes success is ultimately based on one's (subjective) values. The evaluation criteria must measure effectively the attainment of the objectives set (see above) for the public participation process.

9. Communicate the Decision to the Constituents

This next to final step of the decision making process is often overlooked. Still it is a crucial one because it involves communicating the FPS's commitment to the process and redeeming its promises. It is also recommended that the agency keep the publics informed when significant benchmarks are achieved or when changing conditions require modifications of the original plan (McMullin and Nielsen, 1991).

10. Implement the Decision

It is the Finnish Forest and park Service's responsibility to implement management activities in reaching the publicly defined management goals.

Phase IV: Evaluation

1. Evaluate the public participation process

It is commonly accepted, that what the investigator defines as "success" of any interaction process, whether between individuals or interest groups, differs vastly based on different perceptions, values, interests, objectives, and expectations related either to the process itself or its outcomes. Therefore, the <u>FPS together with the participants</u> should define the criteria for an effective public participation process before the process is initiated (see Phase 2: 5. Defining the Evaluation Criteria).

2. Monitor the Implementation

It is the Finnish Forest and Park service's obligation to monitor whether the goals and objectives set in the public participation process have been met. If not, then the FPS should analyze the situation and take appropriate corrective measures, which might mean reinitiating public participation procedures.

3. Evaluate the Outcomes

A distinct date must be set for assessing whether or not the planned outcomes are reached, and the lessons learned from the operation must be assessed, documented and communicated to other managers within the agency.

4. Communicate the Outcomes to the Publics

Finally, the outcomes-- whether successful or not --should be communicated to the publics together with a relevant summary about the whole activity.

Overview of Potentially Useful Public Participation Techniques

Some of the most promising participatory techniques for the FPS are described briefly below. For assessing the usefulness of the techniques highlighted see Appendix 2: Benefits and Costs Related to Participatory Techniques on p. 106.

Focus Groups

Focus groups are small discussion groups facilitated by a trained moderator. Their main function is to elicit participants' reactions to specific ideas presented. Usually several focus groups are needed to

ensure that all major opinions are explored. Focus groups are not seen as substitutes for more direct forms of public participation (Creighton, 1993).

Hot Lines

A hot line is a widely advertised number that offers the public an immediate interactive communication channel with the agency's specialist on the issue. It is useful for answering specific questions and for coordinating activities. It also can be used to broaden the array of active publics.

Interactive Cable TV / Satellite Conferences

Interactive cable TV is a direct form for participation. Viewers can react to proposals by pushing buttons on a remote control; these signals can then be tallied at the station. Satellite conferences are already available and utilized by many fields.

Public Hearings

A Public Hearing is a formally structured large group, public meeting where different interest groups present (usually) prepared statements. Public hearings are not a particularly effective device for public participation because publics are not included in the three central decision making phases of (1) defining the problem, (2) setting goals and (3) creating alternatives, besides creating an adversial negotiation frame-- although they might fulfill legal requirements by providing a clear record (Creighton 1993, Landre and Knuth, 1993, US Congress, 1992).

Informal Hearings

Informal hearings are designed in many cases to overcome some of the shortcomings related to more formal hearings. The main purpose is to create real dialogue, so that issues of great importance for the publics can be probed more deeply. Shared understanding will be created as a basis for finding solutions which optimally address all interests.

Public Meetings / Workshops (small groups)

Some public meetings use a large group/small group format. This can be accomplished by breaking the audience into small discussion groups after the opening presentation, and then reforming again later as a one unified group. Informal meetings (eg. coffee klatches) are better for genuine participation than single large meetings. These meetings are more often targeted at leaders of organized groups rather than nonaffiliated, interested individuals. Furthermore, workshops can be aimed either at policy or technical issues (Creighton, 1993).

Public Meetings / Task Force

The task force is a form of public meeting. Ideally it builds on consensus processes, but it can be used as well with lower levels of shared decision making authority between the FPS and its external publics. On the other hand, task forces have little value in authoritative (autonomous and modified autonomous) levels of decision making because the less decision making authority that is delegated to the publics, the more they feel suspicious that their efforts will have no effect on the final decision...

Task forces are organized to accomplish specific tasks within a decision making process; after completing their task they cease to exist. The main principles for applying task forces are:

- The scope of the publics role, objectives and constraints for the task force must be made clear initially.
- Participants must represent the full range of issues and concerns
- It is crucial that the task force members keep in active contact with their constituencies throughout the process (Krumpe and Stokes, 1993).

Areas where task forces have proven to be most helpful include:

- identifying and prioritizing issues
- developing site specific objectives
- providing information to better describe existing conditions
- articulating desired future conditions
- developing standards for means of meeting objectives
- mapping or otherwise articulating the means of meeeting objectives

suggesting possible management actions and describing the relative desirability of each

Alternate Public Meetings

Other forms of generally known techniques which can be placed under the more general category of "Alternate Public Meetings" include (from more formal to informal):

- The Samoan Circle (AM, CS)
- Panel/ Roundtable Format (AM, CS)
- Large Group/ Small Group Meetings (AM, CM, CU)
- Workshops (AM, CS)
- Open Houses (AM, CS)
- Coffee Klatches (AM, CS, CU)
- Sauna Sessions⁵⁷ (CS, CU, PD)

(Creighton, 1993).

Citizen advisory committees / Ad Hoc Committees

Advisory groups are useful in providing the publics' perspectives throughout the decision making process. They provide a forum for consensus decisions in the same manner as task forces do. Usually they are designed to last through the entire decision making process. (Creighton, 1993).

The same principles that were specified for task forces also apply to advisory committees (see above: Task forces). The boundaries of discourse should reflect the public concerns, and the committee should choose a chairperson among the participants to improve public confidence (Krimsky, 1984).

The terms of reference for a committee should (1) be defined early in the process - for the most part, by the committee itself - and moreover, be made clear to the committee members. In addition, the Finnish Forest and Park Service needs to make extra effort to ensure that the committee is representative; local representativeness is especially important for ensuring the acceptability of the results (Higgelke and Duinker, 1993).

⁵⁷ author's addition. Traditionally many important negotiations have been carried out in principal by the chief negotiators in the heat of original Finnish Saunas. The details will then be worked out later on a different meeting.

A process which builds trust among members is advocated. It might require working with smaller, well structured and less contentious issues first, or using subgroups and/or progressing at a slower pace (Higgelke and Duinker, 1993).

Consensus Process

A consensus process must be created by the parties not for the parties. Issues based on principles or values may not be compatible for win-win solutions; the Finnish Forest and Park Service should not try to find consensus in such cases (Cormick 1992 in Johnson and Duinker, 1993).

For public involvement and consensus-based decision-making to work well, each participant must have an equal say in the design of the process and formulation of ground rules, as well as in the acceptance or rejection of proposals. All parties at the table, including the organizing agency, i.e. the FPS, should share information and make decisions as equals (Johnsson and Duinker 1993).

The process according to US Congress, OTA (1992) is as follows:

- 1. Assess the situation
- 2. Identify the participants
- 3. Set up the process:
 - agree on procedural ground rules
 - determine and communicate to the participants how the FPS will respond to the results of the process
 - establish alternative(s) in case consensus is not obtained
- 4. Run the process
- 5. Complete and report the results
- 6. Implement the plan

Reaching consensus is not always possible, especially when parties have a long adversial history or the issue becomes a dispute over fundamental value differences among parties. Often "majority rules" are needed as a back up to prevent derailment of the entire process (Higgelke and Duinker, 1993).

The "majority rules" should be part of the ground rules when setting up the process (# 3 above). Other ground rules recommended by Higgelke and Duinker (1993) include:

- a process to determine changing membership (new members, alternates, etc.)
- maximum terms of membership
- a process to establish location of meeting sites
- · keeping minutes
- providing summarized information on minutes⁵⁸

Other Applicable Participatory Techniques

Multi-attribute Techniques⁵⁹

Analytical Hierarchy Processes⁶⁰

Nominal Group Techniques (NGT)⁶¹

Delphi Technique⁶²

Guidelines for Working with the Publics

Overcoming Structural Barriers

The following process-oriented guidelines should be utilized by managers in creating effective public participation programs.

- Understand and take local context into account. Focus on local needs and the limitations imposed on the program by local settings. (Landre and Knuth, 1993)
- Design planning alternatives and tailor public participation activities/ programs based on situation specific information.
- Recognize that many people are afraid to express themselves in front of large audiences.
- Avoid a public hearings format except where legally required.
- Avoid power symbols which can breed resentment or antagonism (Creighton, 1993).
- Lead the process, not the content (Creighton, 1993).
- Let the participants "own" the meeting (Creighton, 1993).
- Never surprise elected officials; always keep them informed about your plans, so that they do not lose face to their constituents (Creighton, 1993).

⁵⁸ author's addition

⁵⁹ See Curt Brown, Jed Campbell and John Lathrop (1993) in IAP³ (The International Association of Public Participation Practitioners) conference proceedings.

⁶⁰ This technique has already been used in Finland by Kangas and Matero (1993).

⁶¹ See Kweit and Kweit (1987).

⁶² See Kweit and Kweit (1987).

- Be honest with the media; provide all important information in an objective, factual manner (Fazio and Gilbert, 1986).
- Always provide feedback opportunities in your public participation program; without feedback, there are few incentives to stimulate further participation (Creighton, 1993).
- Remember that the process is at least as important as the final outcome (Knopp and Caldbeck, 1990).
- Remember to adhere to the ACBD -rule: Always Consult Before Deciding (Potapchuk, 1991).
- The manner in which meetings are led is an important determinant of how efficient the meeting will be perceived.
- The public information component of the public participation program must be perceived as impartial by the publics (Creighton, 1993).
- Ultimately, people caring more about an issue will devote more time and energy to it, and subsequently will exert more influence on the issue than those who do not care as much (Creighton, 1993).
- Voting during participation is strongly discouraged (Creighton, 1993, Susskind and Cruikshank, 1991); Although Creighton (1993) argues that a ultimate test of community support would be to take a plebiscite (i.e. a direct vote on the issue), it should always be preceded by active participation.
- Misunderstandings should be corrected immediately. A mistake or false impression created during a public participation session may not be changed easily (Creighton, 1993). (see Cormick # 4, below).
- Cormic (1992) recommends adherence to the following techniques to foster win-win agreements:
 - 1. establish a common data base for all parties to work from
 - 2. use sub-committees in multi-party, multi-topic conflicts
 - 3. apply sequences of dead lines; define targets to be achieved; don't rush into compromises[authors addition: rather modify and redefine tasks and / or the dead lines if tasks are not accomplished in time]
 - 4. correct mistakes when giving information to the parties as soon as possible; do not conceal mistakes

Overcoming Procedural and Personal Barriers

Keep the Publics Informed through the Public Participation Process

The terms of reference for a public participation technique should be defined to the participants early in the public participation process. In addition, all participants should clearly understand the terms (Higgelke and Duinker, 1993).

The terms of reference that should be communicated unambiguously to the participants include:

- goals and objectives
- constraints
- history of the issue (key events which should be known by all parties and/or affecting the process)
- a definition of the structure of the technique
- a description of the process and when, how and what techniques of participation is decided by FPS to be used in it
- the degree of empowerment (i.e. shared decision making authority)
- working guidelines generated by the participants at an early stage (in segmented consultation through public decision) or as given (autonomous managerial)
- a schedule for deliverables
- a schedule of the information exchange program to be applied through the entire project
- ways to access and/or apply a shared data base (if there exists / needs to be generated one)

It is a challenge to hold public interest during inactive phases of the decision making process, to involve the publics after an inactive period, and to sustain credibility when the process is not very visible to the publics. These challenges can be met by applying efficient information techniques. The creation of advisory groups to oversee technical studies, interim reports and / or newsletters, are alternative strategies overcoming this challenge. (Creighton, 1993).

Set the Standards for Communication

At every stage, whether dealing with internal or external publics, good communication skills should be applied. The way the Finnish Forest and Park Service communicates will be monitored and noted by the publics at every interaction situation with them or with the media. It makes good sense therefore, to establish a model for integrative negotiation behaviors and create shared process-oriented expectations in terms of acceptable communication strategies and tactics.

The following principles should be applied to reach these goals (Blahna and Yonts-Shephard, 1989, Lewicki and Litterer, 1985, Fisher and Ury, 1992, Susskind and Cruikshank, 1991, Creighton, 1993):

- use open communication
- share relevant information with all participants
- apply integrative negotiation tactics
- keep the process open

- listen actively
- always discuss how public comment influenced the decision even when people do not agree with the decision you need to demonstrate how their views have been taken into account
- distinguish between major and minor issues, positions and the reasons behind
- recognize feelings as a legitimate expression of opinion
- · discuss intangible issues and behaviors directly when appropriate
- separate people from the problems
- focus on interests, not on positions
- control the issues being handled:
 - 1. state issues in concrete forms
 - 2. control the number of physical issues involved
 - 3. restrict precedents and principles involved
 - 4. fractionate big issues
 - 5. depersonalize issues
- establish commonalties
- utilize the services of third party neutrals' especially experienced process facilitators', in contentious situations
- summarize, don't judge
- summarize both feelings and ideas
- avoid lead-in phrases
- keep a running summary in meetings
- listen actively, matching the intensity being expressed

Confront Conflict Constructively

Landre and Knuth (1993) recommend using process facilitators instead of suppressing conflict, since conflict should be expected in participatory planning processes. Tjosvold (1991) argues that conflict should not be treated as something negative and therefore to be avoided. On the contrary, it should be utilized for clarifying issues and achieving better decisions. As a matter of fact, Susskind and Cruikshank (1989) hold that without differences in opinion between various interests, there would not be potential for integrative bargaining and consequently little opportunity for consensus building processes.

Experiment on Small Scale

"When on a particular issue the stakes are high and the outcome of the decision is doubtful, it would be prudent to test alternative processes on a small scale, requiring a minimal commitment" (Knopp and Caldbeck, 1990). The Finnish Forest and Park Service could well achieve this as a control mechanism for deciding the necessary level of shared decision making authority when applying the Thomas's adaptation of the Vroom-Yetton model (see Phase 1: Defining the Level of Shared Decision Making Authority).

Overcoming Technical Barriers

Technical aides must be used only insofar as to complement the actual participation process. Such tools as planning models must be designed so that they are compatible with the people and the purposes they are intended to serve. The following criteria should be taken into account when using computer models and technology in decision making. The applications should:

- be simple to understand by non-technical lay-persons
- represent the forest resource dynamics (and yet be parsimonious⁶³)
- be transparent; both objectives and constraints should be easily formulated and modified
- generate trust in the participants in terms of how they can affect the solution
- be based on process that is simple and clear for all parties after small introduction
- be user-friendly
- be microcomputer-based (allows portability) and relatively fast to run
- provide outputs in a form easily interpreted i.e., graphics with trends, (figures, tables with key indicators and a sensitivity analysis with contrasts between different runs⁶⁴) (Tanz and Howard, 1991).

⁶³ addition by author

⁶⁴ addition by author

Conclusions

Implications of the Finnish Forest and Park Service's Current Planning Approach

For a market oriented enterprise or corporation, satisfying one's customers is simply good business, and the Finnish Forest and Park Service is gearing its objectives towards this end. Under the current corporative environment, the Finnish Forest and Park Service promotes only economically viable operations if not otherwise mandated. This means, that the whole range of both non-market and market priced outputs will be scrutinized through economic benefit-cost analyses and priorities will be set accordingly. A probable risk is that by exclusively focusing on its own priorities, the FPS will not necessarily maximize its contributions to Finnish society. Negative societal outcomes are especially prevalent when the FPS's profit oriented elements clash with it's nature conservation obligations. For example, in Lieksa (Central Eastern Finland) where the FPS proposed to build a series of rental cabins at the river corridor of Naarajoki, a wild and scenic river, conservationists rejected the plan as unacceptable, because they perceived it would destroy the pristine character of the area (Helsingin Sanomat, 1994).

The Finnish Forest and Park Service should make Finnish citizens aware that without lowering its annual financial outcome objectives little room exists for substantive public participation. By bringing up the issue forcefully, and emphasizing the democratic process of public participation, instead of striving for rigid annually predetermined outcomes, the FPS would avoid the trap of being squeezed between the bark and the xylem. In other words, it will not be caught between competing forest uses by advocating some uses over others⁶⁵. The FPS should "endeavor to provide professionally sound information and forest management alternatives to accommodate a variety of social values, while maintaining options for

⁶⁵ Currently, the FPS is biased towards timber production and consumptive use of our national forests.

future generations".66 (Kennedy, 1985). Accordingly, the conflicts would shift from the agency into the political arena, the appropriate place for mediation between different interest and user groups.

From the Finnish Forest and Park Service's experience with public participation applied in creating the first management plan for Hammastunturi Wilderness in Lapland it can be inferred that it: (1) did not offer sufficient incentives for the Sami people to participate, (2) did not grant sufficient and/or equal decision making authority to the interest groups involved, or (3) the interest groups were not defined precisely enough. This latter deficiency means that some specific interests were excluded from the process.

Effective public participation calls for an open process, where the question: who can participate --should be ultimately left to the affected citizens. As can be easily understood from the multitude of options to be considered, weighted and allocated, no one right way exists to suggest how to deal with wilderness or multiple use planning situations. The multiple use mandate involves reconciling temporally or spatially different uses and activities in the management plans. It involves value judgments, which should be left to publics⁶⁷.

Certainly, listening, and responding to public demands can be seen as imperative: These requirements can not be quickly institutionalized into organizational practices. At the core lies the Finnish Forest and Park Service's moral obligation and responsibility to determine for what outputs - both tangible and intangible- Finland's national forests should be managed. The FPS's duty is to promote it's legally mandated obligation to search for and maximize the production of forest based benefits for Finnish citizens based on social demand and acceptability on a sustainable basis, instead of promoting economically viable timber management policies and activities based on the agency's traditions and organizational culture.

⁶⁶" That has always been the role of foresters and, as long as society will have us, it always will" (Kennedy 1985).

⁶⁷ These interest groups include: nature preservationists, native Lapps, reindeer herders, people making their living by traditional livelihoods, tourism industry, various types of recreationists, scientists, timber dependent communities and the Finnish Army. (Kajala 1993).

Sewell and O'Riordan (1976) proposed a set of questions as criteria for evaluating the effectiveness of citizen participation when compared cross-culturally. They stated that what is desirable and useful in one country may not prove to be valuable in another. Although this study concludes that public participation applied in the US and Canada is by and large applicable in the Finnish context, it is ultimately up to the reader to verify the applicability of the questions proposed by Sewell and O'Riordan (1976)⁶⁸, in terms of the participation model and guidelines advocated in this study.

Likely Benefits of Implementing Public Participation

There exists several benefits for the Finnish Forest and Park Service to incorporate public participation as an integral part of natural resource decision making. To fully realize these benefits involves rejecting the unilateral decision making mode and 'traditional public participation' approach formerly applied in the US and Canada.

Improving the quality of decisions

Collaborative approaches to problem solving and other constructive conflict management strategies can help identify new alternatives which has lead to innovative and creative solutions and better decisions

⁶⁸ The checklist created by Sewell and O'Riordan (1976) for evaluating the responsiveness of the political and institutional culture to more broadly based participation is as follows:

⁽i) What is the nature of citizen's rights to environmental quality, to amenity, and legal standing on environmental matters?

⁽ii) What are the statutory rights of access to information before, during, and after environmental policy has been implemented?

⁽iii) What is the scope and political effectiveness of environmental assessment reviews for policies, programs and projects at the national, regional and local levels, and for public or private proposals?

⁽iv) What is the role of media in investigating and reporting environmental issues before, during and after the policymaking process? What use is made of the media in facilitating public communication and discussion, and to what extent can participatory action groups make use of it in airing their grievances?

⁽v) What is the nature of formal (statutory) and informal (experimental) mechanisms for inducing participation, and what use is made of them in given case studies?

⁽vi) What is the role of education (in the schools, colleges and universities, and in adult education programs) in promoting mental awareness, encouraging active participation, and stimulating explorative participatory experiments?

⁽vii) What is the role of key people - politicians, professionals, community leaders, and citizen activists - in scrutinizing the policymaking process and in fostering reform?

(Gray, 1989). Tapping into a larger pool of knowledge and expertise related to specific natural resources increases the potential for more accurate and well-informed decisions (Daniels and Walker, 1993).

Increasing the ease of implementation

Court appeals and forestry conflicts tend to block the timely implementation of unilateral decisions, which consumes time and resources. Furthermore, the success of a plan depends on public commitment to it. If the publics are strongly committed to the plan and it is perceived as fair in terms of both the process and the outcomes, the plan is much easier to implement than if neither of these conditions are met (Tanz and Howard, 1991). Daniels (1992) argues that perceiving the process as just is more crucial than the actual outcomes, which might be contradictory to one's initial goals. Furthermore, "[a]cceptance and commitment must be generated through the decision process" (Sample, 1990). Accordingly, effective public participation holds promises for effective natural resource management even in the face of conflict escalation or formerly perceived impasse.

Avoiding the potential negative effects of conflict

"As the public policy stakes regarding complex technological issues continue to increase, those who must manage the policy process must create rules for appropriate participation for citizens and experts. To fail to do this is to court unnecessary turmoil at best and potential policy disasters at worst." (DeSario and Langton, 1987). Furthermore, latent or milder forms of conflicts, if not addressed appropriately when encountered, may manifest themselves later in more destructive forms. This might occur either in existing or new arenas when a suitable triggering event occurs (Deutch, 1974, Keltner, 1990).

Maintaining credibility and legitimacy

The only way for agencies and foresters to maintain their respective legitimacy is by acknowledging public interests, distinguishing between value and technical judgments, being aware of one's own / agency's value systems, and clearly articulating the limits of uncertainty or risk. This implies willingness to learn from the publics and good communication skills.

Furthermore, "[t]he development and cultivation of a clientele is a useful device for providing political support to programs in budgetary battles. The participation of the citizens in the policy process could help in developing such a supportive clientele." (Kweit and Kweit, 1987). Consequently, resources are saved, frustration is minimized, and energy is directed toward more creative problem solving (for both the agencies and publics).

Anticipating public concerns and attitudes

Public officials respond to the policy goals of the citizenry if they have sufficient information about citizen preferences (Kweit and Kweit, 1987). This knowledge reduces the risk of future disputes and builds agency credibility and trustworthiness. It also gives continuity and certainty to ongoing and future participation processes, reducing costs related to changed situations or unexpected outcomes. Moreover, this future orientation directs attention from previous positions and accusatory stances into a more constructive problem solving climate (Folger and Poole, 1984).

Different interest groups educate and learn from each other

Public participation may help to resolve conflicts related to the complex natural resource issues by 'forcing' different and or opposing sides through the process of educating each other about the rationale, i.e., attitudes, beliefs, expectations, norms and values, behind their views. "We must not only educate the public; we must also let the public educate us" (Tanz and Howard, 1991). This objective can be achieved best through a collaborative processes, where genuine dialogue is the norm (rather than an exception); dialogue features opportunities for creative and systemic thinking about problem situations (Senge, 1990, Walker and Daniels, 1993).

Should the FPS Adopt a Public Participation Program?

..."Over time agencies become forces of convention as they follow policies and rules formed in the past. Formal organizations often seek goals of autonomy and survival rather than reevaluate the efficacy of their programs in light of changing circumstances. Thus, the practice of participation changes the role of the public administrator from a neutral implementor of policy to that of a co-creator - with citizenry - of policy." (Reich, 1985).

The Finnish Forest and Park Service is a public agency despite its new status as a 'financially steered, outcome oriented bureaucracy' (i.e. Valtion liikelaitos). The FPS has legal authority to accomplish its goals as defined in the National Forest Management Act and Statute. However, we should remember, that Finnish citizens possess the ultimate political authority over the FPS (in the long run). Consequently, the legal authority delegated to the Finnish Forest and Park Service not only can, but also definitely will, change through legislation over time.

The majority of Finnish Forest and Park Service's employees are expecting at least some potential benefits to be obtained by involving different interest groups more actively in the decision making process. In addition, they are looking forward to developing their knowledge and expertise to collaborate more effectively with their clients (see FPS employees' perceptions on public participation on pp.25-27). This motivational opportunity should be utilized. It requires arranging more organizational support for the process, and giving the planners more flexibility in terms of area specific outcomes. It also necessitates sharing the decision making authority with the (external) publics, as warranted by the problem setting (see The Effective Decision Making Model by Thomas (1993) on pp. 68-71).

Clearly, a social demand exists for practical guidelines, techniques, and models about public participation to be applied in multiple use forestry planning. The public participation planning model advocated by the author (on p. 64) is a reply for this demand. The model is aimed at building a firm basis, and creating the conceptual framework necessary for accumulating a more substantive body of expertise in the field. But it must be emphasized that until there is more room for incorporating other forms of forest uses than timber production into public forestry, only little potential exists for involving the publics meaningfully in the decision making process.

In the lack of external guidelines and administrative rules for the Finnish Forest and Park Service to follow in accommodating public values in the decision making process, it is essential for the agency to adopt a public participation program. Furthermore, it is essential for the FPS to retain its decision making capability to be able to carry out its multiple use mission.

To accomplish this imperative, the Finnish Forest and Park Service has recently seized the initiative to study and learn from the US Forest Service's experience about public participation⁶⁹. The FPS should fully capitalize on this knowledge and adapt the model and guidelines generated in this study as a basis for further modifications and refinement. The motivation and open-mindedness exists in order to accomplish the vision of "the Finnish Forest and Park Service as an reliable, accountable, knowledgeable forest ecosystem manager determined to serve sustainably the Finnish society, and ultimately benefiting the individual citizen.

Furthermore, the Finnish Forest and Park Service is challenged to find organizational structures that can respond to ongoing processes of change without losing their sense of direction or purpose. They also wish to retain the ability to incorporate new ways of doing business. Accordingly, public participation guidelines should be institutionalized as an integral part of land use planning in the agency. Once the acceptable ends and constraints are defined, the FPS's responsibility is to ensure that these goals are effectively achieved. This requires impartiality, willingness to change, collaboration with publics, and creativity, determination and know-how concerning public participation processes. The challenge to accomplish this all is here by brought into the consciousness of the diligent reader.

⁶⁹ Pauli Wallenius from FPS acquainted himself in 1993-1994 with the US Forest Service's public participation experiences and processes in University of Minnesota under the advice of professor William Fleichman, and among other things administered a questionnaire to USFS district nine employees over the various organizational levels.

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Appendix 1

A Model for An Information Exchange Program

1. Identify the Problem

Public Participation Objective (1.1):

Obtain a thorough understanding how different interest groups view the problem.

Information Exchange:

Information to the Publics

- The nature of the decision making process
- What FPS already knows about the issue; inventory baseline data including constraints
- Opportunities for public participation

Information from the Publics

- How different interest groups see the situation
- How different interest groups perceive being affected
- The intensity of the impacts
- Additional technical or contextual information

Public Participation Objective (1.2):

Identify the level of public interest in the problem

Information Exchange

Information to the Publics

- •The likely issues to arise
- •Viable public participation techniques

Information from the Public

- •Which interest groups wish to participate
- •How intensely do the interest groups wish to participate
- •What techniques are most acceptable or preferable

2. Formulate Alternatives

Public Participation Objective (2.1):

Formulate an extensive list of possible alternatives

Information Exchange

Information to the Publics

- •A summary of the definition of the problem (arrived during previous stage)
- •The range of alternatives created by FPS
- •The criteria usually used in the evaluation stage

Information from the Publics

- •Additional alternatives / options known to the publics
- •Additional standards held by the publics to be incorporated in the evaluation stage

3. Evaluate Alternatives

Public Participation Objective (3.1):

Develop a well informed understanding of the impacts of these alternatives as perceived by the different

interest groups

Information Exchange

Information to the Publics

- •Standards / criteria to be used in evaluating alternatives
- Proposed methodology to evaluate alternatives

Information from the Publics

- Perceived impacts of alternatives
- •Additional factors necessary to evaluate alternatives
- •Modifications to the proposed methodology

Public Participation Objective (3.2):

Assess the relative merit assigned to alternatives by various interests

Information Exchange

Information to the Publics

- •The technical feasibility of each alternative
- •The environmental, economic and social impacts of each alternative

Information from the Publics

- •Pros and cons assigned to the feasible alternatives according to various interest groups
- •How various interest groups rank the alternatives

4. Make the Decision

Public Participation Objective (4.1);

Determine the most acceptable alternative.

Information Exchange

Information to the Publics

- •Tentatively, FPS's proposed action
- •Reasons behind the proposed action / recommendation
- •The process used for reviewing the proposal

Information from the publics

- •Acceptability of the proposal
- •Modifications for making the solution even more acceptable

Appendix 2

Benefits and Costs Related to Participatory Techniques

Modified Autonomous Managerial Level (MA)

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Comments (written, oral)
         pros
             new issues are identified
             inexpensive
             analysis easy to arrange (content analysis), although on a large scale requires significant
             efforts in structuring the process
         cons
             unrepresentative
             essentially 1-way communication
             no assurance of input validity / representativeness
Focus Groups
         pros
             interactive
             assures that participants are understood
         cons
             moderator / facilitator necessary
             potentially unrepresentative
             indirect form of participation
             might be perceived by the publics as an attempt of manipulation instead of a learning
             process
Hot Lines
         pros
             timely
             interactive (two-way communication)
             clarifies issues
             has potential for deeper understanding
             easy venue for venting frustration by the publics
         cons
              does not generate shared understanding / mutual learning between different parties
              more appropriate for giving background information than for actual participation. This
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really is a mechanism for information exchange.

Interactive Cable TV / Satellite Conferences

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pros
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timely

can bring geographically spread constituents together for the same session

interactive

visual aids can be utilized

more personal contact

accommodates multi-party processes

dynamic - a mechanism to involve the 'passive majority' by meeting their needs

great potential for the future

cons

not readily accessible

cost could be a deterrent

potential for skewing assessment of the 'true' opinions held by the participants by saboteurs

Interviews

pros

identifies issues - especially if the interview is not highly structured

quick, easy to administer - especially telephone interviews

two to three days might prove to be sufficient for interviewing people representing the key publics

cons

potentially unrepresentative

essentially 1 way communication - although focused on specific issues

structured 1s are not very interactive

the public might not have clearly developed opinions

Key Contacts

pros

quick to administer

interactive

inexpensive

cons

usually unrepresentative

Public Meetings/ Public Hearings / Informal Hearings pros

inexpensive

meets the legal minimum requirements

no special skills required

generic formula

voicing of opinions and concerns

timely

cons

creates adversial hardening of positions; tends to exaggerate differences

minimal learning occurs

distributive

publics' knowledge only minimally utilized

do not generate commitment for implementation

unbalanced

reactive

no assurance that the input is representative

input skewed in favor of highly organized interests (Kweit and Kweit 1987).

Polls and Surveys

They give a snapshot of one moment in time. Both require knowledged designers and qualified administers. Neither of them replaces the need for more direct participation. Pretesting should be applied for gaining better internal validity (i.e. the questions are interpreted as intended).

pros

inclusive

good for focusing only on certain issues

polls are quick to administer

cons

costly

very static, publics' opinions and interests change over the issue development, and it is hard to capture this change

the public might not have clearly developed opinions

no mechanism - except pretesting - to ensure that the publics interpret the questions as originally intended

difficulties with open-ended questions

polls, especially, are prone to be unrepresentative

Reports from Key Staff pros quick inexpensive timely can easily be integrated with other duties good for initially identifying potential issues and key publics continuous monitoring

cons

often biased (different frames of reference, values, perspectives) inaccurate (not sufficient all)

Review Boards

pros

timely inexpensive no geographic limitations

cons

lack of acceptance in terms of problem definition minimal learning occurs not very interactive

Public Meetings / Workshops (large groups)

Workshops are a form of public meetings. Taking votes is discouraged. Moreover, the specific format of the meeting should reflect the purpose of the meeting. (Creighton 1993).

pros

potential for mutual learning inexpensive

cons

it is hard to estimate the number of participants
issues tend to proliferate; it might be hard to concentrate on the agenda
advocacy orientation - hardening of positions
domination (tendency) of higher socio-economic status participants
not very interactive

Segmented Public Consultation (CS)

Field Trips / Excursions

pros

informal setting

facilitates problem solving and inquiry

interactive

easy to relate to the problem

focuses communication and understanding

facilitates high level of information sharing

cons

seasonally dependent

documentation / keeping minutes hard to arrange

doesn't work for remote off road sites

Multi-attribute Techniques

pros

simulation of different alternatives

trade-offs and their sensitivity become apparent

quick to run

easy to control for external variables (same situation for different participants and at different times

comparable results

compatible results

participants working both interactively and individually

cons

for small groups at a time (if the monitor text is reflected on the canvas more people can participate at the same session)

costs of programming and equipment (portable micros not very expensive)

emotions and affective components of attitudes hard to incorporate into models / public participation process

implementation of decision might be difficult, since group norms play a minor part in the decision making process

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Nominal Group Techniques (NGT)
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pros
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innovative and efficient: produces higher quality, quantity and variety of information than traditional brainstorming techniques

equal weights on input

participants working both interactively and individually

possibilities for numerous iterations and subsequent enhancement of tradeoff possibilities

cons

works only for a small number of participants (<25)

requires structured environment

implementation of decision might be difficult, since group norms play a minor part in the decision making process (Kweit and Kweit, 1987).

Delphi Technique

pros

especially useful in long-term goal setting and clarifying issues

directs attention to specific issues

easy to organize

no special (facilitation) skills required

interactive when several iterations applied

anonymous

cons

unrepresentative (biased toward higher socio-economical status)

timely

costly

more comprehensively.

Public Meetings / Workshops (small groups)

pros

interactive

generates commitment

potential for mutual learning

potential for creative problem solving

cons

small number of participants (<25)

domination (tendency) of higher socio-economic status participants

facilitation requirements

Surveys and Polls

pros

potential for broad representation

sharing information

mutual learning

builds potential for future interactions (relationships)

cons

expensive

time consuming for both the FPS and its constituencies (Marsh 1993).

Unitary Public Consultation (CU)

Citizen advisory committee / Ad Hoc Committees

pros

generates effective decisions

potential for harnessing the dynamics of changing values

facilitates mutual learning

generates stronger public commitment for successfully implementing the decisions

improves public confidence in decisions

helps anticipate publics reactions to arising issues or proposed actions

provides continuity

cons

domination of higher socio-economic status participants

significant time and commitment requirements

high costs

limited to small number of participants (Kweit and Kweit, 1987, Creighton, 1993).

Public Decision (PD)

Consensus Process

pros

focus on underlying real interests

avoids hardening of positions

separates people from problems

encourages creativity

generates understanding of natural resource decision making complexities and thus lends credibility and political authority to FPS

generates greater commitment to decisions by creating a sense of ownership among the participants through the process

assists creating good relations and builds subsequently potential for future interactions generates comprehensive understanding on the issue and about underlying values held by other participants

cons

time-consuming

expensive (BC Round Table, 1991, USFS, 1992).