National outdoor recreation demand and supply in Finland: an assessment project

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Introduction

This paper introduces the National Outdoor Recreation Demand and Supply Assessment Study (LVVI) in Finland (Sievänen, 1998). The project involves collecting statistics and maintaining databases on a continuous basis in order to monitor changes in people's participation in outdoor activities and behaviour patterns; as well as changes in the supply of recreation opportunities and the quality of services. At present, Finland lacks detailed statistics and information about the demand for outdoor recreation facilities. There is also a need for more information about the recreation resources provided by different agencies. A comprehensive database is needed in order to direct outdoor recreation policy appropriately.

In Finland, outdoor recreation is based on the principle of 'everyman's right', which means that all forests, shores and water areas, including those that are privately owned, are open to public access. Although access is permitted, the quality of the environment in timber production forests does not always meet the requirements for recreational use. State and municipal agencies and private firms also offer designated recreation areas and services. Public recreation agencies need information about recreation resources and their use in order to allocate their future investments effectively, and for the efficient management of their resources. It is particularly important to assess the demand both for local recreation facilities and also for resource-based opportunities further from home. When planning recreation areas and trails, which may extend over municipal borders, information is needed to improve municipal co-operation. The demand for nature-based tourism is expected to grow as many rural communities seek new sources of income. The availability of data on recreation supply and demand will allow for more accurate market analysis and service planning. The assessment will facilitate the integration of planning at the regional level with regard to forestry, landscaping, land-use, tourism and other business development programmes. Continuous monitoring and a better understanding of the use and supply of recreational resources are also required in order to assess the impact on the environment and to implement a policy of socially sustainable use of natural resources.

Recreation demand study

The demand for recreation services is measured by participation rates in outdoor activities. Another measure of demand is the number of days or trips devoted to each activity. These measurements are focused on recreation area types, and on areas as defined by owner group. Recreation use is also classified as local or resource-based recreation. Models of demand for different kinds of recreational facilities can be used to estimate probable future participation rates and frequencies and can also be used to predict the future need for recreational areas. In an economic sense, demand models make it possible to evaluate the benefits of outdoor recreation. Comparing the benefits of recreation with the costs of providing recreation services is a useful tool for evaluating public sector recreation investments.

Some characteristics of outdoor recreation in Finland challenge the study of recreation demand. Firstly, because participation in activities and participation frequencies vary seasonally, data have to be collected all year round. Secondly, because of 'everyman's rights', some outdoor recreation takes place in the normal living environment close to home on private land not in designated recreation areas. This makes it difficult to specify the destination area.

The sample size in the main population survey is about 12 000 people. A random sample is drawn from the population between the ages of 15 and 75 years, and is connected to the national labour study. The sample needs to be large for two main reasons. Firstly, having a large sample will ensure that there will be enough incidences of some new types of recreation activities to monitor changes in participation rates in future. Secondly, there is a need to get a sufficient number of responses to provide information about the demand for recreational services at a regional level. The survey is being done during the 22 months between August 1998 and May 2000. About 800-1000 telephone interviews are conducted every second month. Printed questionnaires are then mailed out to those respondents who have participated in outdoor recreation activities in the 12 months preceding the telephone interview. In this way, all seasons are represented in the sample, and some of the bias caused by memory failure will be minimized. The topics covered by specific survey questions are presented in Table 1.

A pilot study was conducted in 1997 (Sievänen, 1998). The objectives of the pilot study were to test survey instruments, questionnaires and the general data collection organization of the project. The pilot study uncovered examples of interesting differences between recreation behaviour in northern and southern Finland. In the northern rural community, people spent more time (30 vacation days) and money (EUR 553) on outdoor recreation. Among the most popular activities are fishing and snowmobiling, and people usually take part in these activities in areas which are not designated for recreation. In the southern city areas, less time (20 vacation days) and less money (EUR 392) are spent on recreation activities. Swimming and sunbathing are popular and people typically visit municipal recreation areas.

Recreation supply study

In the supply study, a nation-wide inventory of different types of recreation areas, trails and other recreation services is being carried out. The data collected include the amount and location of available recreational areas as well as qualitative descriptions of services and other information. Data on the provision of recreation services are gathered using questionnaires from all 455 municipalities and from two state agencies. Information about recreation areas is saved in a GISdatabase, which will later be merged with the database holding information on sports areas and facilities. These two databases are accessible for public use.

Analyses of supply data will produce quality criteria and indicators for the designated recreation areas. The supply assessment will also give valuable information about the state of implementation of land-use plans within the different regions.

Comparison of demand and supply

The issues examined in this comparison of demand and supply include, firstly, whether the actual supply of recreation opportunities meets the demand for outdoor recreation and, secondly, how demand and the supply are likely to change in the future. From the policy-making point of view, an interesting question is what kind of action will be needed in order to achieve a balance between demand and supply. Area-based indexes in the GIS-database make it possible to compare recreation areas and their use in different parts of the country both on an owner group basis and on

Table 1: Questionnaire design

Telephone interview	
Issue	Topics of questions
Participation in outdoor recreation activities in last 12 months	participation in 90 different activities (yes/no)
Frequencies of participation in	number of times, number of times when this activity was
activities	the main reason for recreation
Last recreation trip	when, activity, length of time
Hindrances to outdoor recreation	health, time, distance
Socio-economic background	gender, age, education, occupation
Mail survey	
Issue	Topics of questions
Last recreation trip close to home	when, activity, length of time, with whom, where
	time expense intention to recreate next time
Last recreation trip including an	when, activity, length of time, with whom, where
overnight stay	and characteristics of the area, travel distance, travel
	time, expense, intention to travel next time
Travels abroad for recreation	when, activity, length of time, where
Time spent in recreation	number of recreation visits, daily, during last week,
	hours of recreation, daily, during last week
	amount of vacation days spent on outdoor recreation
Recreation areas and services used	communal, state owned, private
	number of days on each area type
Money spent on recreation	clothing, equipment, travel
Household production factors	skills, equipment owned, recreation areas near the living
Socio-economic background	environment income, household size, education, urbanization level of home community, amount of leisure time

an activity basis. One of the key indexes is 'recreation trips or days per hectare of recreation area'. The supply of recreation areas is assumed to have an effect on the demand for recreation facilities. This effect is being studied, by including supply indexes in demand models.

References

Sievänen, T. 1998 (ed.) LVVI-esitutkimusraportti. Metsäntutkimuslaitoksen tiedonantoja 702, 1–109. [LVVI pilot study report. Finnish Forest Research Institute Working Papers 702, 1–109. In Finnish].