National Recreation Monitoring in Finland
- Experiences of Methodology

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Objectives of recreation monitoring

• to inventory and to assess nation wide outdoor recreation demand and supply in Finland
  ▪ to monitor changes of participation in outdoor activities, behaviour patterns
  ▪ to monitor changes in supply of recreation opportunities and the quality of services
Use of information

- **Base-line statistics and databases** on continuous basis

- **Research** of different issues
  - predicting changes in participation
  - welfare impacts
  - use of state land for recreation and tourism
  - Understanding recreation patterns
NATIONAL OUTDOOR RECREATION DEMAND AND SUPPLY ASSESSMENT

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National Recreation Demand Inventory and Assessment

- The first main inventory LVVI 1 in 1998-2000, and Outdoor Recreation Statistics 2001
- The assessment studies in 2001-2007
- A new inventory is planned in 2008-2010
Partners in LVVI 1

- Co-ordination: Finnish Forest Research Institute
  - Statistics Finland
  - University of Helsinki
  - University of Joensuu
  - Finnish Game and Fisheries Research Institute
  - UKK Institute (Centre for Health Promotion Research)
- Finance: Ministry of Agriculture and Forestry, Ministry of the Environment, Ministry of Education, Ministry of Social Affairs and Health, Ministry of Trade and Industry
LVVI 1 information content

- Basic information of
  - participation in outdoor recreation
  - close-to-home recreation
  - nature trips
  - distributions of visits in different types of areas
- Special themes concerning
  - recreation valuation
  - recreational fishing styles
  - welfare and health impacts of outdoor recreation
  - Interest in nature tourism
Survey methods

- **Two surveys:**
  - telephone interview
  - mail inquiry

- Data collection method:
  - CATI (+ CAPI) and mail inquiry
  - collected by Statistic Finland

- Target population: 15-74 years old Finnish population
- Long data collection time: 24 months
- Sample size: 12,649
- 12 split samples, about 1,000 people/month
  - interviewing 10,651
  - mail inquiry to 8,466 people, 5,535 responses  
    (those who volunteered in telephone interview)
Response rate

Response rate in telephone interview and mail inquiry (%): LINE

Response rate for mail inquiry in average 65% (IN GREY)

Interview
n1 = 10 651

Mail inquiry
n2 = 5535
Non-response: 16%

- non-respondents of two sub-samples were studied by using a short inquiry
  - 40% responded to this inquiry
  - 90% of those sampled reported at least some information of their outdoor recreation for those two months

=> no remarkable differences in outdoor recreation behaviour between respondents and non-respondents were found
Weighting of data

- Sample weights were produced to reduce the biases between response and non-response
  - Post-stratification
  - Information received from population register (gender, age, area of residence) and survey season
- Answering to the mail inquiry was not random
  - Logit models
  - New weights were calibrated by using the odds ratios for willingness to answer and by information from population register
An example of question used in LVVI...

Screening question: "Have you during the previous 12 months period participated in berry, mushroom, herbs, flowers etc. picking?"

If responded yes, then...

- Have you participated in berry picking?
- Have you participated in mushroom picking?
- Have you participated in picking herbs, flowers etc.? 

If yes, how many times in a year?
Criteria for outdoor recreation

- Outdoor recreation or nature-based recreation refers to all activities which include exercising, moving, doing things, or being in natural environment in order to recreate in leisure time.

- One visit or recreation occasion lasts at least 15 minutes.

- Participation in outdoor activities takes place outside one’s backyard or any man-made sport site.
LVVI STUDY MEASURED...

- Participation in outdoor recreation
  - how many of Finns have participated in outdoor recreation during the previous 12-month period

- Participation in outdoor recreation activities
  - 87 activities
  - participation rate, frequency of participation

- Participation in
  - close-to-home visits
  - nature trips (includes at least one overnight stay)
LVVI 1 Products

- National outdoor recreation statistics
- Regional outdoor recreation statistics (15 regions)
- Outdoor recreation prognosis
- Studies/articles produced from data
  - use of state land for outdoor recreation (who uses, frequency of use...)
  - participation and participant profiles of summer cottage use, boating, berry picking, mushroom picking, fishing
  - infrequent participation and perceived constraints
  - Close-to-home recreation and active living
National Recreation Supply Databases

- GIS – databases of
  - recreation areas
  - trails
  - other recreation services
  - managed by public agencies (state or municipalities) and private enterprises
  - These databases are managed by Finnish Environment Institute (Syke), Metsähallitus (Forest and Park Service) and University of Jyväskylä
  - Everyman’s portals:  
    - http://www.liikuntapaikat.fi
    - http://www.utinaturen.fi
More information of outdoor recreation in Finland and LVVI study

www.metla.fi/metinfo/monikaytto/lvvi

Thank you!