

Making use of visitor monitoring data: Local economic impacts of park visitation in Finland



METSÄHALLITUS

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**"Monitoring and Management of Visitors and
Visitor Flows" -workshop**

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Finnish Forest Research Institute

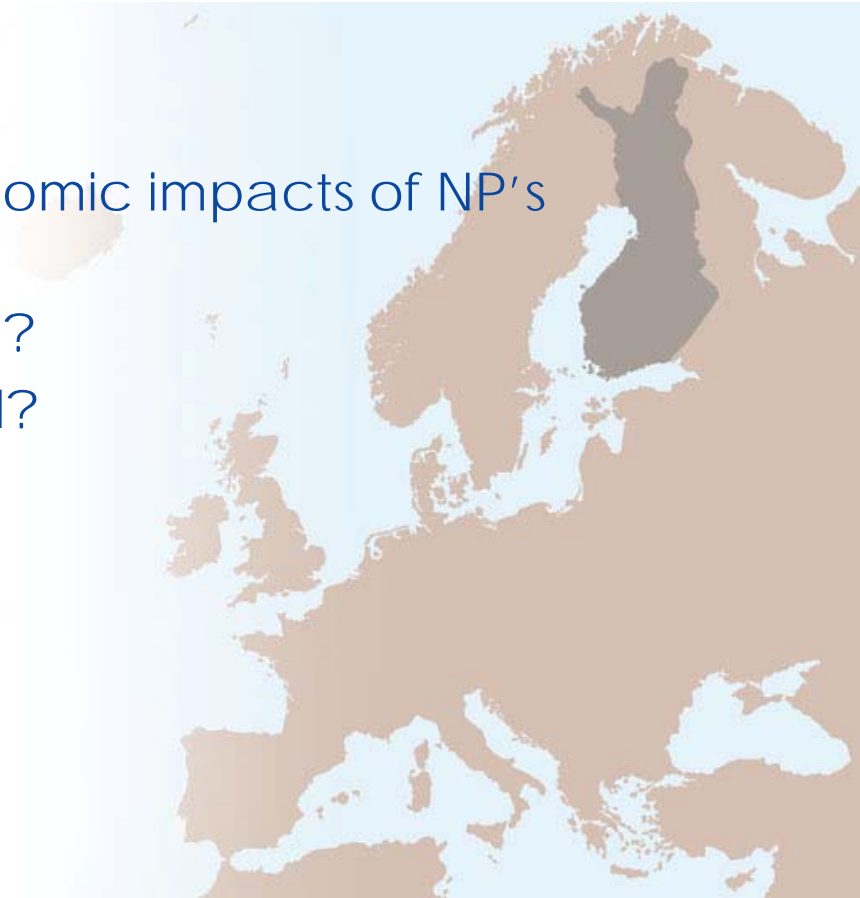
- *"Builds the future of the forest sector by producing and disseminating information and know-how for the well-being of society"*
- National forest research organisation mainly funded by government
- Ministry of Agriculture and Forestry

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Contents of Presentation

- What do the local economic impacts of NP's mean?
- Why are they measured?
- How are they measured?
- Results from Finland
- Future?



What are the economic impacts of park visitation?

→ Local economic impacts of visitor spending

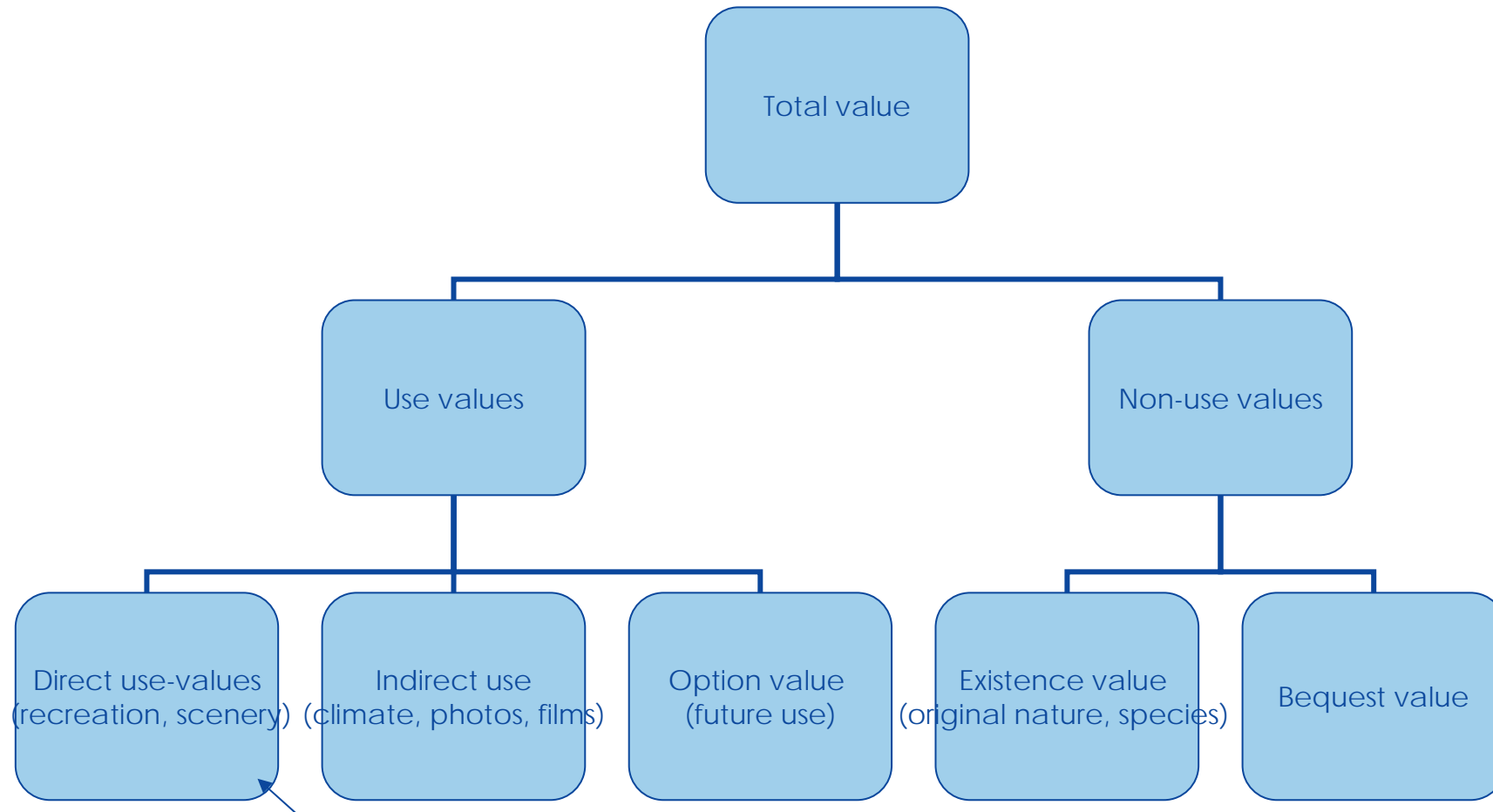
- income (€)
- employment (man-years)

- How the money spent by visitors shows in local economy - or does it show at all?

- NOT the total value of the NP



Total value of the national park



The visitors' spending increases income and employment in the area. Income effects reflect the part of direct use values, not the total value.



Why to estimate economic impacts of park visitation?

→ To answer increased interest, need and demand

1. To justify budget funding
 - Benefits are not obvious
 - Decision-makers prefer numbers
 - State provides facilities, local entrepreneurs benefit
2. To measure effectiveness of parks and parks' management also in economic sense
3. To justify, support and plan new investments and their allocation
4. To increase general acceptability of NP's
 - Nature protection can be combined with business issues



How to estimate economic impacts of park visitation?

1. Measure visitor spending / income
 - How much do the visitors spend during their trip?
 - How much income do the enterprises get from national park tourism?
2. Study how the visitor spending / income circulates in the local economy
 - Input-output models
 - Ask from whom the entrepreneurs buy goods and services
3. Study employment effects
 - Apply general employment / output (turnover) - ratios
 - Ask from entrepreneurs how many people they employ



→ An example from Finland



National Parks in Finland

- A total of 35, covering 8 850 sq.km.
- Estimated 1 750 000 visits in 2008
- NPs are managed by Metsähallitus NHS



Where did we start?

- **The need for a new tool**

- For calculating the local economic effects in a reliable way
- To get comparable results across different NPs and across time
- Practical information
- Cost-effectiveness



First step...

- **Benchmarking**

- U.S. MGM2 (Money Generation Model 2) is a model developed by Michigan State University to USDI National Park Service to evaluate the local economic impacts of National Park tourism

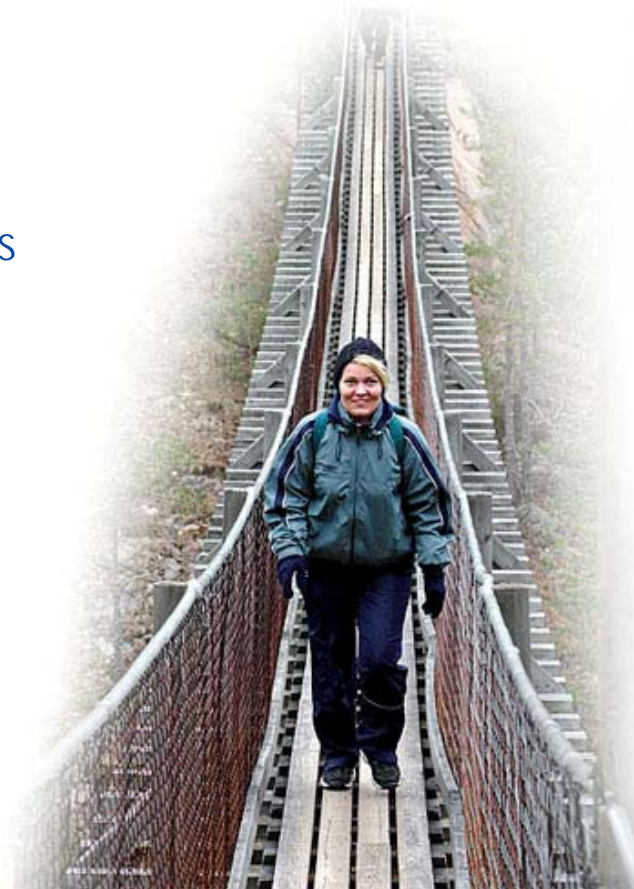
- **Excel application with three inputs:**

- number of visits
- average spending
- multipliers from local input-output tables

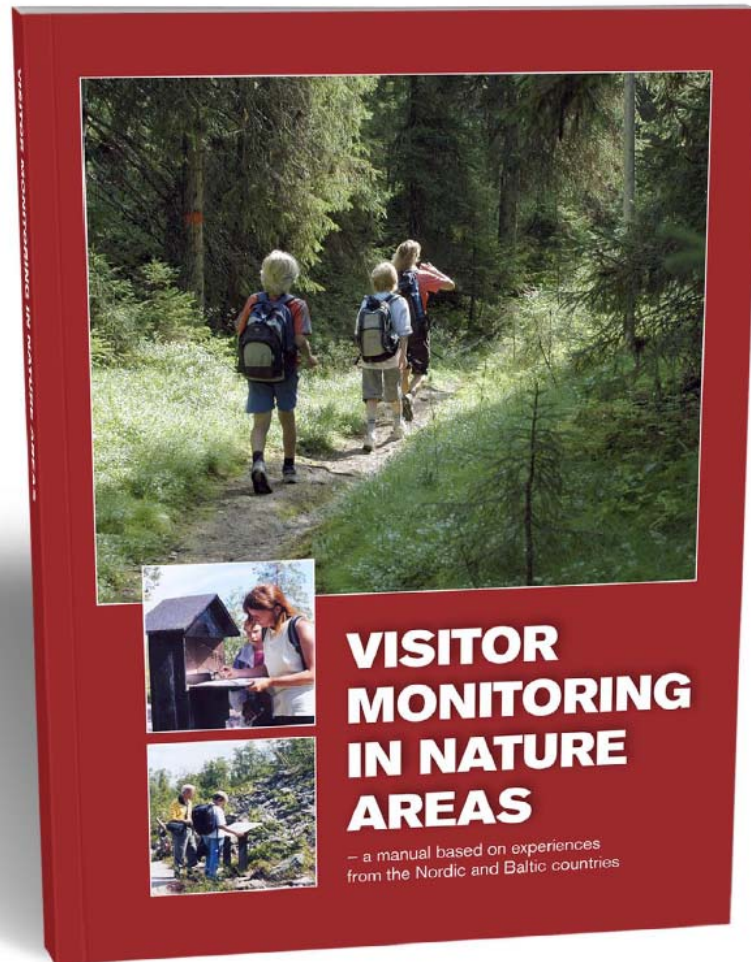


What did we aim at?

- **An excel-based application producing**
 - direct and total income effects (€)
 - employment effects (man-years)
- **An estimate for each NP** → for those parks where no visitor data exists, data from same kind of park is used
- **Enables estimation of total, state-level effects** (summing up all NPs)
- **Easy-to use, practical tool for Park Superintendents**
- **But also strategic information for upper-level management**



Basis: Harmonised visitor monitoring methods in National Parks



- visit counting
- visitor surveys
- reporting of the results



Basis: The Visitor Information Entity in Metsähallitus - ASTA

SURVEYS AT

- protected and recreational areas
- visitor service points
- nature tourism enterprises
- nature tourism enterprises with cooperation agreement, annually

CONTINUOUS FEEDBACK AT

- visitor service points
- outdoors.fi-webpages

VISITS AT

- protected and recreational areas
- visitor service points
- outdoors.fi-webpages



Good use of ASTA visitor information

- Annual number of visits
- Visitor spending in the park and its surroundings
 - Spending related to the trip: yes / no?
 - Costs per visitor / party?
 - In 7 categories (accommodation, restaurants etc.)
- Other visitor information
 - How important destination the NP is?
 - Municipality of residence
 - Length of stay
 - Size of the party



13. Spending

Have you spent/Will you spend money on various activities in the national park or its environs while on this trip (see area on map)?

- yes (→ please answer the following questions)
 no (→ move on to question 14)

Please tick the box that indicates whether you are estimating
 your personal expenses and your share of your group's joint expenses **OR**
 the total expenses of your family or group.

This is a group trip organised by a travel agency or other travel operator, costing _____ €
→ In addition, please indicate any of your other expenses in the national park or its environs.

Indicate below (points A–G) your total expenses for this trip **in the national park and its environs**. (Write 0 (zero) in the column if you have not spent any money on the activity in question)

A fuel or other purchases from the service station	_____ €
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B costs for local transportation (for example local bus or taxi trips)	_____ €
--	---------

C food and other retail shopping	_____ €
---	---------

D café and restaurant purchases	_____ €
--	---------

E accommodation	_____ €
------------------------	---------

F organised programme and recreational services (eg. guided tours, entry fees and exhibitions)	_____ €
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G other expenses (e.g. fishing, hunting or snowmobiling permits, equipment hire, etc.)	_____ €
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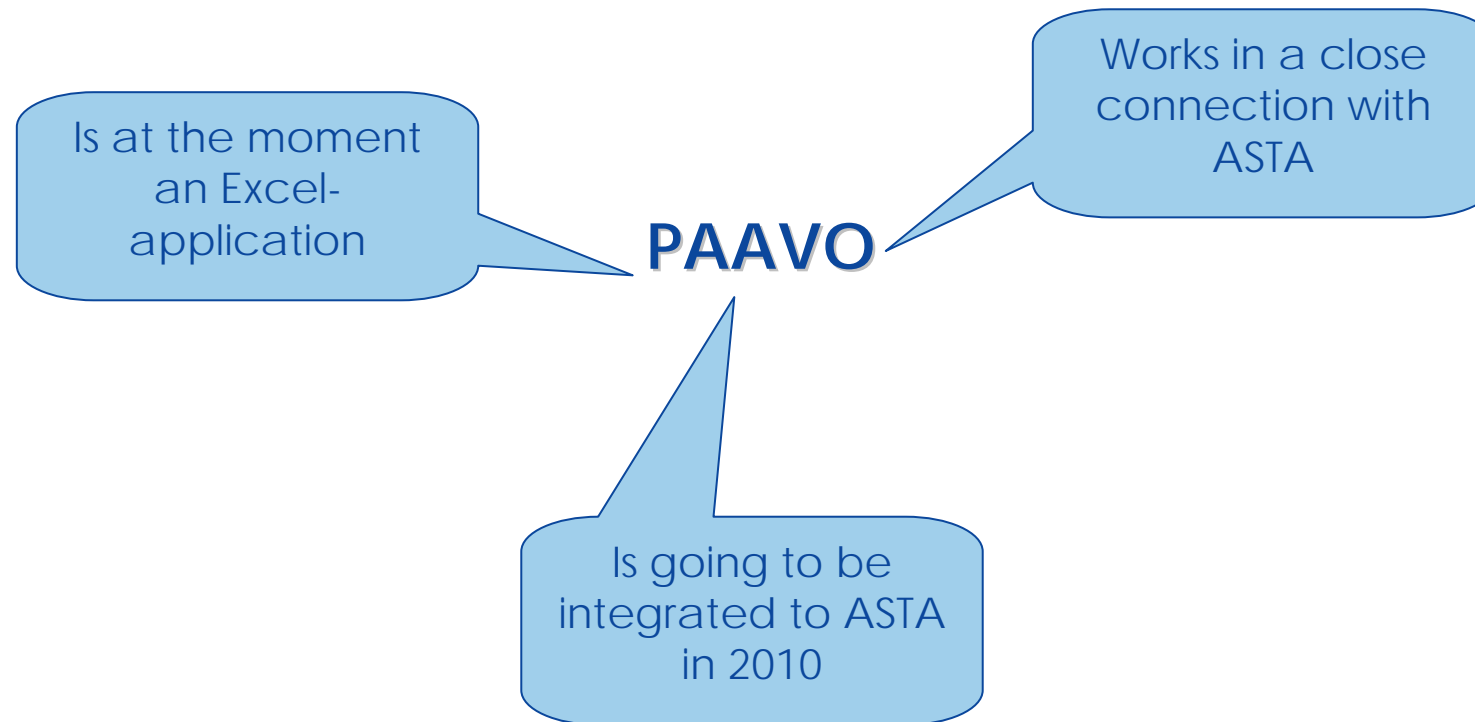
Other background information

- Defining each park's "impact zone"
 - Municipalities of location
 - Other municipalities if services there
- Classification of the parks by these zones
 - Four classes (rural, built-up areas, capital, tourism centre)
 - Density of population
- Deriving average multipliers for each class
 - From local input-output tables
 - Constructed for 21 parks from regional input-output tables

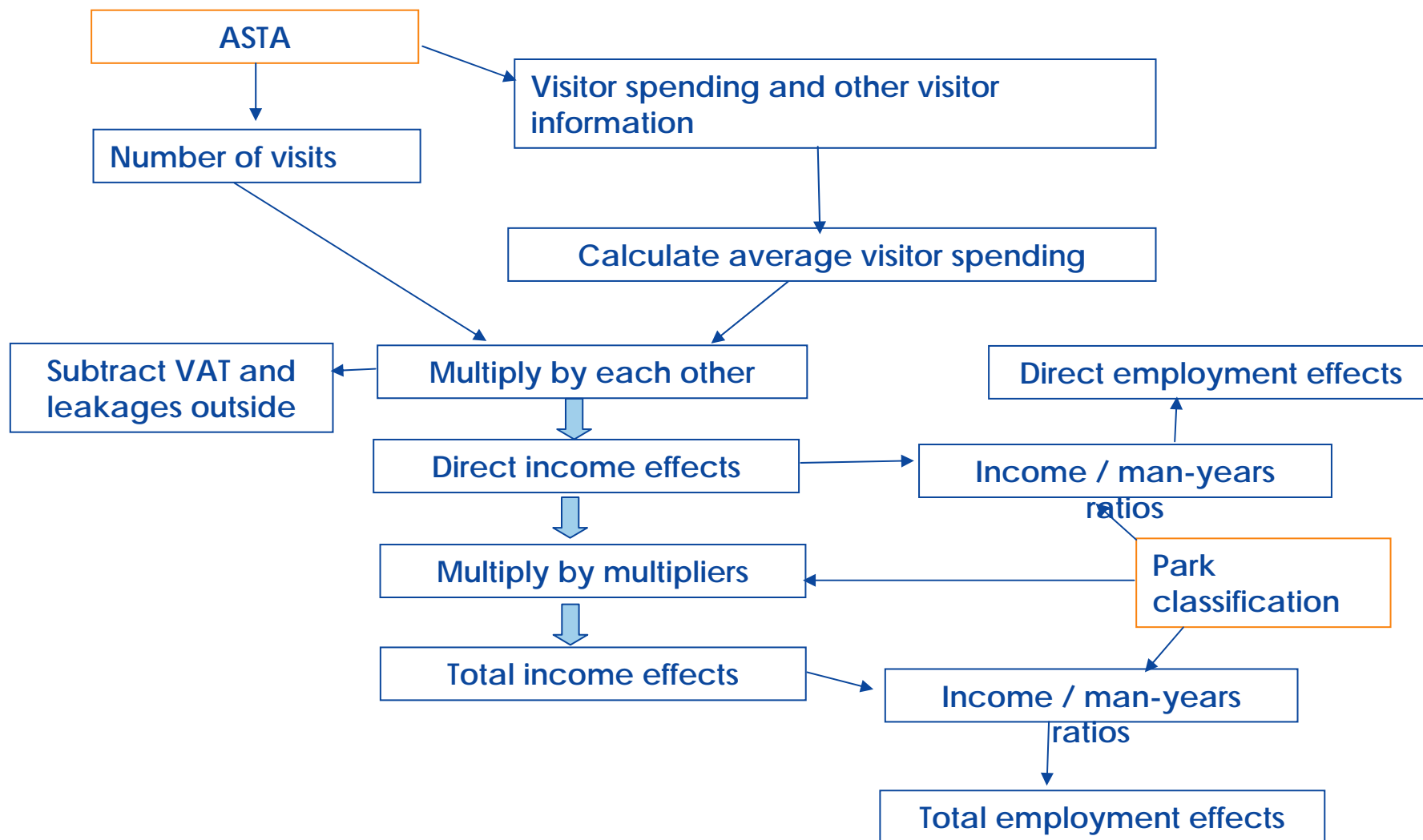


And now...

We have a pleasure to introduce an application for economic impact estimation:



The logic of PAAVO



Main results

- National parks' visitor spending results in
 - 70,1 million euros income / year
 - 893 man-years
- The largest effects at Oulanka NP and its surroundings
 - 14,2 m€ / 183 man-yrs
- For each park also impacts calculated from those visitors' spending to whom NP was " the only or the most important destination"
 - Minimum impact
- Results were published last week
- Preliminary report will be sent to all Members of Parliament



Reliability of the results?

- Depends on the quality of visitor monitoring
- Number of visits and spending estimates crucial
- Average multipliers (park classification) also source of error
- Minor effect on results
- Reliability can be described with the number of NP's
 - where number of visitors are estimated electronically
 - where impacts are estimated with an own, recent visitor survey
- Reliability is worse for those NP's
 - where impacts are estimated applying another NP's visitor survey data
 - where visitor survey is old



Reliability: Metsähallitus indicators 2009

	Indicator	Number of areas in 2009
1	The number of visits for 2008 is based on electronic counters	35 / 45
2	Impacts are counted with area's "own" visitor survey from 2008 or 2009	11 / 45
3	Impacts are counted with area's "own" visitor survey conducted in 2007 or earlier	14 / 45
4	Impacts are counted with some other area's visitor survey	20 / 45



Why do the economic impacts differ?

- Obvious reasons: number of visits, length of stay
- Some parks are mainly used for day visits → less spending → smaller impacts
- Not enough services → not possible to spend money → smaller impacts
- Different profiles: backpackers / cottage renters → different spending habits



To conclude...

- Visitor monitoring data provides great possibilities for further analysis
- Finnish example: Local economic impacts of NP visitation
 - Basis: standardised visitor monitoring
 - Result: comparable income and employment effects across parks and time
- Future
 - MMV 5 conference
 - Integration to ASTA
 - Annual follow-up of the impacts
 - Even more emphasis on visitor monitoring?
 - New applications? Effects on well-being?



Thank you!

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