



**Faculty
of Forestry
and Wood
Technology**

- International IUFRO Symposium
- Advances and Challenges
in Managerial Economics
and Accounting
- 9 – 11 May 2016 Vienna, Austria

Usage of the Local Multiplier for Decision-making of Management in a Forest Enterprise

Mendel
University
in Brno



Jitka Meňházová

Department of Forest and Wood Products
Economics and Policy

Content

- introduction
- interest area
localization and
description
- methodology and its
application
- selected results
- conclusion



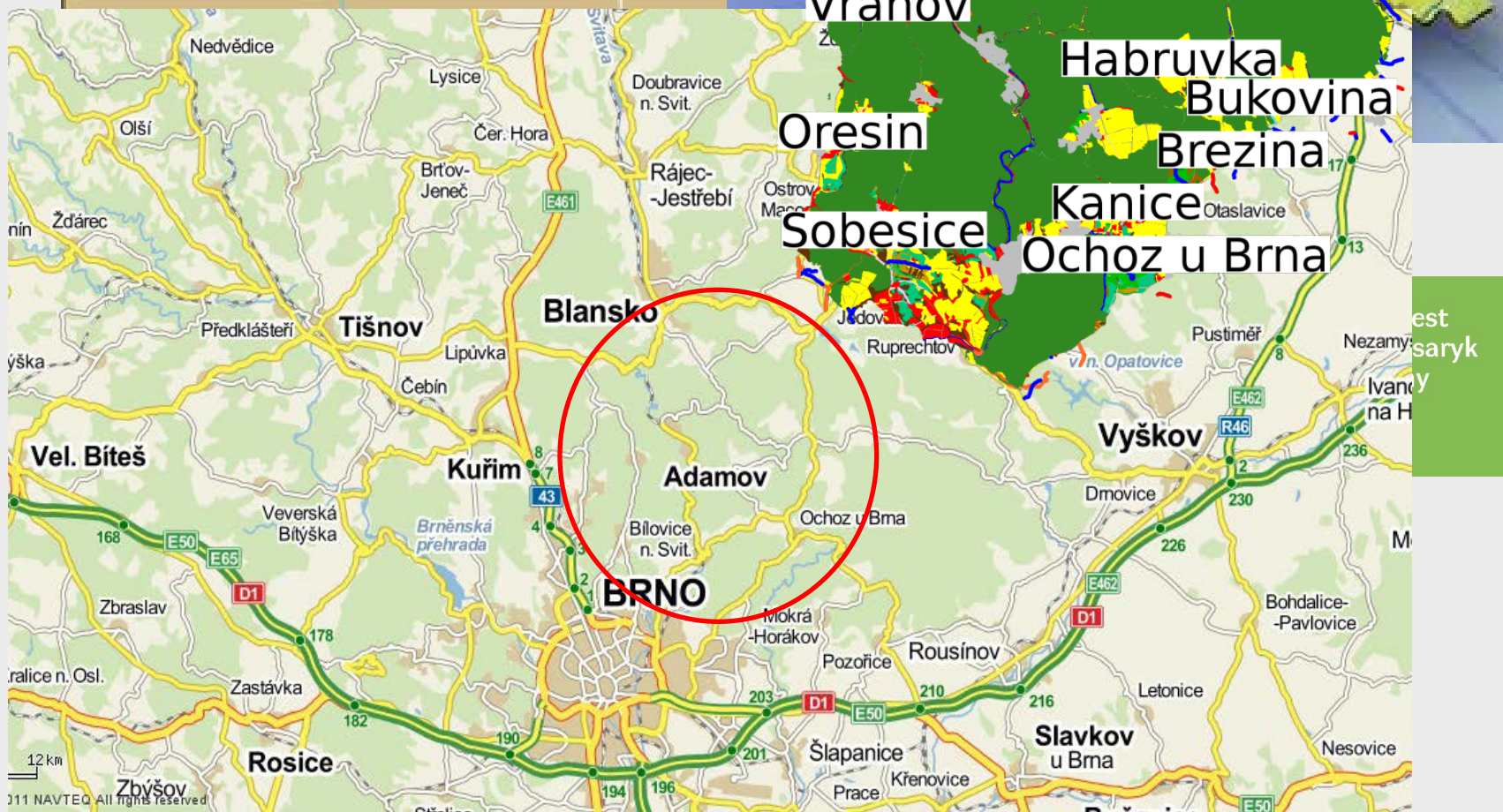
Introduction

- **the aim:** to describe a methodological approach of research activities of FFWT, Mendel University in Brno
- focus on identifying the actual and potential cash flows in the area of interest and benefits of forest enterprises for the local economy

Introduction

- cooperation:
 - Department of Forest and Wood Products Economics and Policy
 - Department of Landscape Management

Interest area – localization



Training Forest Enterprise Masaryk Forest Křtiny

- organisational part of Mendel University in Brno
- special-purpose facility of the FFWT
- foundation in 1923
- 3 forest districts
- 10,492 ha (10,265 ha forest land)
- certification systems: PEFC, FSC
- altitudes ranging from 210 to 575 m asl
- 46 % coniferous, 54 % deciduous tree species
- 116 forest types in 4 forest altitudinal vegetation zones

Methodology and its application

- comprehensive survey of actual and potential cash flow of the forest ecosystem functions provided by TFE Křtiny
- 2 parts of solution:
 - analysis of recreational use
 - economic analysis (LM3 calculation)

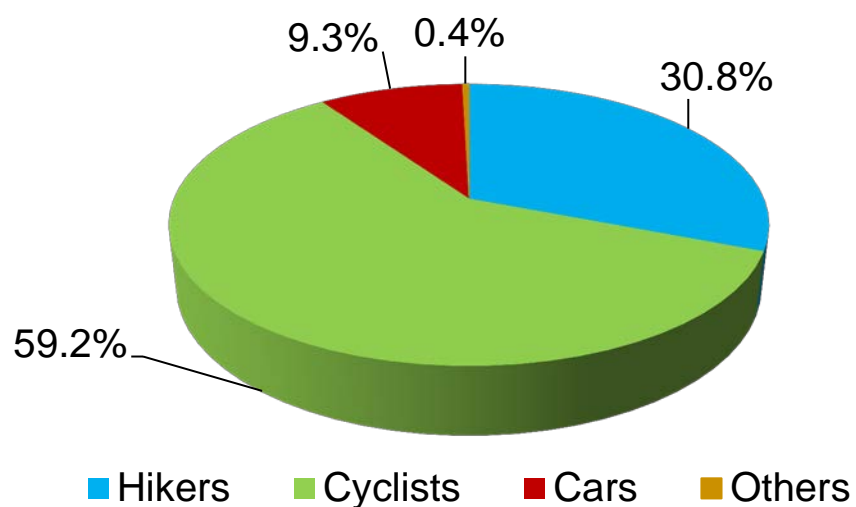
Visitors monitoring by specialized firm

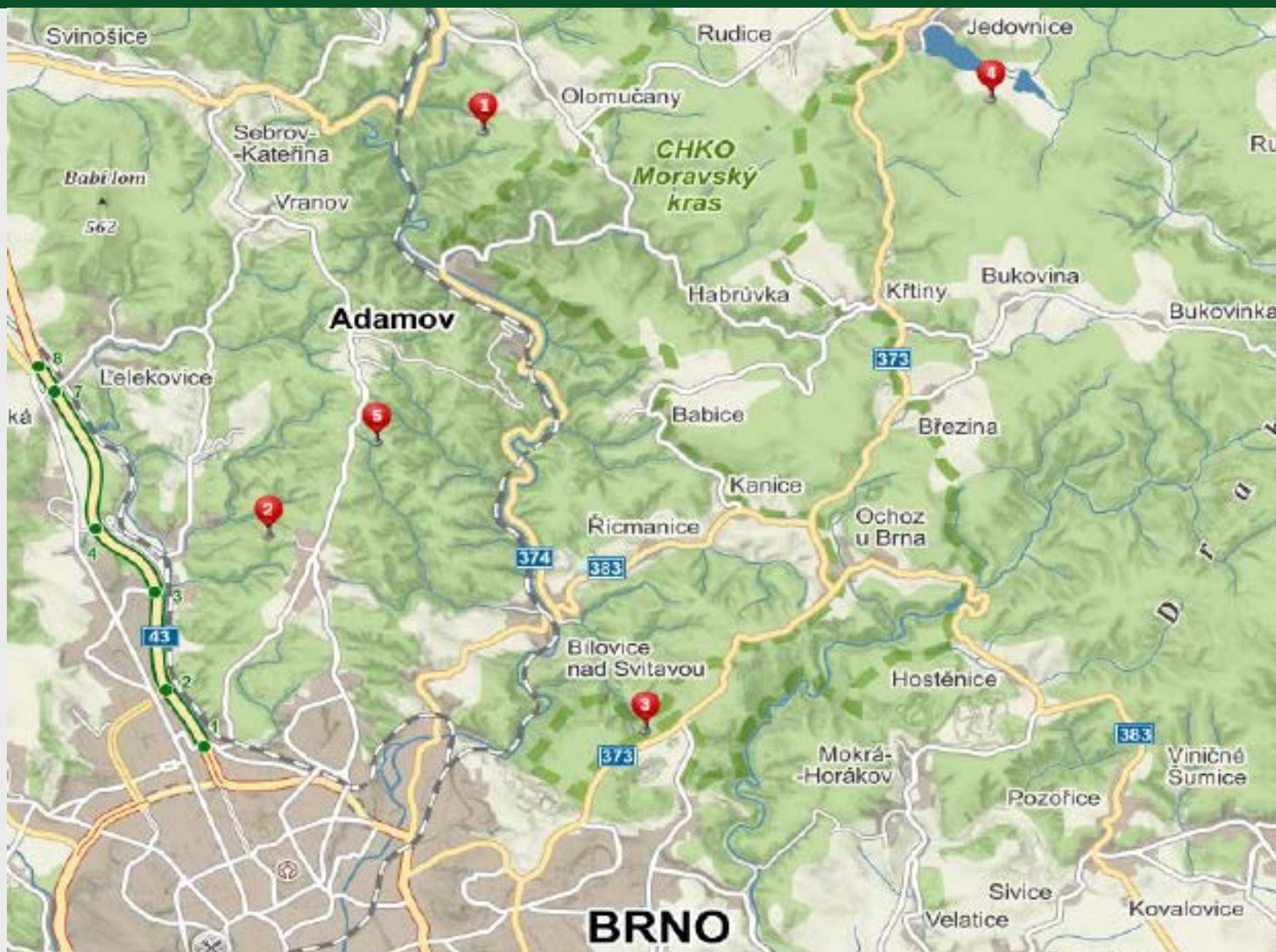
- pyro electric sensor
 - records the thermal radiation of human body
 - adds up all users
 - option of directional movement resolution
- calibration of sensors was performed by FFWT students



Visitors monitoring by specialized firm

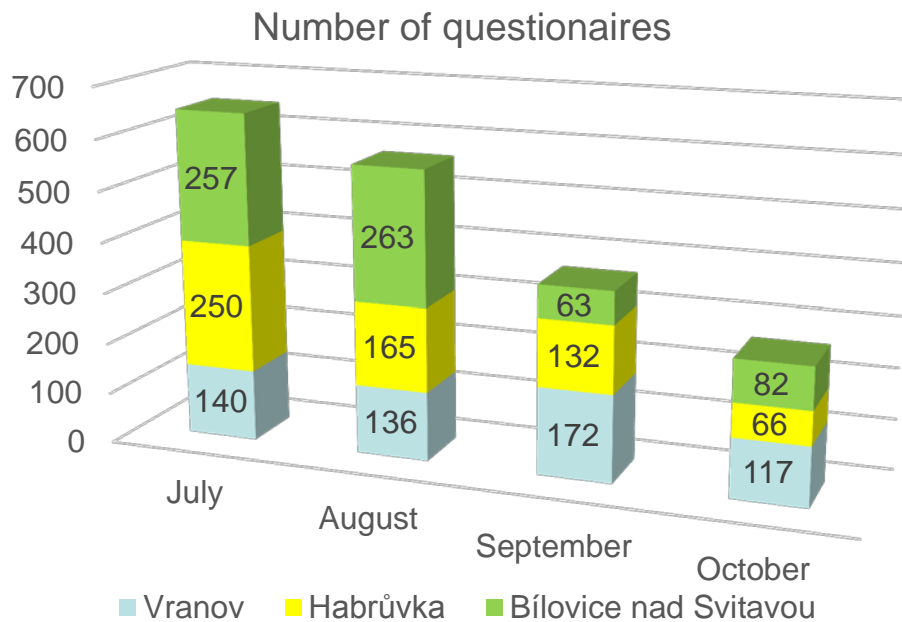
Indicator	Locality 1	Locality 2	Locality 3	Locality 4	Locality 5
Total number of visitors	8,643	19,295	36,054	10,036	14,784
Daily maximum	370	352	631	366	527
Daily minimum	1	0	22	0	4
Most frequent day	Saturday	Sunday	Sunday	Sunday	Saturday
Monthly average	1,719	3,839	7,173	1,997	2,941





Visitors monitoring by students

- 5 localities
- a questionnaire survey
- July and October 2015 – a total of 1,843 questionnaires were filled out

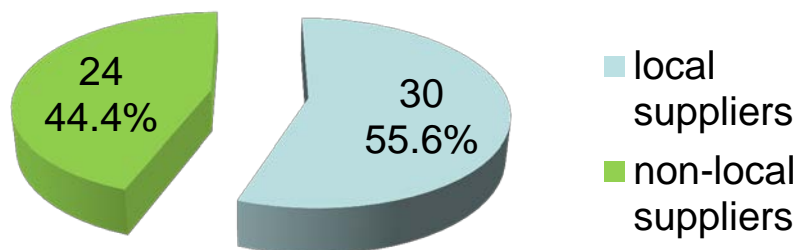


Economic analysis

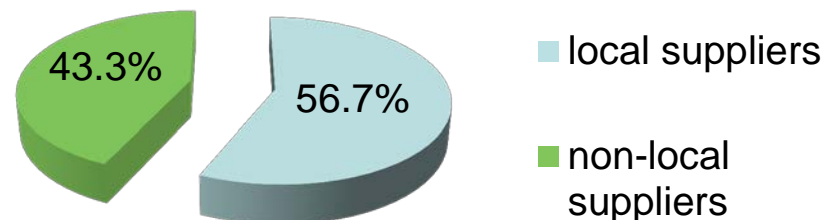
- The methodology of the calculation of the LM is divided into four parts:
 - defining the area of interest (TFE Křtiny)
 - districts of Brno-Country and Blansko
 - calculation of LM2
 - calculation of LM3
 - a questionnaire survey necessary to calculate LM3

Selected results – suppliers

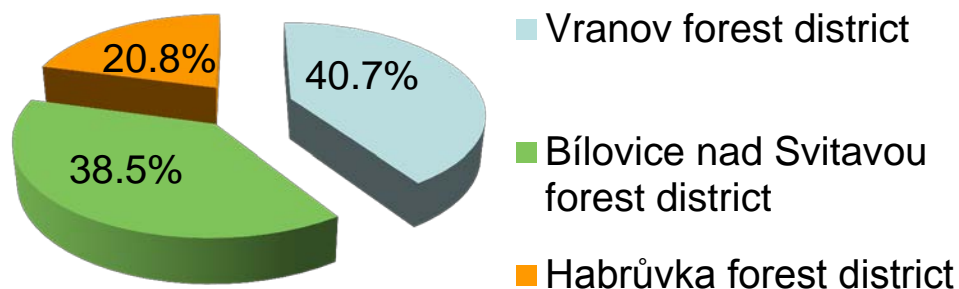
The number of suppliers



The expenditure on suppliers

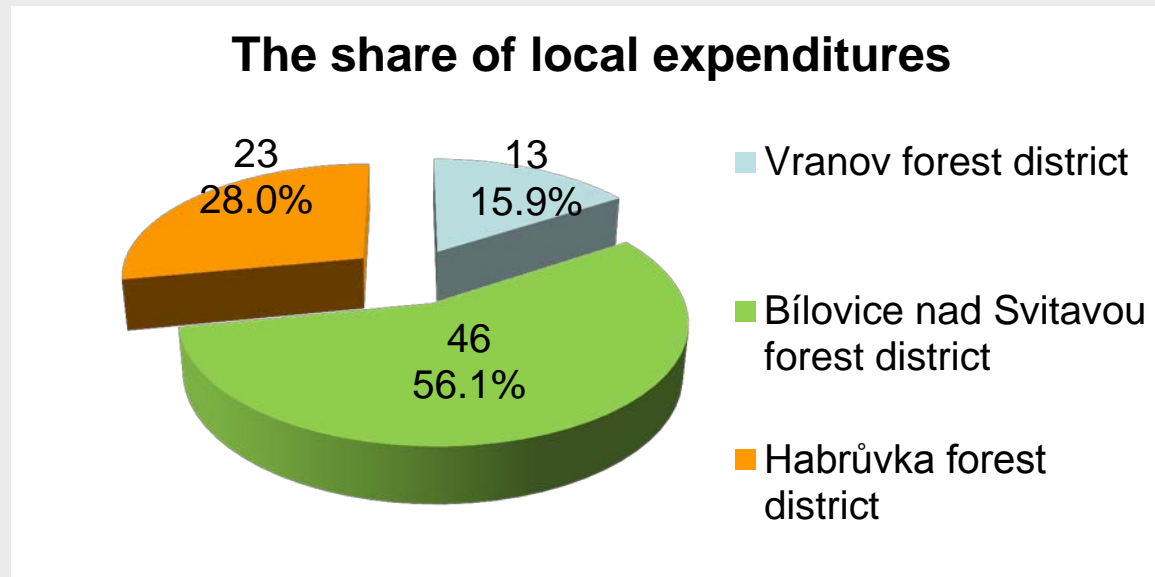


The share of local expenditures



Using structured interviews, a total of 23 filled out questionnaires were obtained from 30 local suppliers (76.67 %).

Selected results – employees



- A total of 57 filled out questionnaires were obtained from structured interviews (69.51 %).

Local multiplier

- the value of LM2 score: 1.23
- the value of LM3 score: 1.52
- compare with recommended values and with similar enterprises

Conclusion

- methodological approach to the quantification of the importance of a forest enterprise for the local economy
- contribution to the research in the area of evaluation forest functions
- economic evaluation of real cash flows from the recreational use of the area of interest

A photograph of a forest path. In the foreground, a tree trunk with a white identification tag is visible. The path is covered with fallen leaves, and the background is filled with green foliage and trees.

Thank you for your attention...

Ing. Jitka Meňházová

Department of Forest and Wood Products Economics and Policy

Faculty of Forestry and Wood Technology

Mendel University in Brno

Czech Republic

Email: jitka.menhazova@gmail.com