

*FOREST EUROPE Side event - 13<sup>th</sup> Session of the United Nations Forum on Forests*

## **FORESTS AND SUSTAINABLE CITIES IN EUROPE:**

Contribution of forests and SFM to sustainable living and well-being in  
European cities

# **Forests, Health and Urbanized Societies**

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# Megatrends

- Urbanisation
- Globalization and population growth
- Technologisation and Digitalization
- Climate Change

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# Urban societies

## Worldwide:

> 50 % of the population lives in urban areas

(United Nations, 2014)

> 70 % expected by 2050

(FAO, 2016, Guidelines on urban and peri-urban forestry)

## Wildlife vs.

## Pokémon:

73 % vs. 53 %

(Science, 2012, issue 3456)

## Megacities:

28 in 2014, home to 453 million people

(United Nations, 2014)

## Consequence:

Lack of green spaces → **disconnection**

## Europe:

73 % of the population lives in urban areas

(United Nations, 2014)

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# Health challenges

- EU: 50-60 % of all lost working days due to stress
- Worldwide: 1.2 million people die due to urban air pollution each year
- Worldwide: 300 million people suffer from depression
- EU: 7 % of entire population affected by burnout (34.61 million) <sup>(1)</sup>

Source 1: Statistik Austria 2008, Ö Bundesverband für Psychotherapie November 2010, Burnout Kongress Wien 2006, Deutsche Gesellschaft für Personalführung e.V. 2011, Fürstenberg-Performance-Index 2011, WHO 2004-2005, Felix Burda Stiftung-Booz & Company 2011, IMAS 2010, Österreichischen Bundesverband für Psychotherapie 2010, www.wien.gv.at/statistik/arbeitsmarkt/tabellen, www.arbeitundbehinderung.at/de/arbeitsmarkt/arbeitsmarktdaten

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**... prescribe yourself  
a dose of forest!**

# Strengthening social sustainability

## FOREST EUROPE Expert Group

1. Impacts of forests on Human Health and Well-being
2. Concepts of using forests for health aspects
3. Forest management and human health benefits
4. Green jobs related to the therapeutical and recreational use of forests
5. Policies, strategies and administrative mechanism

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# Impacts of Forests on Human Health and Well-being

...positive effects on physical and mental health

...promote regular exercise, healthy lifestyle

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# Physiological effects

***Stress  
reduction***

***Physical  
activity***

***Cortisol, blood pressure,  
pulse rate***

***Children***

1. LEE et al., 2011; PARK et al., 2008; PARK et al., 2009; TSUNETSUGU et al., 2007, 2010, 2013  
2. HERRMANN et al., 2007  
3. SACCOMA et al., 2005  
4. BAE, SCHMIDT, 2011; LEE et al., 2009; PARK et al., 2008; PARK et al., 2007; TSUNETSUGU et al., 2010; TSUNETSUGU et al., 2007; TSUNETSUGU et al., 2010

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# Psychological effects

***Positive  
emotions***

***Decreased  
subjective stress***

***Anxiety,  
tension***

1. THURNÄNDER et al. 2014  
2. BELL, KAPLAN, ANDERSON, COLE, LIU et al. 2011, MANDI et al. 2012, MORITA et al. 2007  
3. BRONKHORST et al. 2014, PARK et al. 2008, LAMM 2010, TILMANTALOGU et al. 2011, 2007, LEBRANDOIT 2012, WATTEG et al. 2009  
4. KANTHAKUMAR et al. 2011, MORTIMER et al. 2007

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# Social effects

***Community***

***Universal public spaces***

***Social encounter***

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# Green Jobs

*Green jobs are decent jobs, which are connected  
to the management and use of forests  
and to environmentally friendly  
production processes based on goods and services  
from sustainably managed forests* (FOREST EUROPE 2015)

**Social &  
urban development**

**Health &  
recreation**

# Green Jobs and SDG

- **SDG 3 Good Health and Well-being**

Link to forests: Promotion of physical and psychological health benefits; provision of facilities

- **SDG 11 Sustainable Cities and Communities**

Link to forests: Promotion and management of green infrastructure, urban forests

- **SDG 15 Life on Land**

Link to forests: Promotion of sustainable management, highlighting the numerous benefits

# Green Jobs - Example

## Restorative forest trail – project Green Care FOREST

- Scientifically supervised
- Resting points, information desks
- Instructions for exercises

- Forest bathing, therapy, pedagogics
- Culture – tourism – conservation – forest management – health

**Local stakeholders!**

# Forests, Health and Urbanized Societies - Outlook

- Discuss: New green jobs through social services
- Foster: Cross-sectoral communication
- Implement: Forests + Healthcare strategy
- Integrate: Green spaces in housing
- Optimize: Urban planning - grey, blue, green spaces
- Protect: Green spaces from urban encroachment
- Provide: Access within city and to surroundings

**Megatrends, health  
and sustainable cities –  
forests are part of  
shaping the future of our societies!**

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