

Demand for Forest Ecosystem Services

CLEARINGHOUSE 中欧城市森林应对方案

An analysis of societal perceptions towards forests in Europe and China

Rik De Vreese, Dennis Roitsch, Chang Zhang, Jiali Jin

With contributions by Jakob Derks, Helga Pülzl, Marko Lovrić, Jakub Kronenberg, Lisa Tyrväinen, Nicola da Schio, Corina Basnou, Agata Konczal, Dagmar Haase, Georg Winkel



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement n°821242. Several Chinese CLEARING HOUSE partners have also contributed to the funding.

该项目获得欧洲H2020研究与创新计划的资助(拨款协议号码:821242)。部分中国合作伙伴也为此提供了资金。

Study aim

To systematically and representatively analyse societal perceptions and demands towards forests, parks and trees in Europe and China, including:

- Perceptions of ecosystem services & disservices
- Perceptions of the aesthetics
- Forest and park visits during the Covid-19 pandemic in spring 2020



Data collection

China Mainland:

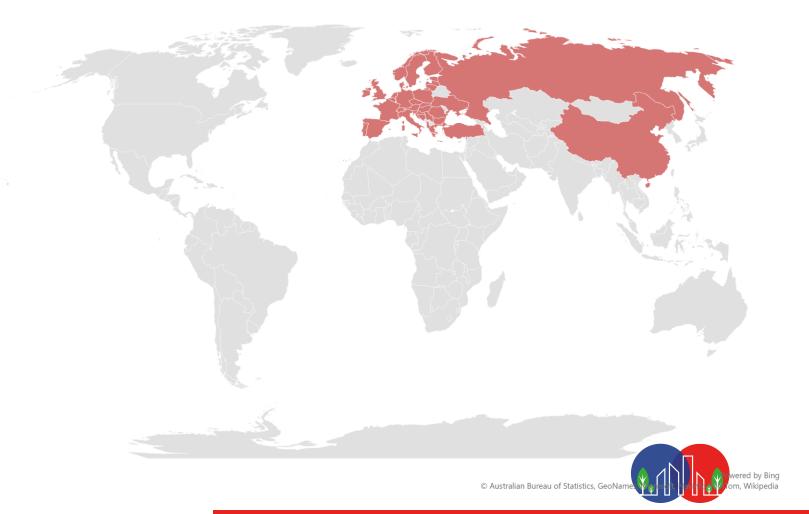
• 7,379 responses in

18 provinces (appr. 409 responses per province)

Europe:

• 13,319 responses

in 33 countries (appr. 403 responses per country)





Results

CLEARINGHOUSE 中欧城市森林应对方案



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement n°821242. Several Chinese CLEARING HOUSE partners have also contributed to the funding.

该项目获得欧洲H2020研究与创新计划的资助(拨款协议号码:821242)。部分中国合作伙伴也为此提供了资金。

Result 1: Societal perceptions towards forest ecosystem services (FES) in Europe

How important are the following benefits of this forest to you?

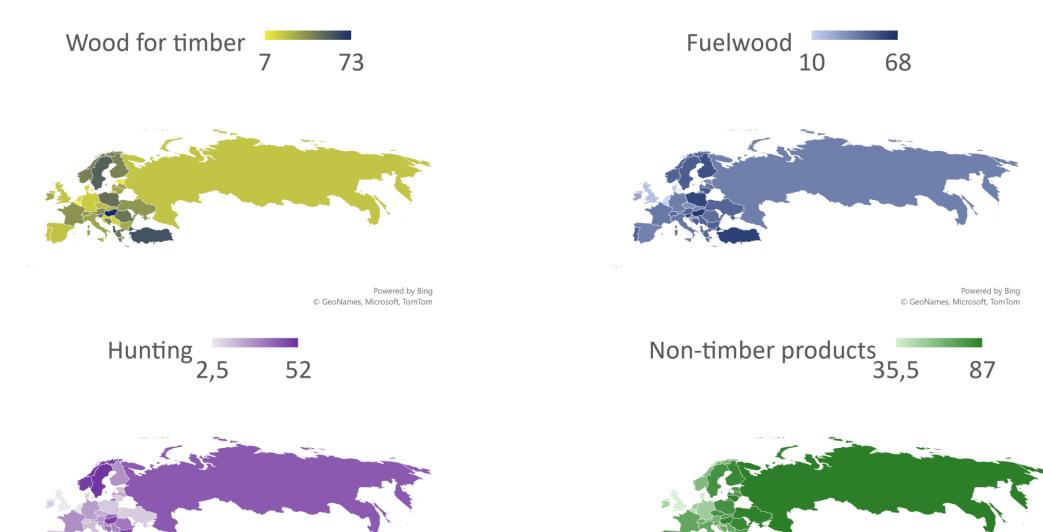
(In reference to a specific forest located on a map)

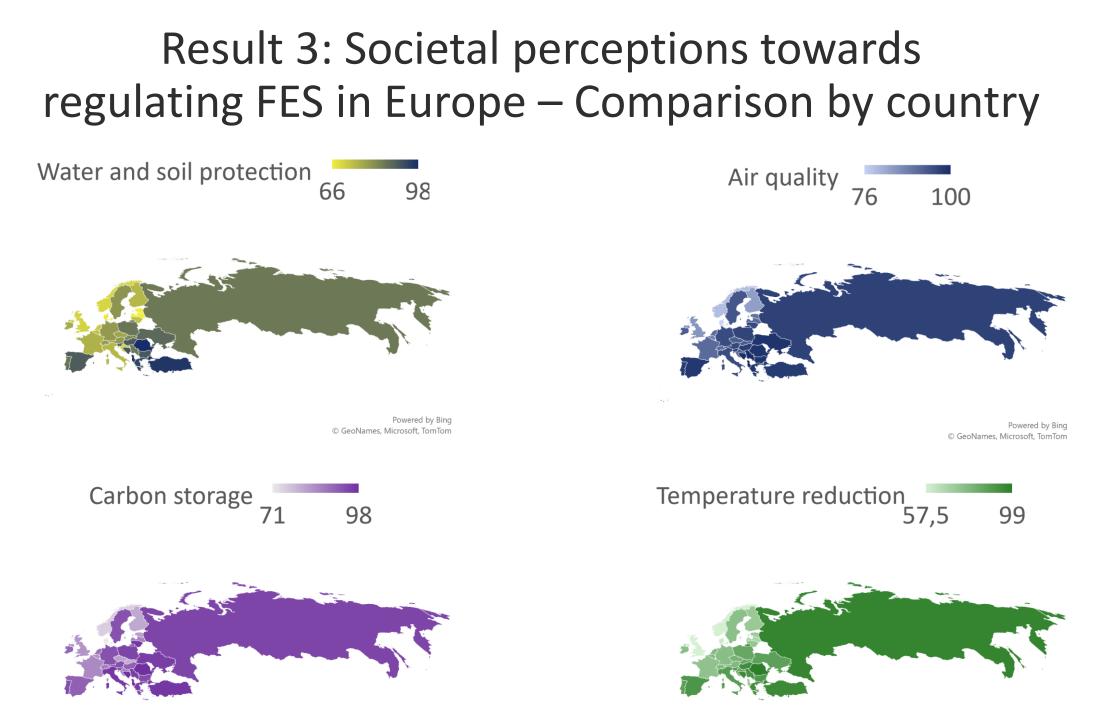
Scale: 0=Not important, 100=Very much important

n=3379

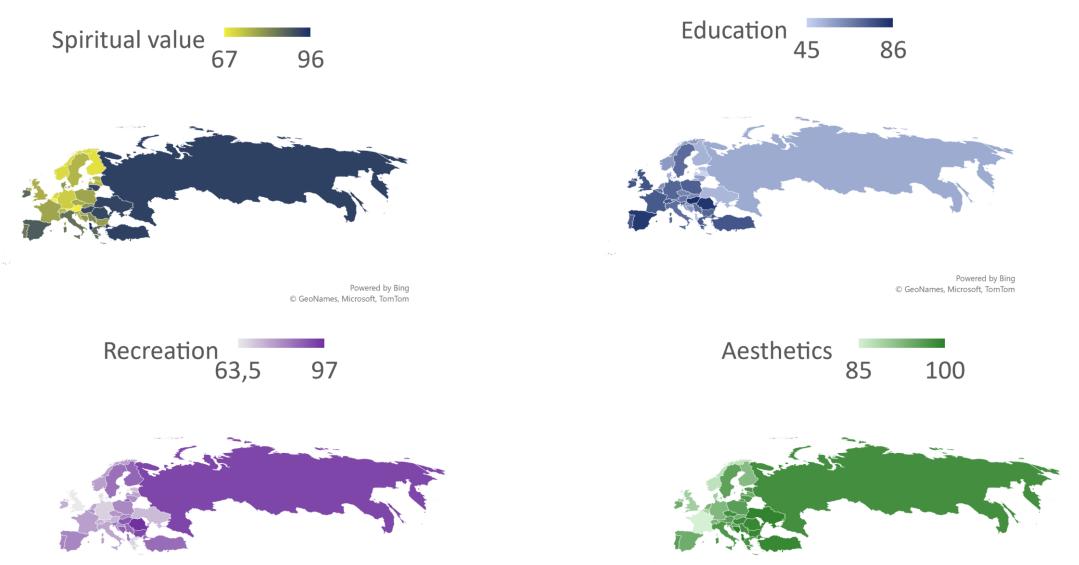
	Median	IQR		Median	IQR
Habitat for plants and animals	<mark>96</mark>	<mark>21</mark>	Water and soil protection	80	42
Aesthetics	<mark>96</mark>	<mark>22</mark>	Spiritual value	79	44
Air quality	<mark>95</mark>	<mark>22</mark>	Non-timber products	70	48
<mark>Human health</mark>	<mark>93</mark>	<mark>25</mark>	Education	68	48
Carbon storage	90	31	Employment	50	53
Noise reduction	85	34	Fuelwood	<mark>43</mark>	60
Natural hazard protection	82	40	Wood for timber	<mark>34</mark>	<mark>60</mark>
Temperature reduction	81	41	Hunting	20	55
Recreation	80	43			

Result 2: Societal perceptions towards provisioning FES in Europe – Comparison by country





Result 4: Societal perceptions towards cultural FES in Europe – Comparison by country



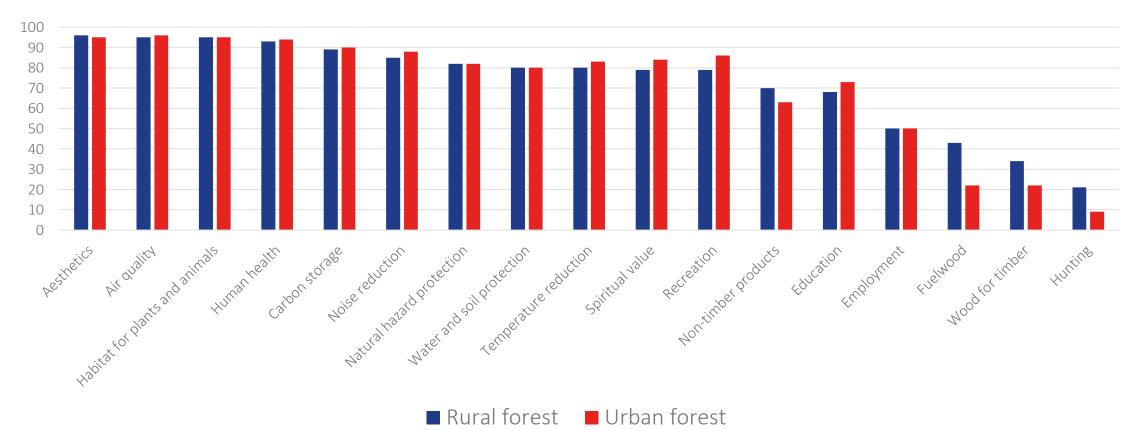
Result 5: Societal perceptions towards forests in Europe – Comparison rural vs. urban forests

How important are the following benefits of this forest to you?

(In reference to a specific forest located on a map)

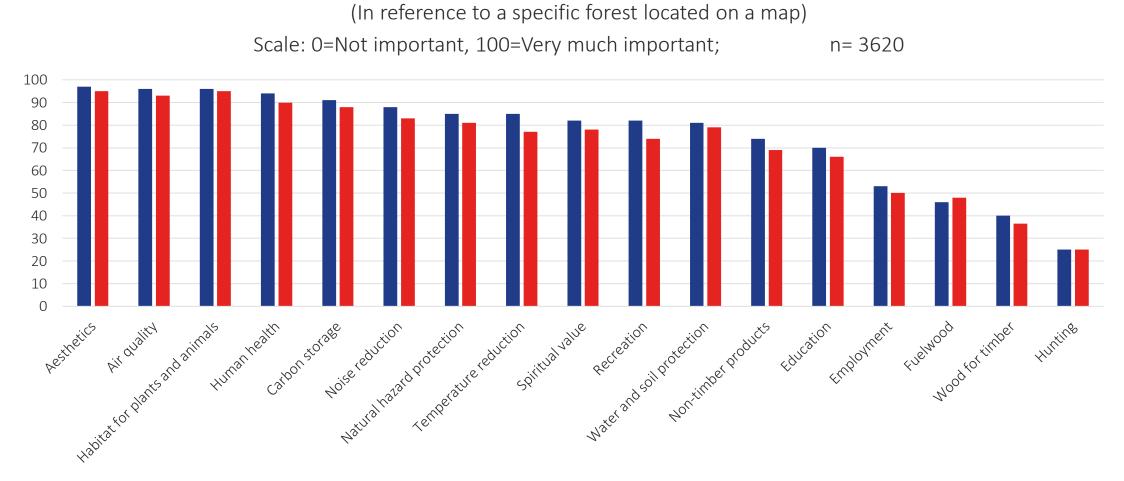
Scale: 0=Not important, 100=Very much important

Rural: n= 3631/Urban: n=3362



Results 6: Societal perceptions towards forests in Europe – Comparison by place of residence

How important are the following benefits of this forest to you?



■ City or town centre ■ Rural area/countryside

Aesthetics – Public preferences

Which of the following landscapes do you find most attractive?

Image 1 – most attractive (n=3635 / 13317) – 27,30 %



Image 2 (n=3370) – 25,31%



lmage 4 (n=1492) − 11,20 %



Image 3 (n=1454) – 10,92 %



Image 5 (n=3366) – 25,28 %



Summary

- demand regulating and cultural FES > provisioning FES
- variety in the demand across cultural and regulating FES many are rated as important
- Demand towards FES regionally diverse within Europe
- Differences between type of forest, gender and place of residence but these appear to be not very strong & mainly concern provisioning FES

 \rightarrow More detailed analysis will follow!



Thank you



CLEARINGHOUSE 中欧城市森林应对方案



The content of this presentation reflects only the author's view. The European Commission is not responsible for any use that may be made of the information it contains. 本文档的内容仅反映作者的观点。 欧盟委员会不对其中包含的信息的任何使用负责。

Ecosystem services

• Importance of ecosystem services rated using a slider on the scale from 1-100

Forests	Slider (1-100)
Provide wood for timber and furniture	
Provide fuelwood	
Provide products other than wood (e.g. mushrooms, berries, nuts, medicinal plants)	
Provide opportunities to hunt game	
Protect water quality and protect soils from erosion	
Improve air quality	
Store carbon and reduce climate change	
Provide living space for plants and animal species	
Provide cultural, emotional and spiritual value	
Provide opportunities for education (e.g. for forest kindergartens, schools)	
Provide recreation and sports opportunities	
Provide benefits to human health and well-being	
Lessen the negative impact of natural hazards (e.g. storms, floods)	
Provide jobs and economic activity	
Are beautiful	
Reduce noise	
Reduce temperature	