

GREEN FOREST JOBS

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on Green Jobs in the Forest Sector



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What is a Green Forest Job?!

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A green forest job ...

- ... complies with the principles of Sustainable Forest Management (SFM),
- ... contributes to the green economy,
- ... and is involved in the value chain of forest products and/or in the performance of forest services.

Nothing is more empowering than having a job.



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The goal of our ToS activities is to identify and list existing and potential green forest jobs in the forest sector.

- Based on an analysis of the actual situation and on future challenges we elaborated a Report, which will be published in the coming months.



Trends in the forest sector - employment

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■ Employment

- ❑ Over the period 2000-2010, employment in the forest sector in the ECE region decreased by 21%. (UNECE & FAO, 2015)
- ❑ In 2014, the number of people employed in the world's public forestry sector was 14% lower than in 2010 (FOREST EUROPE, 2015)



Trends in the forest sector –economic output

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- Economic output
 - ❑ Over the period 2000-2011, the contribution of the forest sector to Gross Domestic Product (GDP) in the ECE region decreased by 50%.
 - ❑ From 2000-2011, forest related GDP declined from 1.2% to 0.8%
 - ❑ In monetary terms, forest based GDP declined from \$374 billion to \$286 billion (UNECE & FAO, 2015)



Towards a green economy

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- Growth in green jobs (European Commission, 2014)
 - ❑ Over the period 2002-2011, employment in the environmental goods and service sectors in the EU-28 increased by 40% from 3.0 to 4.2. This includes a growth of 20% during the recession years.
 - ❑ In 2011, these sectors represented 6% of total employment in the EU-28.
 - ❑ Such employment includes: Natura 2000 sites support 8 million new jobs focused on tourism and recreation
 - ❑ Further employment growth is expected in the environmental goods and service sectors in the EU-28 .
- The importance of forests for recreational use, cultural values and for the production of wood-based bio-energy is increasing.
(FOREST EUROPE, UNECE and FAO,2011).



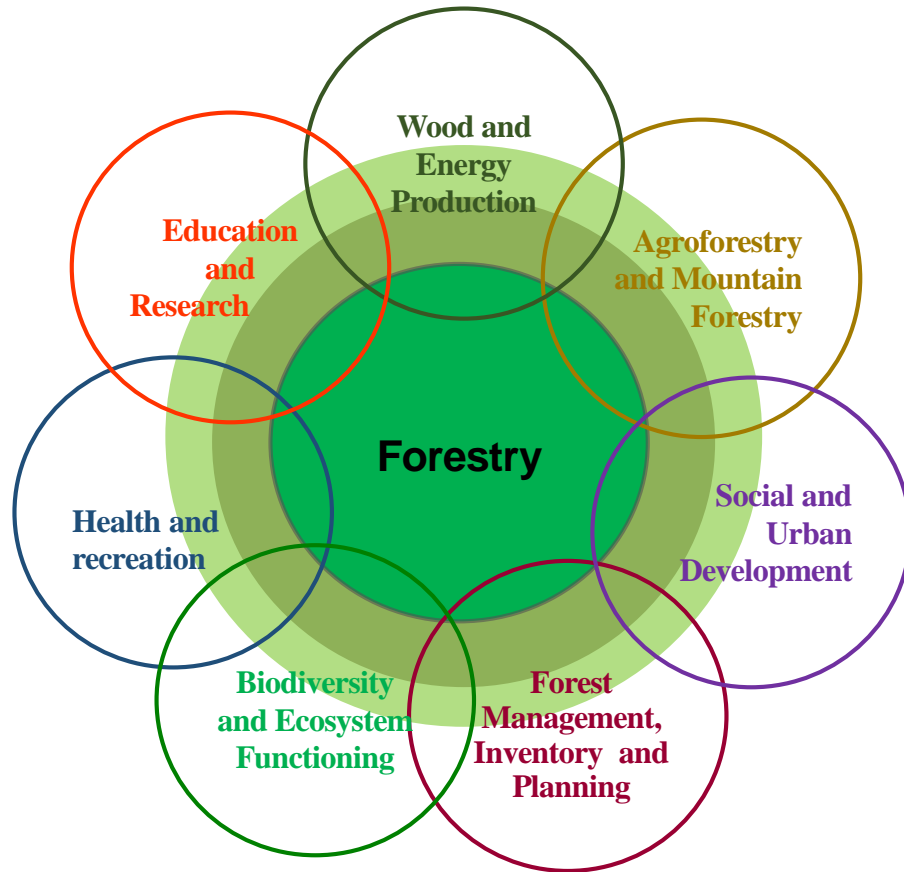
What has been achieved by the ToS?

- Outputs and impacts achieved so far.
 - ❑ Research on future green forest jobs was carried out.
 - ❑ Identification of 7 main thematic areas and 19 action fields.
 - ❑ Compilation of case studies; description of 31 job profiles
 - ❑ Surveys, expert meetings and workshops.
 - ❑ Compilation of our findings in a UNECE/FAO report on green forest jobs.






Green forest jobs and its context

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7 thematic areas

-  traditional / current Green forest jobs
-  current non-traditional Green forest jobs
-  new Green forest jobs

Thematic area: **Biodiversity & forest protection**

Example / Field of activity: **Forest protection & contingency planning**

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- Forest fire control.
- Global warming/climate change is creating major challenges.
- Forest contingency planners need to think globally. They will have to develop and implement new insect & disease management strategies.

Forest protection and contingency planning
<i>Skills, Expertise and Green Forest Professions</i>
<ul style="list-style-type: none">• Forest fire control specialists• Forest pathologists and entomologists.• Specialists in laboratories for analysis.• Specialists on forest disease and insect identification.• Specialist on surveying, monitoring and control.

Thematic area: **Biodiversity & forest protection**

Example / Field of activity: **Mycoforestry**

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- The forest mycelium is a biomolecular superhighway.
 - www: wood wide web (communicating with its environment).
- Ecosystem hydrology: integrated constructed wetlands-enhanced water quality by judicious tree planting in riparian zones for flood control.
- Working with mycorrhizal fungi in forests opens up different fields such as mycoremediation and biological control by utilising mycorrhizal benefits and interactions.

Mycro-forestry

Skills, Expertise and Green Forest Professions

- Mycology researchers.
- Specialists in mycology laboratory diagnostics.
- Forest mycologists, specialists in fungal taxonomy.
- Specialists in Myco-remediation and biological control.
- Managers of fungal forests.

Forests & water

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Thematic area: **Wood & energy production**

Example / Field of activity: **Energy production**

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- In 2015, forest based fuels provided enough wood-based energy to heat 2 million homes in Sweden.
- In 2015, district heating satisfied 60% of the heat demand in Sweden. Today, more than two thirds of the heat provided by district heating systems in Sweden is supplied by biomass and waste streams. Biomass alone accounts for 50% of the heat supply.
- A new integrated work perspective: excellent logistic abilities and negotiating skills will be required!

Energy production

Skills, Expertise and Green Forest Professions

- Forest energy producers
- Specialists in biomass marketing and logistics
- Experts in energy wood procurement
- Experts in trade and communication
- Forest entrepreneurs and operators

Thematic area: **Regional and land use development**

Example / Field of activity: **Mountain forestry**

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- Mountain forests in Switzerland protect in excess of 130,000 buildings and 1,000's of kilometres of roads & tracks from natural disasters.
 - Such forests aid land slide and avalanche prevention.
 - 49% of Swiss forests are managed as protection forests with special management restrictions imposed on them.
- Risk management will be one of the main tasks for mountain foresters to consider including:
 - Risk analysis, valuation and action planning.

Mountain forestry

Skills, expertise and green forest professions

- Mountain forestry specialists
- Specialists in the management of natural hazards
- Soil bio-engineers



Thematic area: **Health and recreation**

Example / Field of activity: **Recreation, leisure and sports**

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- In 2013, 447 million day visits were made to forests in the UK. This trend is increasing.
- In excess of 650 forest recreation sites are provided in Great Britain.
- Working in this field, one is responsible for balancing forest and visitor needs and engaging in important public relations, information & communications work.

Recreation, leisure and sports
<i>Skills, Expertise and Green Forest Professions</i>
<ul style="list-style-type: none"> • Recreation foresters • Forest rangers • Forest tourist guides • Outdoor pursuits & activity organisers • Multiple-use forestry experts

Thematic area: **Health & recreation**

Example / Field of activity **Forest ecotherapy**

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- Forests act as an antidote to stress.
 - More than 44 accredited forest ecotherapeutic areas are operated in Japan.
 - They are spreading all over the world.
- In Ireland foresters and ecotherapists are promoting the non-timber forest health benefits (of forests) by combining new forest health research with a basic knowledge of medical issues.

Forest ecotherapy

Skills, Expertise and Green Forest Professions

- Research and dissemination of knowledge about forest healing effects.
- Forest ecotherapists
- Medical doctors working in forest therapy centres
- Sports professionals, forest health coaches
- Forest educators and guided walks leaders...

Contribution of Green Forest Jobs to achieving SDG's

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3 Good health and well-being

Ensure healthy lives and promote well-being for all at all ages.

...promote the huge physical and physiological health benefits of forests and provide appropriate facilities to achieve these objectives.



11 Sustainable cities and communities

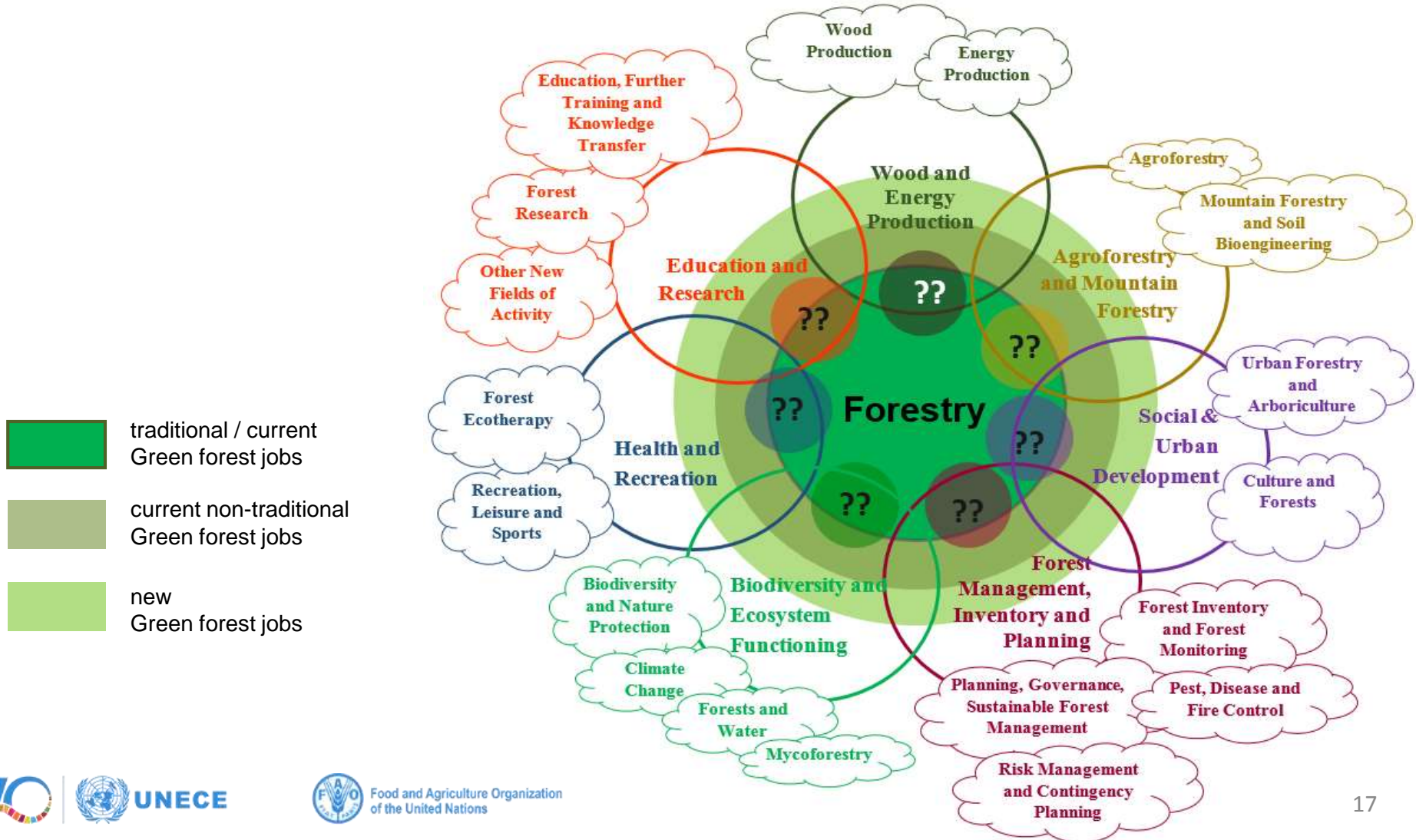
Make cities and human settlements more inclusive, safe, resilient and sustainable.

...promote and manage green infrastructures and urban forests within cities for a better quality of life.

Specific potential of Green Forest Jobs

National and regional perspectives needed

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«Green Forest Jobs have the potential to link the green economy with Sustainable Forest Management in a modern globalised world of continuous change!»

Thank you! Dziękuję! Go raibh maith agaibh!

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UNECE/FAO Forestry and Timber Section

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