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UNECE

Green Jobs in the Forest Sector

Executive Summary¹

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Sector*

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¹ This document is an executive summary of the Green Jobs in the Forest Sector study by the ECE/FAO Team of Specialists on Green Jobs in the Forest Sector – ILO/ECE/FAO Joint Expert Network

UNDERSTANDING OF GREEN FOREST JOBS

Major ongoing changes in society, the economy and technology influence global sustainability. These developments create opportunities for new technologies, investment and jobs (UNEP, ILO et al., 2008) and they lead not only to changes in the work perspective of Green Forest Jobs but also offer excellent prospects for new or realigned job developments. To cater for and to be best prepared for such transformations there is a strong and urgent need to adapt and retrain the work force associated with forestry-related jobs.

Forests are increasingly attractive to people as a place of leisure and recreation, but less and less as a workplace. High levels of occupational injury and fatal accidents, low wages and low social status in some areas, and an ageing and largely male workforce make the sector unattractive to the younger generation. FOREST EUROPE (2015) states: “Around 30% of people employed in forest related activities in Europe are 49 years old or over. This percentage is increasing. Across Europe, women account for only 20% of the overall forest workforce”. Furthermore, in 2014, the number of people employed in the world’s public forestry sector was 14% lower than in 2010. Based on these facts the following leading question arises: How can the forest workforce adapt to changing trends in the forest and other work areas to enhance forest-based economic, social and environmental benefits?

There are transformative global forces that have a far-reaching impact on and reshape the structure and functioning of our entire world. The effects of these megatrends are changing society, the economy and technology. Some of the most important megatrends are globalisation, urbanisation, climate change, new health awareness, demographic changes towards a silver society, new patterns of mobility and technology convergence. These major factors also greatly influence the employment sector. With the development of the green economy and technological innovation, for example, new work fields are being explored that impact on and affect present procedures and skills. Due to these large changes adaptation strategies are needed to cater for the needs of the current work force.

The present situation of forestry-related jobs was evaluated to identify and analyse the scope of traditional, current and potential future Green Forest Jobs. Seven thematic areas were differentiated and 19 fields of activity associated with each area were identified. The thematic areas are `Wood & Energy Production`, `Agroforestry and Mountain Forestry`, `Social & Urban Development`, `Forest Management, Inventory and Planning`, `Biodiversity & Ecosystem Functioning`, `Health & Recreation`, `Education & Research`.

The following definition of a *Green Forest Job (GFJ)* was developed by the ECE/FAO Team of Specialists on Green Jobs in the Forest Sector – ILO/ECE/FAO Joint Expert Network:

A Green Forest Job ...

... complies with the principles of Sustainable Forest Management²

... contributes to the green economy³,

... and is involved in the manufacture of forest products and/or in the performance of forest services.

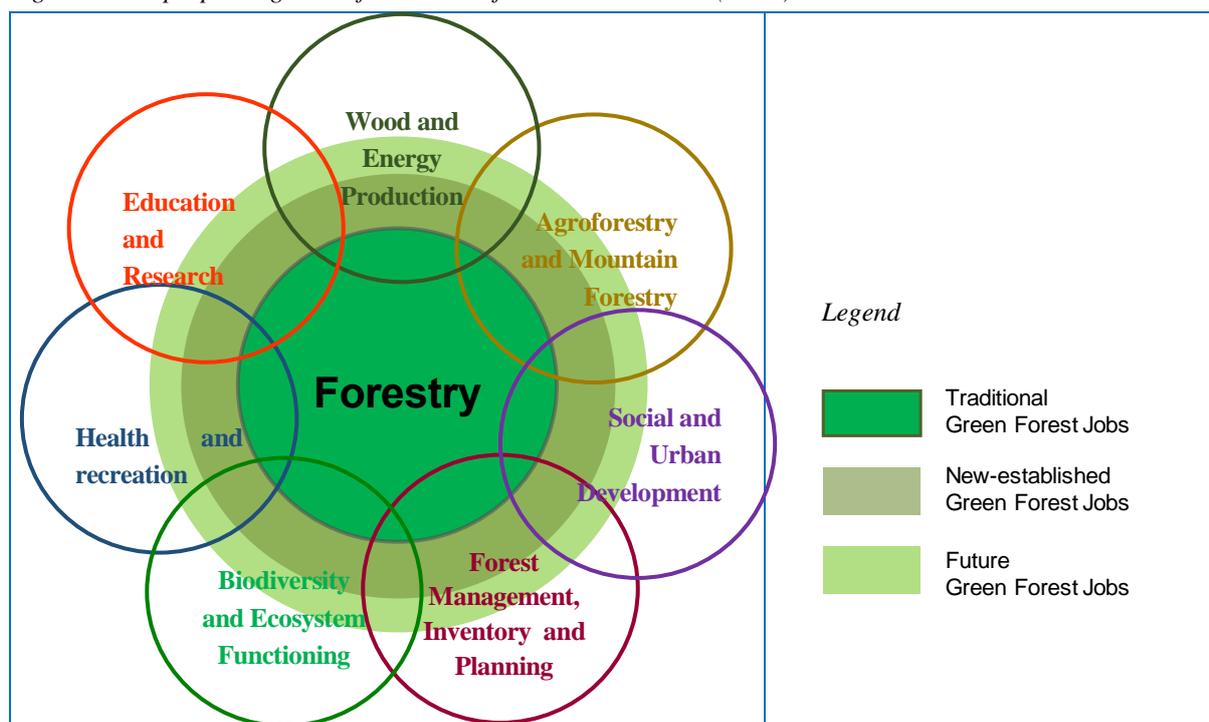
² SFM Sustainable Forest Management: “The term was defined in 1993 in the Helsinki resolution H1 as “the stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems”. (FOREST EUROPE 2016)

³ The process of reconfiguring businesses and infrastructure to deliver better returns on investments of natural, human and economic capital, while at the same time reducing greenhouse gas emissions, extracting and using fewer natural resources, creating less waste and reducing social disparities. (UNEP et al. 2008)

POTENTIAL OF GREEN FOREST JOBS

The following diagram shows the future potential of a wide range of forest and forestry related activities.

Figure 1: The proposed general framework of Green Forest Jobs (GFJs).



So far – within the above mentioned seven thematic areas - 19 fields of activity have been identified.

Table 1: 19 fields of activity for future Green forest Jobs (GFJs) in Forestry.

7 Thematic areas	19 Fields of activity
Wood and Energy Production	Wood Production
	Energy Production
Agroforestry and Mountain Forestry	Agroforestry
	Mountain Forestry and Soil Bioengineering
Social and Urban Development	Urban Forestry and Arboriculture
	Culture and Forests
Forest Management, Inventory and Planning	Forest Inventory and Forest Monitoring
	Planning, Governance, Sustainable Forest Management
	Pest, Disease and Fire Control
	Risk Management and Contingency Planning
Biodiversity and Ecosystem Functioning	Biodiversity and Nature Protection
	Climate Change
	Forests and Water
	Mycoforestry
Health and Recreation	Forest Ecotherapy
	Recreation, Leisure and Sports
Education and Research	Education, Further Training and Knowledge Transfer
	Forest Research
	Other New Fields of Activity

CONCLUSIONS

1: Forest Ecosystem Services Management is the Pillar for GFJs. Conclusion: Up to now forest jobs mostly dealt with traditional silvicultural and related economic issues (classical forestry sector). Conversely, the first results of this study show that the scope for the creation of new Green Forest Jobs needs to be seen in a broader context and will likely expand further. Therefore, this study concludes that new green jobs created in the forestry sector based on ecosystem services (ESS) will embrace a much broader range of tasks and functions in the changing society. The outcomes of implementing Sustainable Forest Management are the creation of numerous GFJs. **Recommendation: Forest policy makers should consider these GFJ opportunities and integrate their further development in the political agenda.**

2: Improve and Continuously Seek New Ideas and Skills. Conclusion: As forest ESS are embedded in an ever changing context, it is very important to continuously observe ongoing megatrends and check for new knowledge, skills and expertise. **Recommendation: The basis for an adequate analysis of context, trends and opportunities is a systematic review of newly emerging demands, ideas and skills; such a review should be elaborated and executed periodically.**

3: Research Delivers Sound Information. Conclusion: Continuous research is needed to explore knowledge, methods and skills throughout the different fields of activity.. **Recommendation: Different research institutions are encouraged to work together in a network of international players. For the further development of new GFJs private entrepreneurs should work hand in hand with research institutions.**

4: Enforce and Support a Change in Perspective on Green Forest Jobs. Conclusion: New GFJs will be generated if the forest sector can enlarge its perspective on forest work and the outcomes of forest services. **Recommendation: Partnerships drawn from different sectors and disciplines should be encouraged. Along with the management of ESS a great variety of new GFJs could be identified and established.**

5: Exchange of Experiences and Examples. Conclusion: An exchange of experiences and ideas will be an excellent first step to learn from each new GFJ perspective. **Recommendation: Utilising physical and digital networks and platforms (e.g. Open Book of GFJs <https://www.hashdoc.com/greenforestjobs>) experiences and examples should be exchanged continuously. Mindsets can be changed by sharing evidence and examples.**

6: Encouragement of New Ideas. Conclusion: Many new ideas exist already but often it is difficult for practitioners to get the first steps done; start-ups and the implementation into practice of novel ideas therefore should be encouraged. **Recommendation: The implementation of pilot-projects should be initiated in order to develop new fields of activity. Start-ups should be supported, e.g. by mentoring services. Finance has to be made available. The creation of innovative platforms brings people from different backgrounds together. An award for the best creative new GFJ could be started (e.g. an annual ECE and FAO prize of the year).**

7: Continuous Adaptation of the Education Curricula in Forestry. Conclusion: A proper assessment of the training and education needs is missing to cater for potential new forest careers of the future **Recommendation: A revision of the education and training curricula to suit changing circumstances in the forest sector should be undertaken.**

8: Adaptation of Statistics. Conclusion: Figures providing sound empirical data for forest policy are needed. Statistical methodology for the quantification and categorization of GFJs is also required. **Recommendation: As a first step, criteria-based definition of GFJs should be developed.**

9: Master's Degree on GFJs. Conclusion: International knowledge about GFJs and the latest outcomes of Sustainable Forest Management should be collated. **Recommendation: An international Master's degree programme on GFJs should be developed.**

10: Assure Continuous Communication. Conclusion: The image of forestry may not be seen by the public as broad and diverse as it is. **Recommendation: The positive implications of Sustainable Forest Management on GFJs as well as the contribution of GFJs to sustainable development should be communicated widely. Policy briefs on GFJs should be developed and distributed among the ECE and FAO member States.**

11: Collaboration among ECE/FAO Teams of Specialists (ToS). Conclusion: The green jobs theme is a cross cutting issue, therefore many other ECE/FAO Teams of Specialists are at least partly concerned by its significance. **Recommendation: It is recommended that greater collaboration should take place with these Teams on the concept of GFJs , including the organization of joint meetings and workshops on this subject.**

12: Improvement of communications. Conclusion: Internal and external forest communication on GFJs needs to be promoted and improved. **Recommendation: The findings, key conclusions and appropriate communication activities should be discussed with the ECE/FAO Team of Specialists on Forest Communication.**