POLICY BRIEF

Green jobs’ trends and their implications for the forest sector in achieving the objectives of the Rovaniemi Action Plan for the Forest Sector in a Green Economy

SUMMARY

Globalisation, digitalisation, changing requirements of society, and changing labour markets influence the forest sector (FAO 2017). The forest sector is highly vulnerable to risks associated with environmental degradation with up to 16.7 million jobs in forestry dependent upon the provision of ecosystem services (ILO 2018). With rising concerns related to climate change, there is urgency to develop environmental skills and diverse sectors of the economy, including the forest sector, that have the potential to provide solutions to reduce and mitigate atmospheric pollution and other environmental risks (Forest Europe 2017; Prins 2016).

This policy brief summarises findings addressing major transformation drivers of green jobs in the forest sector development, a mapping of (i) existing and emerging green jobs in the sector; (ii) skill requirements and; (iii) education needs for forest professionals in the UNECE region.

INTRODUCTION

The forest sector offers several characteristics that support effective employment generation, including low capital requirements in many situations, a multiplier effect between direct and indirect jobs, and job diversity and flexibility that ranges from tasks that require high levels of technology to labour-dependent occupations (Nair 2009). Many quality of life considerations can be addressed through employment in forestry, including improvements to food security and nutrition, non-timber benefits, human health, and recreation (Estruch 2013; Herkendell 2016). Green jobs in the forest sector can be created to support local, community-based needs as well as broader international or global objectives, including the objective to limit the global temperature increase to 1.5°C under Paris Agreement and the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs).

EXISTING AND EMERGING GREEN JOBS IN THE FOREST SECTOR

As defined in the UNECE/FAO publication “Green Jobs in the Forest Sector”, green jobs are jobs that “minimize the adverse environmental impacts of enterprises and economic sectors by preserving or restoring the quality of the environment”.

Following on this definition the UNECE/FAO Team of Specialists on Green Jobs in the Forest Sector (Joint ILO/UNECE/FAO Expert Network) defined a green job in the forest sector as one which:

- complies with the principles of sustainable forest management,
- contributes to the green economy, and
- is involved in the value chain of forest products and/or in the performance of forest services.

(UNECE/FAO 2018).
REGIONAL, SOCIAL, AND ECONOMIC TRENDS

There are areas within the UNECE region where there have been declines in the forest sector workforce due to a number of factors. Between 1990 and 2015 employment in the forest sector in the Balkan region declined by approximately 45 percent largely due to reforms of public enterprises and collapse of companies which were in state ownership (UNECE/FAO 2016b). The forest sector in this region has the potential to regenerate more than 100 thousand jobs in the next decade if the conditions are created to support improved utilization efficiency (UNECE/FAO 2016b). Similarly, the reduction in the forest sector across Eastern Europe (including Belarus, Bulgaria, Czech Republic, Hungary, Moldova, Poland, Romania, Russia, Slovakia, and Ukraine) from 1990 to 2011 impacted more than 1.4 million people (49 percent of forest sector employees) (UNECE/FAO 2016a). There is recognition that some forest areas within the UNECE region are not currently being managed and expanding the workforce may help improve forest stewardship. Several European countries report less than half of the forest area under management plans (or equivalent), including France, Denmark, Portugal, Spain, Cyprus, United Kingdom, and Norway (Forest Europe 2015).

Additional workforce concerns for the forest sector include the lack of young entrants, insufficient training and education, high accident rates and health risks, gender imbalance and low profitability of forest operation services (Kastenholz 2014). The expectations for decent work include fair income, security in the workplace, social protection for families, personal development and social integration, freedom to express concerns and organize to participate in decision-making, and equal opportunities and treatment (Vančo 2017). According to the State of Europe’s Forests 2015 Report, about 30 percent of people employed in forestry in Europe are 49 years of age or older, and in some countries the rate is over half of the workforce. Women account for only about 20 percent of the forest sector workforce (FAO 2017).

SKILLS REQUIREMENTS FOR GREEN FOREST SECTOR JOBS

The forest sector employs people across a wide range of job types and working conditions. While global employment numbers are very difficult to assess, in 2008 the FAO provided a global estimate of 16.7 million full-time equivalent workers in the formal forest sector, and the ILO previously estimated 29.6 million in indirect employment, for a total global forest-based employment of nearly 48 million (ILO 2018; ILO 2001; Nair 2009). There are an estimated 350 million people around the world that obtain additional income from nearby forests (World Bank 2004; Estruch 2013). Furthermore, 70 million of the world’s indigenous and tribal peoples depend on forests to meet their livelihood needs (ILO 2018). As evidenced in the recent ILO report on Greening with Jobs – World Employment and Social Outlook 2018, skills mismatch is one of the major hurdles in the greening of the economy (ILO 2018). Addressing this requires building education and training capacities and actively motivating and recruiting the next generation of forest sector workers.

EDUCATION NEEDS FOR FOREST PROFESSIONALS IN THE UNECE REGION

Education within the forest sector can be categorized as basic, vocational, and professional. In general, the forestry workforce in Europe is well educated with nearly three-quarters achieving vocational or professional qualification (Forest Europe 2015). There is interest in strategies that create life-long learning and re-training opportunities to address the major changes that are ongoing and anticipated in the forest sector and in the transition to a green economy (ILO/OECD 2012; Hetemäki 2014). Some research has found widespread use of on-the-job training and in-house classrooms by employers.
that are seeking to prepare green workers (Brite 2010). There is also broad recognition of the need to raise skills related to science, technology, engineering and mathematics (STEM) to support green economic growth (OECD 2012).

MAJOR ADAPTATION NEEDS FOR FOREST EDUCATION AND TRAINING

Several areas of adaptation needs can be identified for meeting the education and training needs of green jobs in the forest sector, including innovation, rural and urban connections, monitoring and research, gender diversity and recruitment strategies. Each of these is discussed briefly below and provides opportunities for greater development and creativity.

Innovation

To achieve the necessary impact from innovation, several related efforts and skills are needed. These include research needs as well as promotion, marketing, and communications skillsets. The development of innovation within the forest sector relies upon the enabling legislation and policy as well, including efforts to support investment in research and to combat harmful practices such as illegal logging. The education and training needs for green jobs in the forest sector require collaboration with many other professions and on-going learning opportunities.

Rural and Urban Connections

It is commonly recognized that forest sector jobs are highly relevant in rural areas (Brizay 2014). A more robust engagement with urban forest opportunities can contribute to achieving several SDGs, including SDG11 Sustainable Cities and Communities where the green infrastructure of a well-managed urban forest can have an impact on quality of life (Herkendell 2016). The expanded use of mass-timber and tall-wood building designs link rural forest resources to urban planning and sustainable community design goals.

Monitoring and Research

To effectively influence the drivers for green job growth it is necessary to develop better approaches to monitoring, reporting, and researching green job trends. There is also the opportunity to develop metrics and methodologies to measure the environmental benefits that may be attributed to green job growth, including reduced carbon emissions as well as human health and worker safety considerations. The Rovaniemi Action Plan includes objectives for monitoring trends related to green jobs in the forest sector, including social aspects of sustainable forest management and employment conditions.

Gender Diversity

Gender inequality in the forest sector workforce persists in all countries (FAO 2006). The Rovaniemi Action Plan includes integrating national gender strategies into relevant forest policy strategies and emphasizes the importance of gender mainstreaming for providing decent green jobs in the forest sector. These actions are strategic and aid in the recruitment and retention of the necessary workforce for supporting green jobs in the forest sector and sustainable forest management.

Recruitment Strategies

There is a need to raise awareness of the career opportunities and educational programs that are available to develop the necessary training and knowledge skillsets to participate in the green economy and to get a green job in the forest sector. As training and education programs are developed, it is important to conduct evaluations of the programs to aid in improving the design and delivery of job training programs and effective recruitment strategies.

CONCLUSIONS

The Rovaniemi Action Plan for the Forest Sector in the Green Economy provides a foundation and a roadmap for continuing to advance green job opportunities in the forest sector and development of skills needed for them.
It is meant to inspire action and provide the basis for concrete actions so that the forest workforce is able to implement sustainable forest management and achieve social goals of the green economy by providing decent jobs.

The recent UNECE/FAO publication on Green Jobs in the Forest Sector finds that a number of green jobs already exist in the forest sector. While the number of jobs in traditional forestry will continue to decrease, the number of jobs in the sector will increase in relation to all forest ecosystem services. Many of the new fields of activity, identified in the study, will contribute to the rural development and can help retain jobs in small and medium-sized enterprises. They can also create new employment opportunities for professional groups that may incur job losses in the process of the transition to a green economy and facilitate the integration into the labor market of other vulnerable groups, such as young people and women.

POLICY IMPLICATIONS

The further development of green jobs in the forest sector will strongly depend on the revision of existing curricula aimed at addressing existing skill gaps and adapting to new career paths. This can also improve the public perception of the forest sector as an innovative sector that attracts qualified workers and offers modern careers in a green economy. This will require looking across the current and future employment needs to support new workers as well as developing the life-long learning opportunities for the forest sector workforce.

Continued work is needed to increase awareness of the existing and emerging green job opportunities within the forest sector, including on adaptation to changing trends to ensure resilience and flexibility of forest workforce and to enhance economic, social and environmental benefits of forests in a green economy.

This policy brief has been prepared as a summary of the report on “Trends in Green Jobs in the Forest Sector in the UNECE Region” (ECE/TIM/DP/76) as a part of the UNECE project on “Improving the capacity of the UNECE member States to create green jobs in the forest sector” implemented by the Joint UNECE/FAO Forestry and Timber Section.

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