

Forest sector workforce

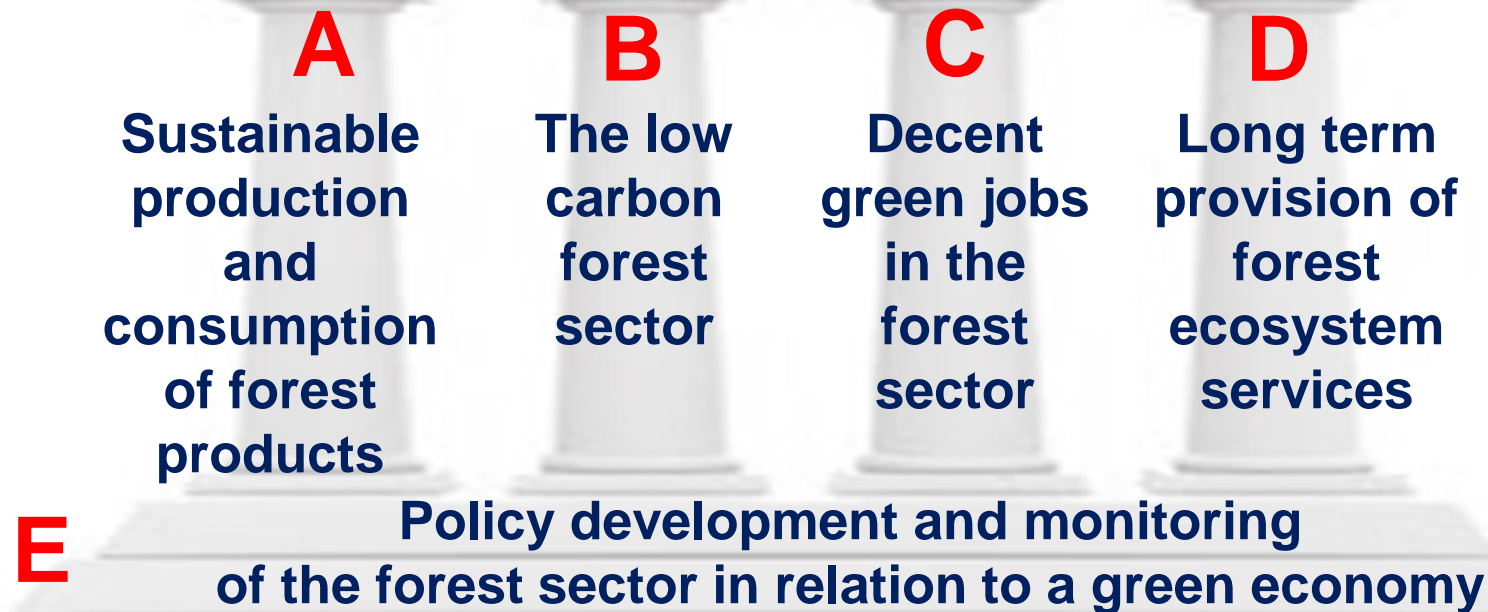
A literature review in support of the Rovaniemi Action Plan

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Rovaniemi Action Plan for the Forest Sector in a Green Economy

Vision and Overall Goal



Relevant RAP actions:

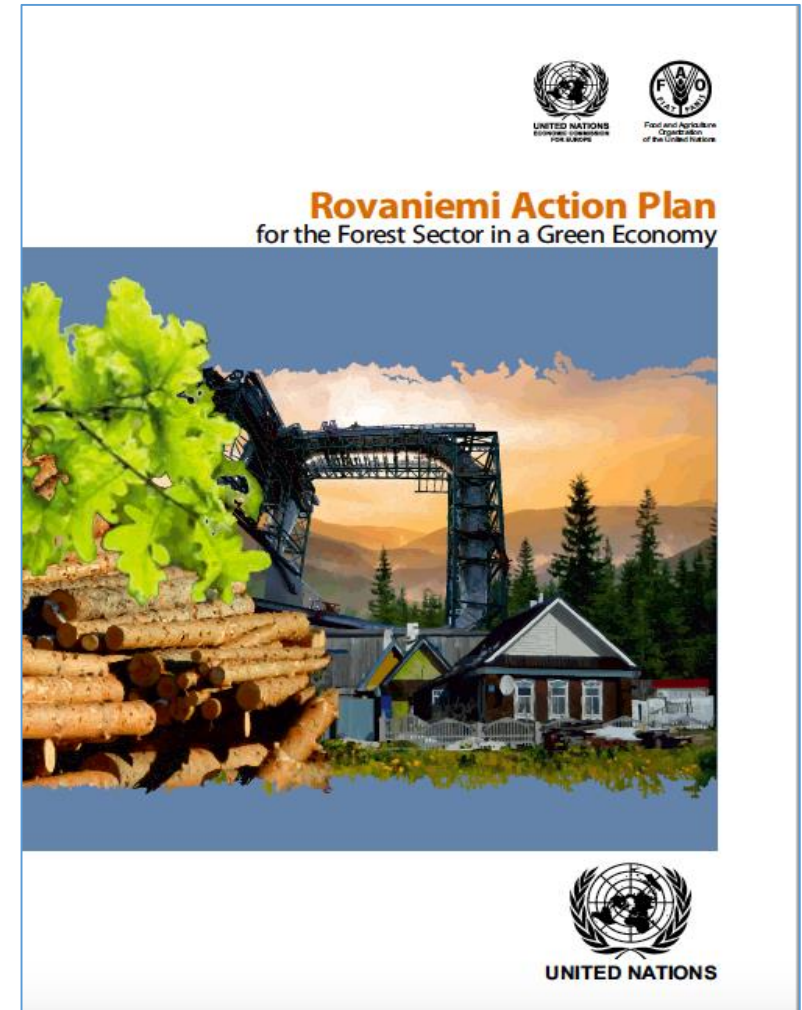
C.0.1 Review forest sector workforce issues

C.1.1 Improve monitoring and analysis of the forest-sector workforce

C.1.2 Review main threats to sustainability of the workforce

C.2.1 Raise the level of political will to improve the safety and health of the workforce, by studying workforce status and trends

C.2.2 Radically improve the monitoring of occupational safety and health of the forestry workforce.



'Forest workforce' includes:

Forest labourers or workers

- Tree planters
- Loggers or harvesters
- Legal and illegal, formal and informal, secure and seasonal

Foresters, forest managers, forestry professionals

State forest organisations

Other public organisations (e.g. municipal forest organisations)

Private forest management organisations

Forest contractors including machinery operators

Sawmill employees

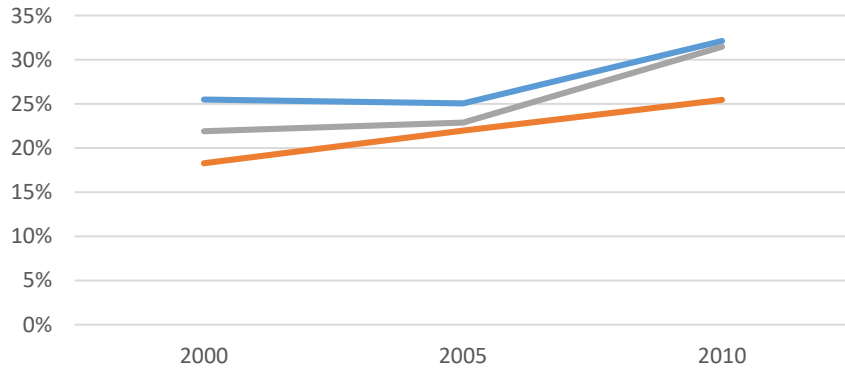
Other manufacturing sector employees

Forestry consultants, advisers and extension workers.

Structure

- Demographics
 - Gender, age, ethnicity
- Changing employment structures
- Changing types of work
- Safety
- Health
- Attractiveness (a few observations)

Age

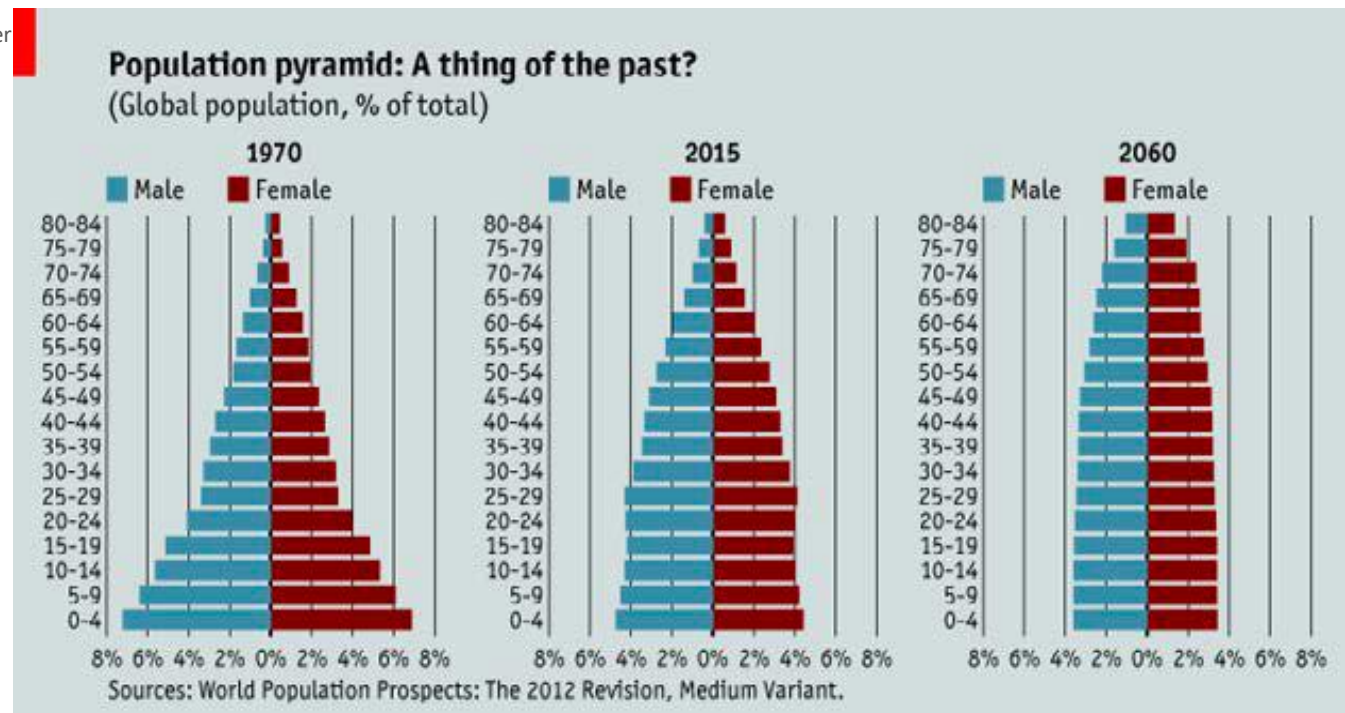


Original analysis based on UNECE Statistical Database >>
[Forestry \(FOREST EUROPE/UNECE/FAO\)](#) >> [Socio-Economic Functions](#) >

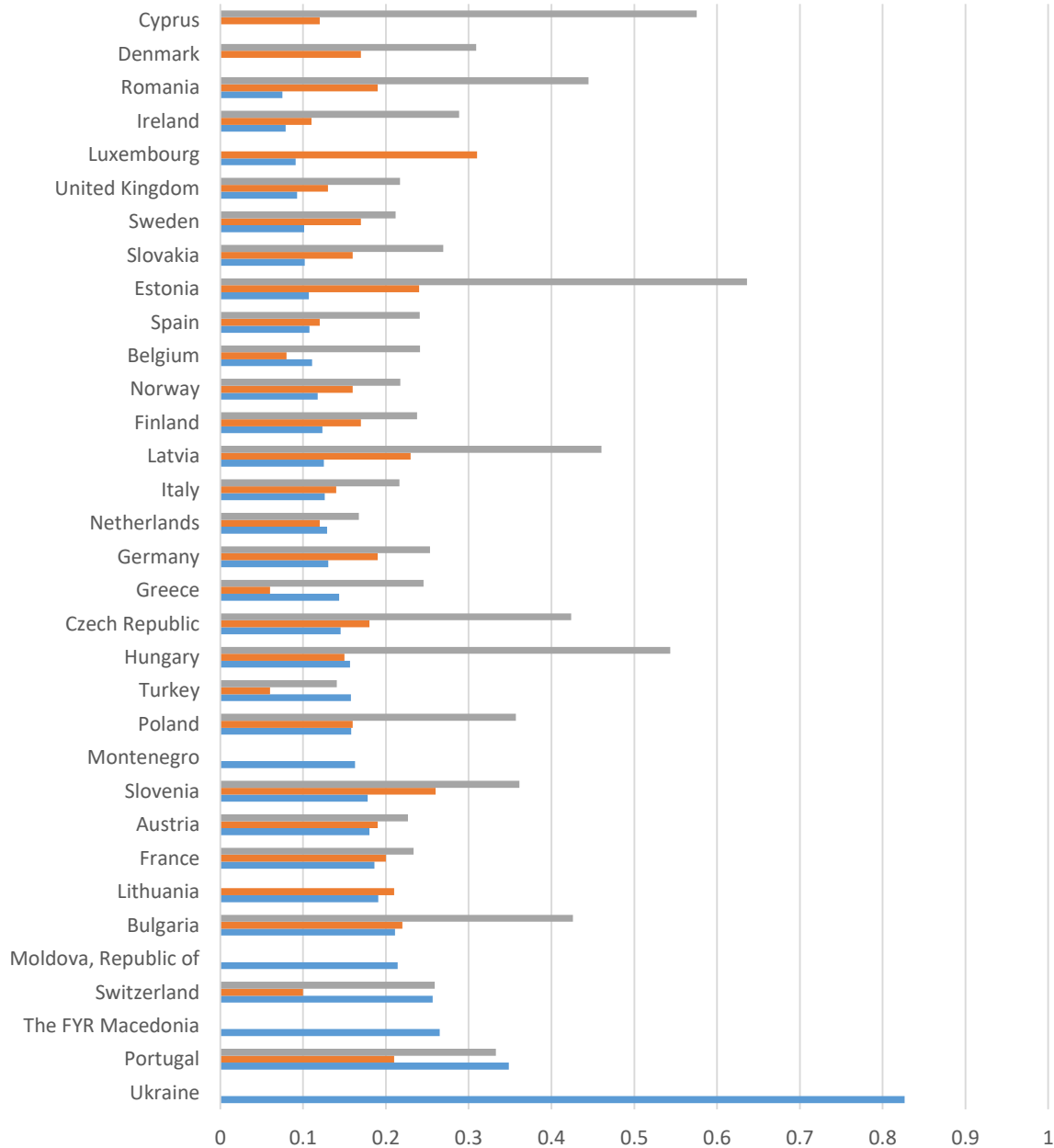
Figure 2. Percent of workforce aged 50+

— forestry — wood — paper

Source: Economist Intelligence Unit 2015 'Engaging and Integrating a Global Workforce'



Gender



Percent women in total forest workforce by industrial sector

Source: EUROSTAT data

forestry wood paper

Gender and ethnicity: opportunities

Increased inclusion of women has been associated with shift to multi-purpose forestry and ecosystem approach

Masculine culture associated with higher risk behaviour and lower well-being (few studies)

Increased inclusion of ethnic minorities has been associated with shift to urban forestry and more inclusive extension / communication

Challenges for culture change

Learning from experience

Employment structures

- Corporations merged, downsized, relocated, restructured
- Unions loss of power
- Work particularly harvesting out-sourced to contractors
 - different work cultures
 - need management and communication skills
- Insecure informal workers: more vulnerable to poor working conditions, and risks to health and safety.
- Many of these trends reflect global changes
- More fragmented but also more diverse world with possibilities for innovation
- Experiments with community-owned businesses and community-managed forests.

Changing type of work

- Less secure
- More mechanisation / computerisation / robotics
- Fewer workers are paid more, because the work is more skilled.
- Multi-disciplinary, multi-functional, multi-stakeholder forestry:
- Public forest services, and forest management professionals.

Safety

- Very high rates of injury and fatality, particularly harvesting but also almost all sectors and countries
- Safety is improving, particularly in countries with high levels of mechanisation.
- Research in specific cases points to the need for workers to change their practices
- Behaviour change, culture change, systems change

Health and well-being

- Much less researched
- Physical health
- Mental health
- Well-being at work
- Conflict
- Green workplace

Attracting the future workforce

This area needs a different approach – not generally the focus of social science literature.

Highly context specific – the Regional Study Papers give examples of education which builds in diverse work experience; papers from USA focus on providing support to minorities.

Little research describes students' experiences from their own perspective.

Interventions – training, education, projects – all need more evaluation.

Reflection: state of research (1)

Demographic – statistics are consistent on age and gender balance but need insight into different *types of work*; no statistics on ethnicity; research on gender and ethnicity is strong in particular areas; age treated only patchily

Changing work types – good geographical and disciplinary range

Changing employment structures – good geographical and disciplinary range; informal sector treated in depth by particular research centres, otherwise insufficiently researched

Reflection: state of research (2)

Safety, health and well-being:

- very thorough research on safety issues, less thorough on solutions and their success;
- thorough on physical health, little attention to well-being, mental health and workplace happiness

Attracting and training the future forest workforce:

- little available in the scientific literature;
- topic would be better addressed through national level consultancy reports and primary research (interviews and case studies).

Recommendations (1)

1. **Context:** biophysical – terrain and forest; socio-political – relationships and governance modes; cultural – what matters to the workforce and to the public. All these mean that research in one place cannot always be applied elsewhere.
2. **Safety:** needs organisational and culture change leading to behaviour change. Needs political and organisational will and systems.
3. **Health and well-being:** needs more attention in statistics, and adaptation through local research. Continuity and connectedness support well-being.

Recommendations (2)

4. **Diversity:** research points the way, but needs to be tailored to context. Proactive approaches work in public forest service. More diverse workforce brings benefits and challenges.
5. **Associations:** provide support to contractors and owner-operators.
6. [**Future skills:** include financial and people management; communication; stakeholder interaction and engagement.]

Thank you !

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