Social aspects of the forest sector workforce: A literature review in support of the Rovaniemi Action Plan

Professor Anna Lawrence, University of the Highlands and Islands, UK

Seventy-fourth session of the ECE Committee on Forests and the Forest Industry
18-20 October 2016, Geneva, Switzerland
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.
Objective

“Review and compile existing studies, data and information in order to:

• analyse the recent trends and current situation of the forest sector workforce
• identify drivers, challenges and opportunities of the forest sector workforce
• identify possible needs for data collection.”
Sources

- Scientific literature: published, peer reviewed
- Mainly social science – broadly defined
- Search terms:
  - forest* AND (workforce OR labour OR labor)
  - forest* AND safety
  - forest* AND employment
  - workplace AND safety AND gender
- Contrasted with trends from UNECE and FAO reports
‘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.
Study limitations

Statistics

Quality, consistency and comparability of statistics (Lebedys and Li, 2014)

Research

Unevenly distributed: mainly English language, dominance of North America, Nordic countries

‘Pockets’ of research by specific groups interested in e.g. migrant workers, or masculinity

Focuses on topics that funders want to pay for

Focuses on ‘problems’

Much work does not reach the ‘peer reviewed literature’
Structure

• Demographics
  • Gender, age, ethnicity
• Changing employment structures
• Changing types of work
• Safety
• Health
• Attractiveness (a few observations)
Figure 2. Percent of workforce aged 50+

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

Source: Economist Intelligence Unit 2015
‘Engaging and Integrating a Global Workforce’
Percent women in total forest workforce by industrial sector

Source: EUROSTAT data
Demographics of forest workforce

• Ageing
  • Little studied; potential for retraining

• Low representation of women
  • Mostly studied in N America
  • Contrast gender and *ownership* more studied in Nordic countries
  • Women disadvantaged Canada
  • Proactive policy USA

• Ethnicity:
  • Mostly studied in N America
  • Disproportionately high levels ethnic minorities in informal sector
  • Disproportionately low in public sector
  • Proactive policy USA
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
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; sociopolitical – 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.
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!

anna.lawrence.ic@uhi.ac.uk