Forest Machine Contractor and Operator

Operating environment - Changing know-how and professional skill requirements

Oscar Contractor Forestry Seminar
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Contents

• Background

• Professional Know-How at Forestry Sector Today and 2020, Lautanen, E. & Tanttu, V., TTS Bulletin 7/2013 (768)
  – Forest machine operators and contractors TOP 10 professional competence areas today and 2020

• Conclusions and training tasks
  – Three topics for operators and contractors
Backround

• Environment
  – Wood harvesting volume increases
  – Environmental change sets up new competence requirements

• Harvesting entrepeneur
  – Companies grow
  – Operating models change

• Machine operator
  – Need for new operator work
  – Work functions enlarge
  – Professional skill requirements increases
Professional Know-How at Forestry Branch Today and in 2020

AIM FOR THE STUDY

• To find out the professional competence and determine future know how requirements of forestry branch educated workers (presentation includes forest machine operators and contractors)

MATERIAL AND METHODS

• E-mail survey focused on 57 qualified as forest machine operators in 2004-2008 (44 machine operators, 13 contractors; all working at forest branch)

• Interview studies focused on 10 contractors recruiting new labour
Professional Know-How at Forestry Branch Today and in 2020

RESULTS: Operators TOP 10 professional and general working life competence areas today

- Reliability (3.9), ability to make decisions (3.9), responsibility (3.8), use of thinning models (3.7), mastering machinery technics (3.7), timber measuring (3.7), mastering machinery maintenance (3.7), controlling/assessing own work outcome (3.7), work safety (3.6)
Professional Know-How at Forestry Branch Today and in 2020

RESULTS: Operators TOP 10 professional and general working life competence areas in 2020

- Energy tree thinning (3.7), GIS and map systems (3.7), ability to learn (3.7), machine operating skills (3.7), responsibility about the work quality (3.6), quality systems and certificates (3.6), ability to produce timber (3.6), machine maintenance and repairing (3.6), contribution to own work wellbeing (3.5), awareness of end products raw material requirements (3.5).
**Professional Know-How at Forestry Branch Today and in 2020**

**RESULTS:** Contractors TOP 10 professional and general working life competence areas *today*

- Reliability (3.9), mastering economical issues and cost awareness (3.9), stress tolerance ability (3.8), responsibility (3.8), decision making ability (3.8), time management and planning (3.8), customer service competence (3.7), consulting skills (3.6), marketing competence (3.6), entirety mastering (3.6).

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<tr>
<th>Competence Area</th>
<th>Score</th>
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<td>Luotettavuus</td>
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<td>Talouden hallinta ja kustannustietoisuus</td>
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<td>Kokonaisuuksien hallinta</td>
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Professional Know How at Forestry Branch Today and in 2020

RESULTS: Contractors TOP 10 professional and general working life competence areas in 2020

• Cost awareness and perception of own productivity (3.9), responsibility about the work quality (3.9), competence to plan the harvesting site (3.9), mastering the GIS systems (3.9), ability to learn (3.8), competence of fuel wood acquisition (3.8), business intelligence (3.7), language skills (3.7), new employees familiarization and instructional skills (3.7)
Professional Know-How at Forestry Branch Today and in 2020

**RESULTS:** Development of the forest machinery education according to interview studies (contractors)

- More cost awareness teaching
- More tuition to enlarge students perception of how taken actions correlate straight to company economics and customer relations
- Practice punctuality, responsibility, entrepreneurial attitude
- Team work skills, vis-à-vis working skills and social skills
Conclusions

Training tasks - Operators

1. Instead of pure technical knowledge, education needs to comprehensively raise pupils to be professionals (vocational basic education)
   - Ability to carry work related responsibility, ability to solve independently challenges, team and cooperation skills, own work organizing skills, responsible of own development.

2. Updating training for operators
   - Non-used opportunity
   - Adding the role of the entrepreners (forest companies, machine and equipment manufactures, other stateholders) in training conduct

3. Upgrading the attractiveness of the Forest branch
   - The attraction of a branch must be improved - better labour on market
Conclusions

Training tasks - Contractors

1. Managing the companies
   – Only 54% of the forest machine SME’s are regularly collecting information to support the managing decisions. (Hourunranta & Kettunen 2013)
   – Utilizing resources effectively
   – Operational and strategic management and leadership

2. Information systems serving the actions
   – Weak links are not allowed as the information systems are steering the whole process throughout the procurement.

3. Execution of education
   – How to train
Working for the better productivity!

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