Mapping and comparison of harvesting production management in Norwegian forest owners associations

Eva Skagestad – Norwegian Forestry Extension Services

Birger Vennesland & Dag Fjeld – Norwegian Institute of Bioeconomy Research
Aim and design

– Potential improvements in harvesting production management for Norwegian Forest owner associations.

– Production management routines were captured using business process mapping methodology
  – Data collected using virtual walk-through approach
Forest owner associations in Norway at National and regional level
Four Activity Levels

Level 1. Organisation
• Plan for one year to each region

Level 2. Region
• Monthly plan to district planner

Level 3. District
• Weekly plan

Level 4 Entrepreneur
Level 3: Production planning

3.1 Initiation of buying timber for harvesting
  • Stockpile of timber

3.2 Creation of preliminary plan for one week
  • Preliminary plan – one week

3.3 Verify with forest owner
  • Sharp plan – one week
Level 3.2 Creation of preliminary plan for one week

3.2.1 Creation of prognoses of production
- Updated stockpile of timber, with prognoses
  - Volume/sortment
  - Time/stand

3.2.1.1. Choosing a stand to meet the market

3.2.1.2 Route Planning – minimizing relocation of machine
- Preliminary plan – one week
Level 4: Start- and follow up on harvesting/forwarding

4.1 Finishing instruction to-and choosing entrepreneur.

- Harvesting instruction

4.2 Tuning conditions, then start harvesting and forwarding

- Production report

4.3 Production report vs. production plan
Conclusion

– Production management vary between context
– Three sub-processes
  – A: Overall planning within the forest owner association
  – B: Operational scheduling of harvesting
  – C: Production follow-up

– Multiple re-planning loops are found within sub-processes B and C