Forest technology at FAO

Jonas Cedergren
Forestry Officer, UN FAO

Forest Engineering Conference
Rotorua, New Zealand
17 April 2018
Why am I here

- Present the FAO Programme on forest technology
- Launch of two publications
<table>
<thead>
<tr>
<th>Decade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950s</td>
<td>Focused on reconstruction after the II World War</td>
</tr>
<tr>
<td>1960s</td>
<td>Training &amp; industrial development in new countries</td>
</tr>
<tr>
<td>1970s</td>
<td>Similar to the 60’s influential reference texts</td>
</tr>
<tr>
<td>1980s</td>
<td>Environmental issues, the first account of reduced impact logging (RIL), appropriate technology</td>
</tr>
<tr>
<td>1990s</td>
<td>Environmental issues stronger much work with RIL, code of practice for logging, the last reference text (ergonomics)</td>
</tr>
<tr>
<td>2000s</td>
<td>Numerous case studies and work with RIL</td>
</tr>
<tr>
<td>2010s</td>
<td>Reduce rural poverty, decent rural employment, occupational safety and health, across agricultural sectors, small and medium size companies</td>
</tr>
</tbody>
</table>
• Work is now done under the Strategic Programme called Reduce Rural Poverty (SP3)
• Decent rural employment is one of two major outputs from the Programme
• International labour standards and occupational safety and health are part of the work on decent rural employment
More than 75% of the world’s poor live in rural areas
Many of them depend on agriculture, including fisheries and forestry to make a living
This work is often hazardous
Many of the jobs can be classified as 3D (Dirty, Difficult and Dangerous)
Accidents may lead to unspeakable tragedy for those immediately concerned
The informal sector in forestry and agriculture is huge

Cross-sectoral work/activities

Non-wood forest products e.g. present a new set of challenges

Small and medium size companies often need support in safety and health issues

Rural households with their cross sectoral activities present special challenges
The two publications

Source: FAO Mediabase

Photo: Jonas Cedergren
Agro cultural work in hot conditions reduces productivity and can be fatal. Workers need access to water and shade.

Well-designed workplaces with shade and water reduce the risk of heat stress. Employees should be encouraged to drink frequently. Dehydration sets in before thirst.
Key messages: Heat stress (cont.)

- Protective clothing restricts heat dissipation, and should be designed accordingly in warm climates
- Assess workplaces
- Work during cooler hours
- Training to observe signs of heat stress on yourself and others

Photo: Walter Kollert
Accidents

Motosierras en los bosques tropicales (FAO & ILO, 1980)
Key findings/recommendations

• Working in the forest is difficult and dangerous. Procedures for accident reporting can help to avert future tragedies.

• Forestry accidents and health concerns are serious problems worldwide. Existing data suggest that work in forestry is among the most hazardous of all civilian activities.
Improving safety in forestry will depend on setting in place procedures for accident reporting and analysis. To achieve this, the following steps should be taken:

- Increase reporting of forestry accidents and near misses
- Improve accident investigation
- Tailor accident reporting forms
- Assist developing countries to improve forestry accident reporting and analysis
## Benefits of accident reporting

<table>
<thead>
<tr>
<th>Period</th>
<th>Location</th>
<th>Reporting stimulus</th>
<th>Intervention and changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>Oregon, Washington, USA, New Zealand, Chile</td>
<td>Injuries to workers on steep slopes</td>
<td>Replacing hand felling and cable logging with tethered machines</td>
</tr>
<tr>
<td>1990+</td>
<td>British Columbia, Canada</td>
<td>Deaths and injuries to tree fellers</td>
<td>Adoption of British Columbia feller standards, training and certification</td>
</tr>
<tr>
<td>1985+</td>
<td>Chile</td>
<td>Overall high forest industry accident rates and poor working conditions</td>
<td>Improving reporting, training, management commitment, working and living conditions</td>
</tr>
<tr>
<td>1960+</td>
<td>Canada, Sweden, USA</td>
<td>Deaths and injuries among timber fellers</td>
<td>Improving training and work arrangements; developing tree-felling machines</td>
</tr>
</tbody>
</table>

*Source: John Garland*
The publications can be downloaded at

Areas in focus

**Ongoing**

- Scoping study of children’s work in forestry
- Field guide to handle accidents

**Near future**

- Practical documents guidelines
- One or two more reference documents
- More direct outreach to projects
- Forest technology and natural disasters
Thank you for your attention

Washington state fatals

Source: Washington Labour and Industries Data