

Forest Work in the Tropics in the Focus of Work Science

See also Poster A-0142

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Fig. 1: Cross-cutting Felled Tree (Indonesia)

Sustainable Forest Management (SFM)

We find little SFM in natural forests. Success of Reduced Impact Logging (RIL) is very limited. Estimations of 7% under SFM of the forests used for industrial wood production, in the natural Tropical Forest Estate (TFE) of 761 million ha, are given by ITTO (Blaser et al., 2011).

Working Conditions

The working conditions in tropical forests differ from those of forest work in industrial countries, not only with respect to climate, state of mechanization and work organization. Most of the work is done in the informal economy and much by illegal logging.

Work Study

Work study is based on many traditions, including Taylorism, with different concepts and terminology. Any assessment of workload and working conditions is only meaningful in relation to performance. A strong plea is made not to occupy the term work study for mere time study, but to use it in a broad sense and then to clarify, whether it is performance study, methods study or ergonomic study what is attempted and done.

New Book "Work in Tropical Forests"

A comprehensive approach has been taken on work in tropical forests, including a view on all kinds of working people and their work in natural and plantations forests, and all forms of employment (Lewark, 2019).

Utilization of the Tropical Forests

Work in tropical forests is often associated with retrieving big logs of precious wood from the jungle, the tropical rain forests (Fig. 1). Such exploitation, "timber mining", has been the common way of taking wood from tropical forests since the start of colonization. Wood and Non-Wood-Forest-Products (NWFP) was taken from all forests, not only from the rainforests.

There is forest work in natural and plantation forests, for retrieval of wood for industrial use, but also for NWFP, and for other traditional utilization.

Nearly 60 million hectares of plantation forests (Fig. 2) have been established in the tropics (FAO, 2016).



Fig. 2: Manual Pruning of Pine (South Africa)

On-site Conversion, Chainsaw-milling

Handling and transport of big and heavy logs early on led to conversion of felled trees to planks, on the spot of felling, which has great importance today. Traditional pit-sawing has in parts been replaced by chainsaw milling (Fig. 4).

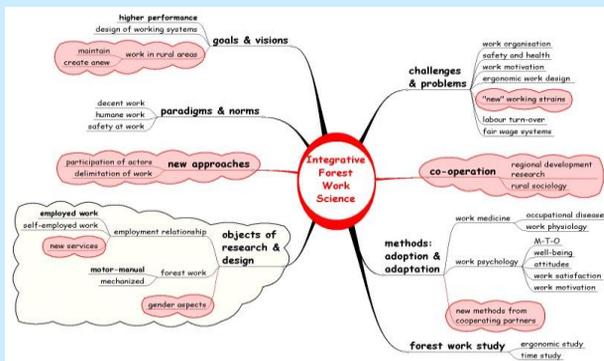


Fig. 3: Integrative Forest Work Science (from Lewark and Kastenholz, 2007, adapted)

Development of Forest Work Science

Forest Work Science should acknowledge the approaches and research results from a broader view, applicable to specific work situations in tropical forests. There is knowledge from other scientific disciplines that contribute to the knowledge, especially Anthropology, Rural Sociology, Development Studies or Human Geography. Forest Work Study should attempt for co-operation with the more specialized disciplines, in order to take an integrative, holistic and problem oriented approach (Fig. 3).

All photos taken by the author.



Fig. 4: Construction Wood for Small Scale Use (Indonesia)

References

- Blaser, J., Sarre, A., Poore, D., Johnson, S. (2011) "Status of Tropical Forest Management 2011." ITTO Techn. Ser. 38. Yokohama.
- FAO (2016) Global Forest Resources Assessment 2015: How are the World's Forests Changing? Rome.
- Lewark, S. (2019) Work in Tropical Forests. Under preparation
- Lewark, S., Kastenholz, E. (2007) Sustainability of work as challenge for forest work science. In: International symposium "Bottlenecks, solutions, and priorities in the context of functions of forest resources" Proceedings. Istanbul, 375-384. <https://www.kwf-online.de/deutsch/comforopen/pdfopen/SLEKSustWorkIstanbul.pdf> (Retrieved September 2019)