

Ways Forward: The Paradigmatic Changes Required in Industrial Forestry

Markus Kröger, University of Helsinki

Current Problems	Urgent Challenges	Suggestions for Solutions	How Research Could Help?
1. Monocultures	Expansion of GM tree plantations, increasing pesticide use, fires, droughts, pests and uncertainty.	=> Multi-species, biodiversity rich (semi-natural) forests as sources of wood and forest-based products.	Research should help in modeling forestry practices based on the expansion of semi-natural forests.
2. Corporate land concentration	Rising violent land conflicts, (illegal) land grabs, corruption, decreased democracy in politics and economy.	=> Agrarian reform that divides land control, access, and returns to a larger group of smallholders, to ensure regional development and social acceptability.	Research should identify socio-environmental injustices, power relations that should be equalized, and help to promote socially accepted developmental models and political transformations.
3. Mega pulp mills	Discontinue the mega pulp mill projects in the pipeline: far too risky, and exacerbating the key problems.	=> Smaller bioproduct plants with varied input sources. These plants should provide regional spillover effects of value-added production and create new bioeconomies.	Research should help in developing cost-effective, smaller plants, with multiple input and output lines, which can be flexibly changed. This would provide robustness in the markets.