
Mapping the South African pulpwood supply chain

Simon Ackerman, Diana Rietz, Louis Titshall
simon.ackerman@icfr.ukzn.ac.za

Institute for Commercial Forestry Research

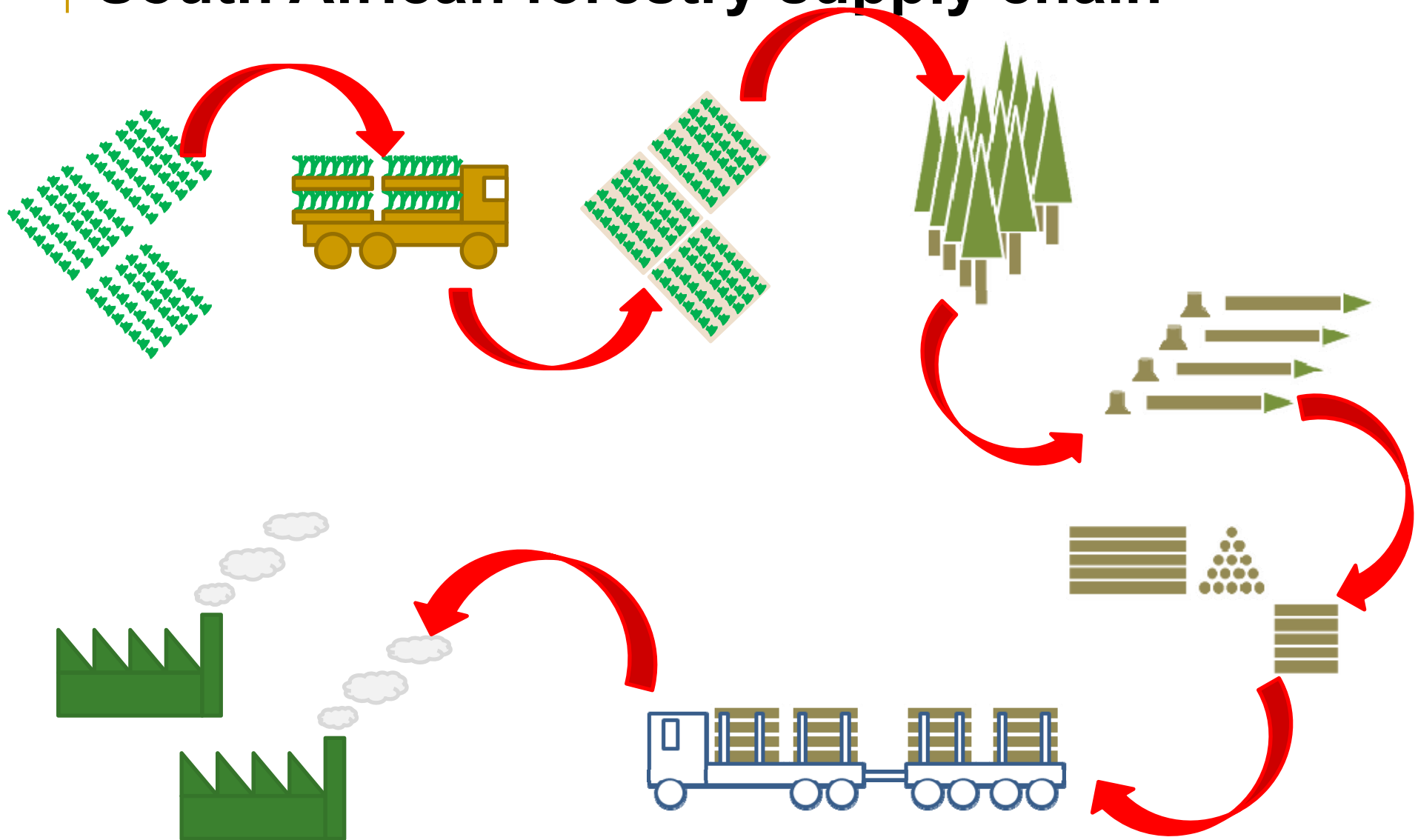
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South African forestry supply chain



Background

- Awareness that in the future supply chains will compete – not companies
- Improve the whole vs individual discrete events
- Integration between a series of events that take a product, from its basic form to completion
- In South Africa:



Forestry stakeholder engagement

- The initiative started when
 - Need to understand the interaction/interface between harvesting and silviculture
 - Tradition in South African forestry that raw material delivery means everything
 - Not much quantification of affect of this and potential poor practice
- Country wide survey and interviews:
 - Establish what the industry sees as important
 - Understand how to apply these in a framework to understand efficiencies and potential inefficiency



Why are there issues in the SA forestry value/supply chain?

- Management structures and focus
 - Separate management of harvesting and silviculture
 - Drive to lower costs within each operational area
- Outsourcing/contracting of operations
- Increased mechanisation of operations
 - Labour – ergonomics
 - Cost effective
 - Technological advances
 - Lack of flexibility
- Move from a supply chain to a value chain



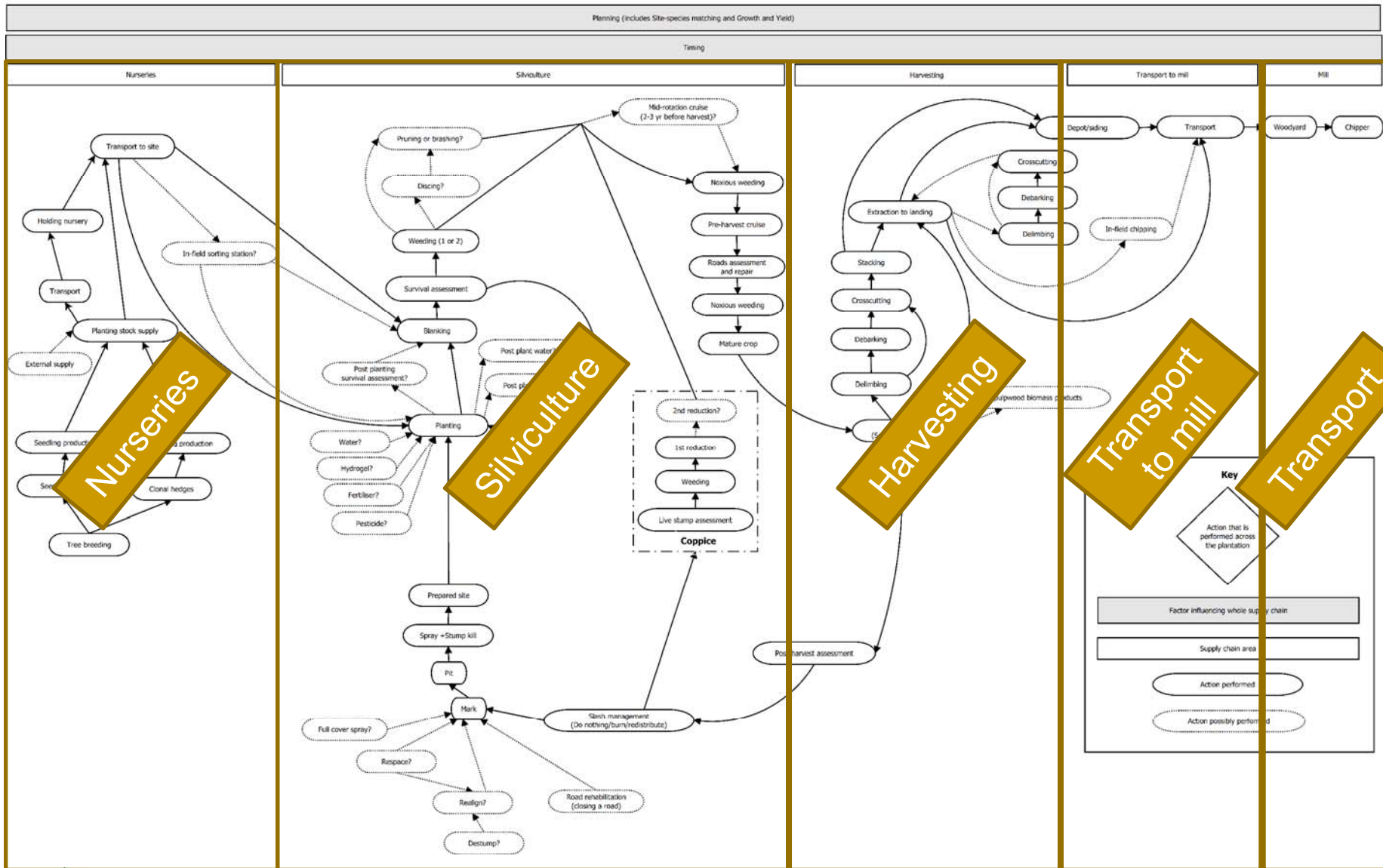
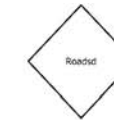
What was needed to understand the South African value chain?

- Mainly aimed at the pulpwood value chain, but has **evolved**
- Key people at various parts of the chain
 - Insight into particular jobs, roles and constraints
 - Also potential to critique and comment on other parts or roles
- Conducted a brown paper process
 - Done mainly in the manufacturing industry
 - Pictorial view of the supply chain
 - On ICFR staff as a start
 - Then on industry

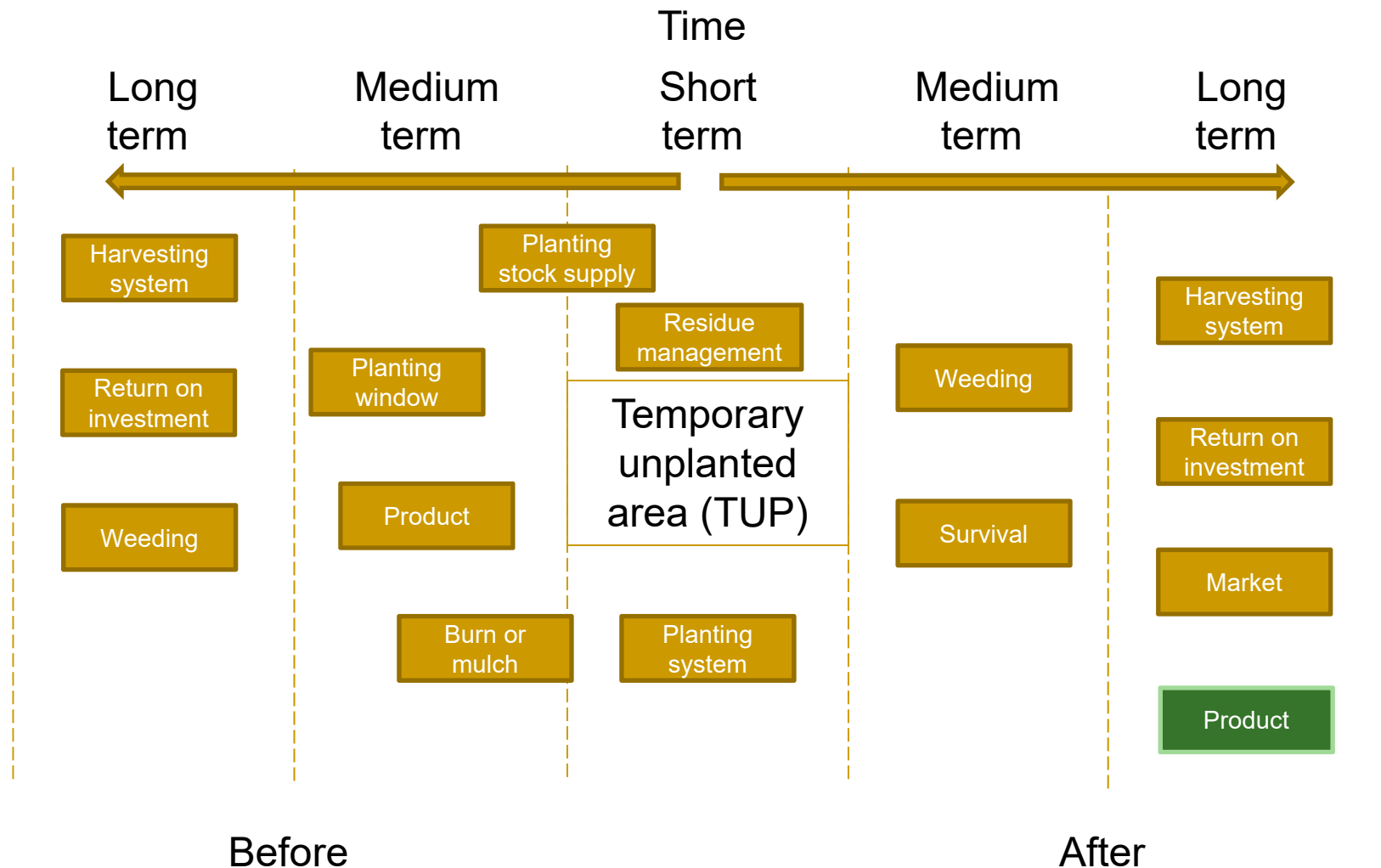


The brown paper...





Understanding the complex value chain



Re-focus of research and presentation of research results...

- Development of new research areas at the ICFR
 - Forest operations research, inter-rotation management FOR forest management at the ICFR
 - Understanding of the influence of management decisions
 - Use of precision forestry to answer value chain questions
 - Apply past, current and new research results in a standardised framework
- Collaboration between companies and other research institutes
 - Framework for forestry enterprise simulation >> MSc. studies around research return on investment and cost sensitivity
- Greater understanding of the full value chain approach to research and operational forestry interventions



Benefits to the SA forestry supply chain?

- Informed decisions at planning level >> optimal silvicultural regimes >> productive low cost harvesting
- Show potential to increase economic viability of operations
- Overall understanding of influences parts of the value chain on others

Planning

Enable G&Y predictions

Improves silviculture

Harvesting and transport

Market

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Thank you

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