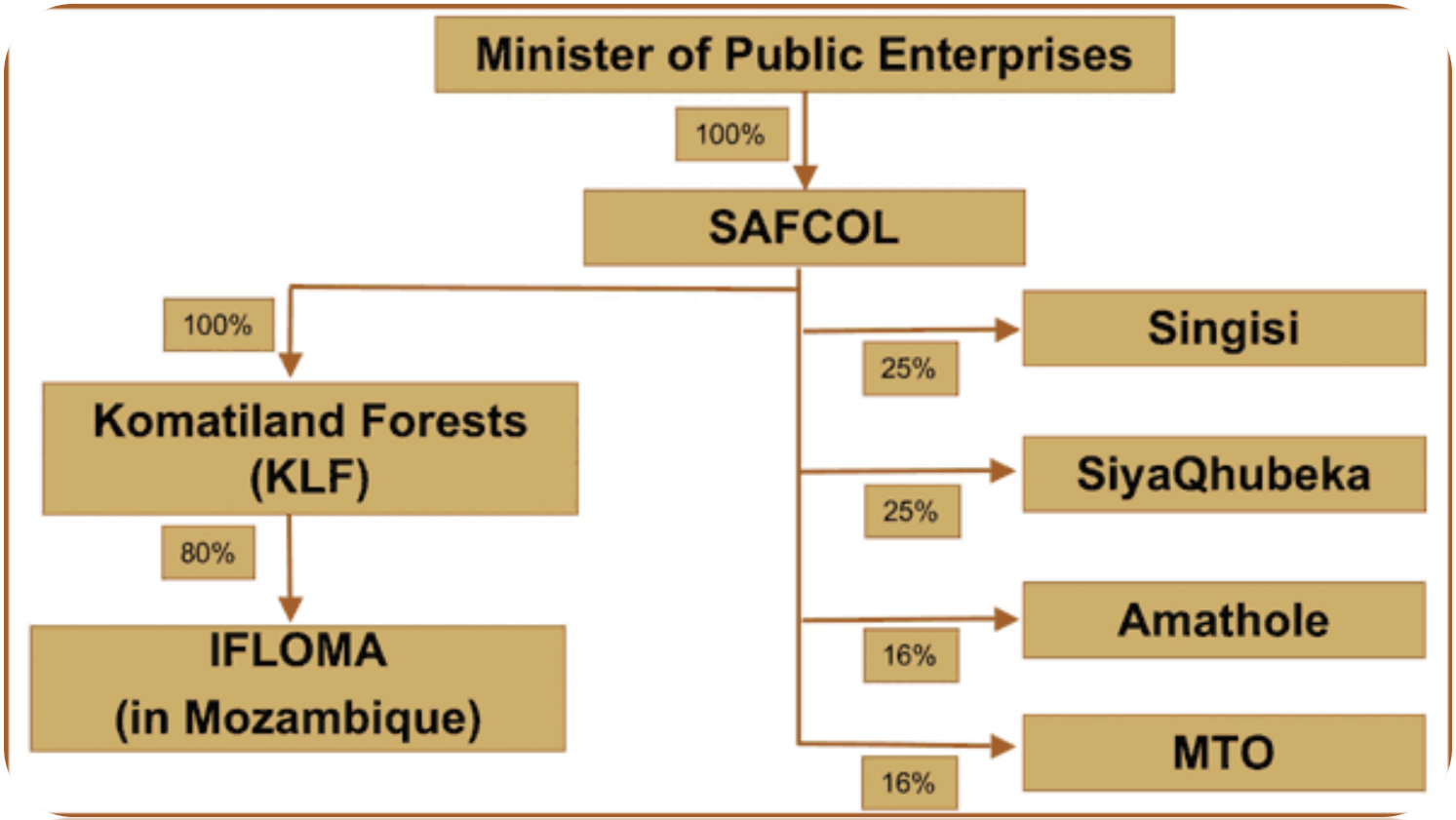
Roundlog Sawlog Transport

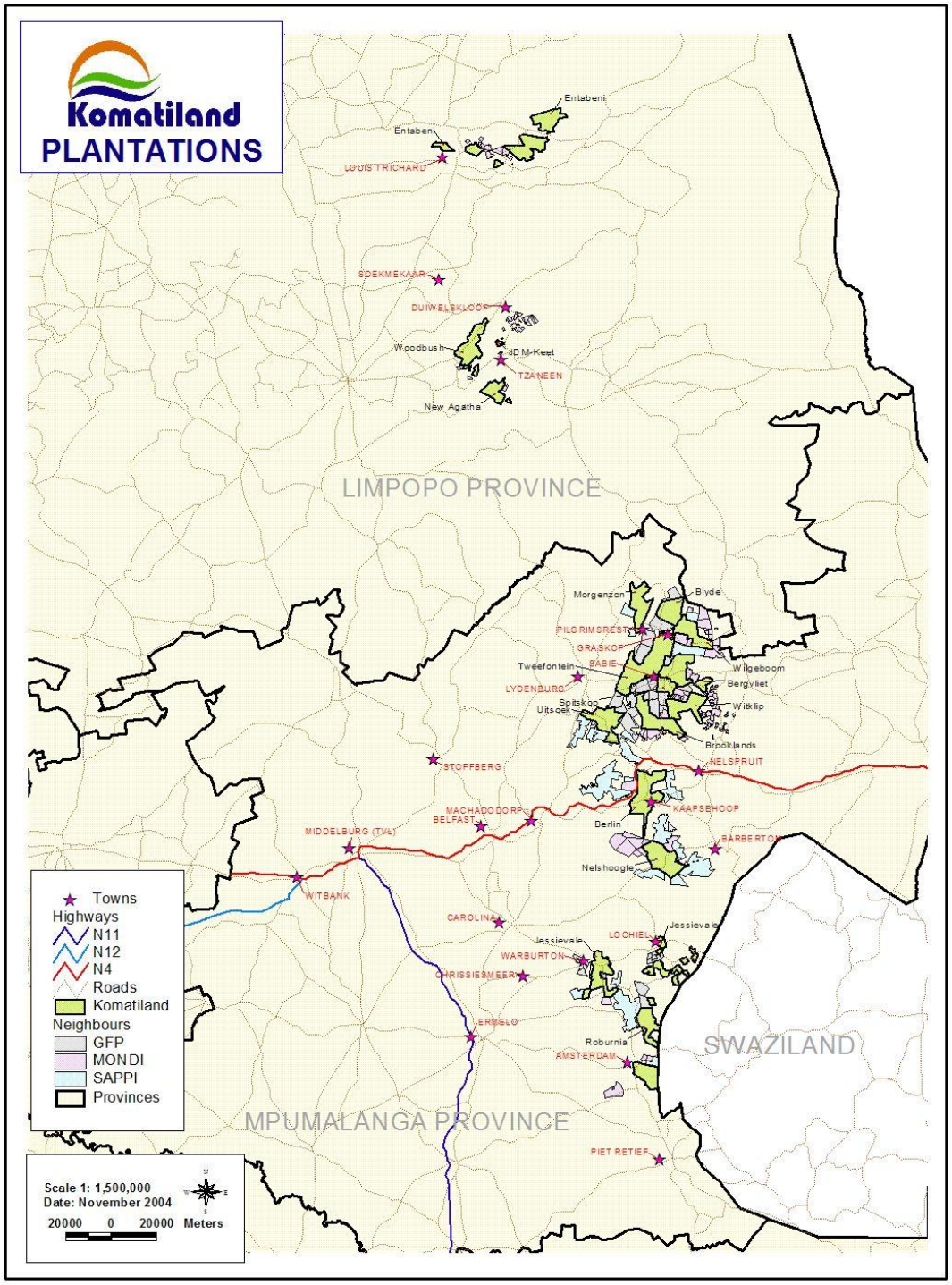
Presentation content

- Source overview
  - Company profile
  - Current transport flow
- Industry (grower & processor) focus
- Challenges (internal & external)
- Solutions and way forward

Komatiland Forests (PTY) Ltd

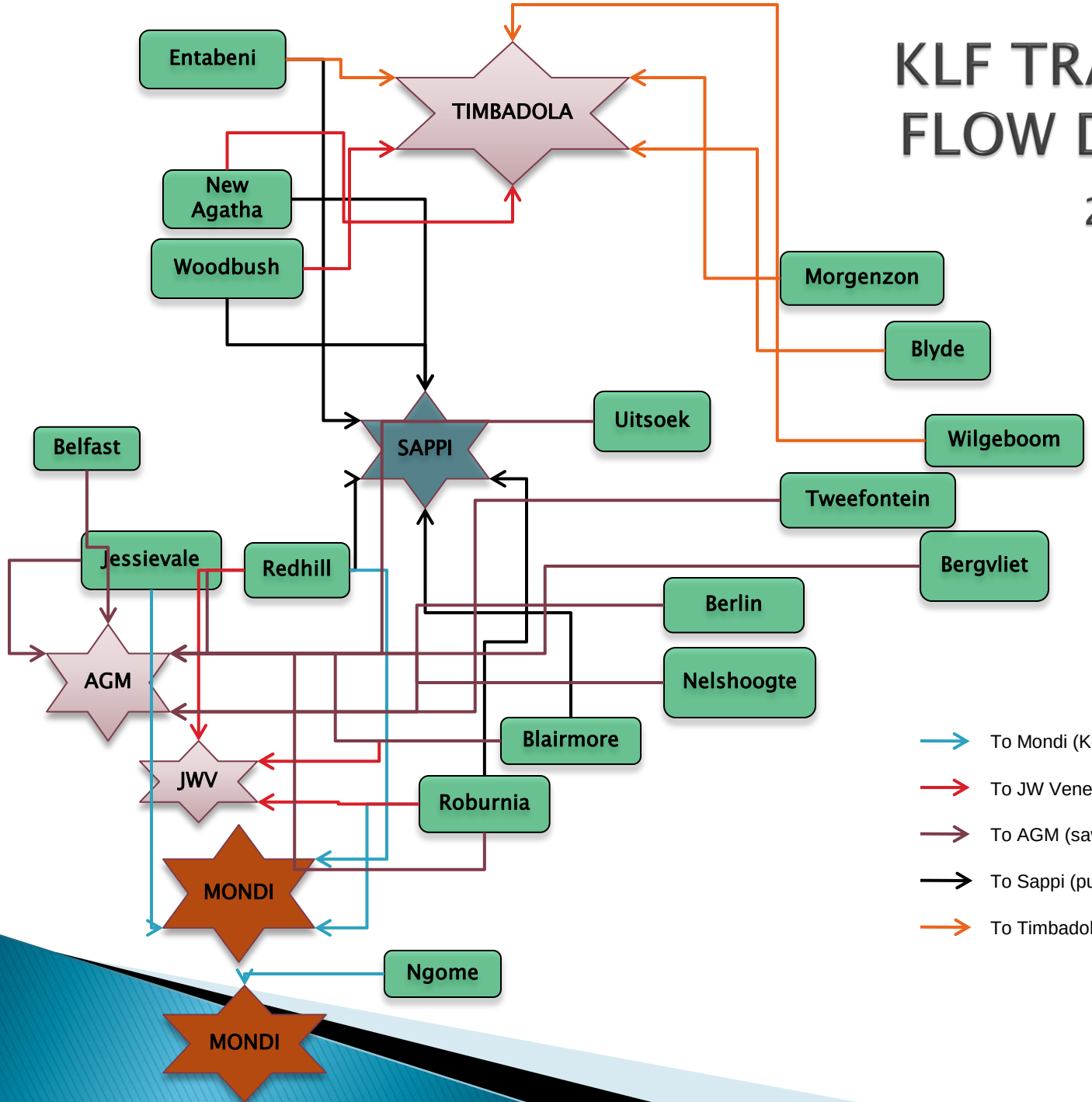


KLF operating area



KLF TRANSPORT FLOW DIAGRAM

2009



2008 Roundlog Sales Volumes from Plantations

Product	2008 ('000)	%
Sawlogs	4999 m^3	29.2%
Poles	435 m^3	2.5%
Mining Timber	417 tons	2.4%
Pulpwood	10 851tons	63.4%
Charcoal & Firewood	218 tons	1.3%
Other	200 tons	1.2%
Total	17 120 m^3 or tons	

Softwood
Sawlogs 1 ton = 0.94m^3
Pulpwood 1 ton = 1.0m^3
Eucalyptus grandis
Sawlogs 1 ton = 0.94m^3
Pulpwood 1 ton = 1.47m^3

Other Gum Species
Sawlogs 1 ton = 0.78m^3
Pulpwood 1 ton = 1.25m^3
Wattle 1 ton = 1.138m^3
Poplar 1 ton = 1.03m^3

Forestry Economics Services CC, **REPORT ON COMMERCIAL TIMBER RESOURCES AND PRIMARY ROUNDWOOD PROCESSING IN SOUTH AFRICA 2007/2008**

Estimated commercial plantation resource in terms of hectares

Region	Sawlogs		Pulpwood, Mining Timber, Poles and Other				
	Pine Area ('000 ha)	Eucalyptus Area ('000 ha)	Pine Area ('000 ha)	Eucalyptus Area ('000 ha)	Wattle and Other Area ('000 ha)	%	%
Northern Regions							
Limpopo	25	8		30	1	5%	
Mpumalanga North	139	10	35	72		19%	45%
Mpumalanga South	68	6	89	115	20	22%	
Middle Regions							
KZN Zululand/Maputaland	19	1	11	108	12	11%	
KZN North	11		7	44	24	6%	40%
KZN Midlands	20		45	76	48	14%	
KZN South	26		24	55	12	9%	
Southern Regions							
Eastern Cape	78		33	16	3	9%	
Southern Cape	61	1			1	5%	15%
Western Cape	16					1%	
Total	463	26	244	516	121	1370	
%	34%	2%	18%	38%	9%		
%	36%		64%				

Source: Plantation Areas: Commercial Timber Resources and Round wood Processing in South Africa – 2002/2003

Current sawlog focus – grower

- Cut to Value – full tree
- Value recovery focus– shorter lengths
- Revenue focus (ASP)

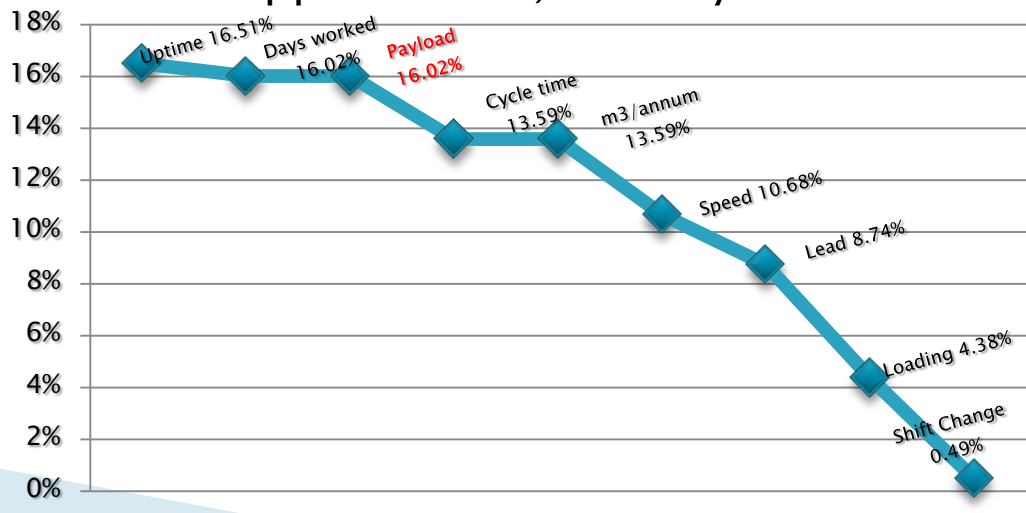
Processor

- Cut to order
- Right/certain mix – product diameter classes
- High specification level
- Recovery focus
- Asking – Mill delivery solutions (POS AM)

"Individual (boxed) optimisation approach – no Supply chain focus"

Influencing factors (IF)

- **R/m³ versus R/ton – time frame allowance**
- **Multiple configuration**
- Weight distribution – Stability (SRT) – useful life
- Payload 3-5m³ & costs
- Multiple source/destination base – shifting depots
- 6monthly tender
- THP's (geographic dispensation)
- Higher value products
- Delivered cost high – pressure on carriers
- POS AR? – stock security
- SIT independent (Intermediate cost drivers)
- Carrier agreements with customers – EOS opportunities, security
- Product characteristics & type
  - Shape
  - taper affect
  - longer lengths
  - 300mm intervals (1.2m – 6.6m)



IF cont…

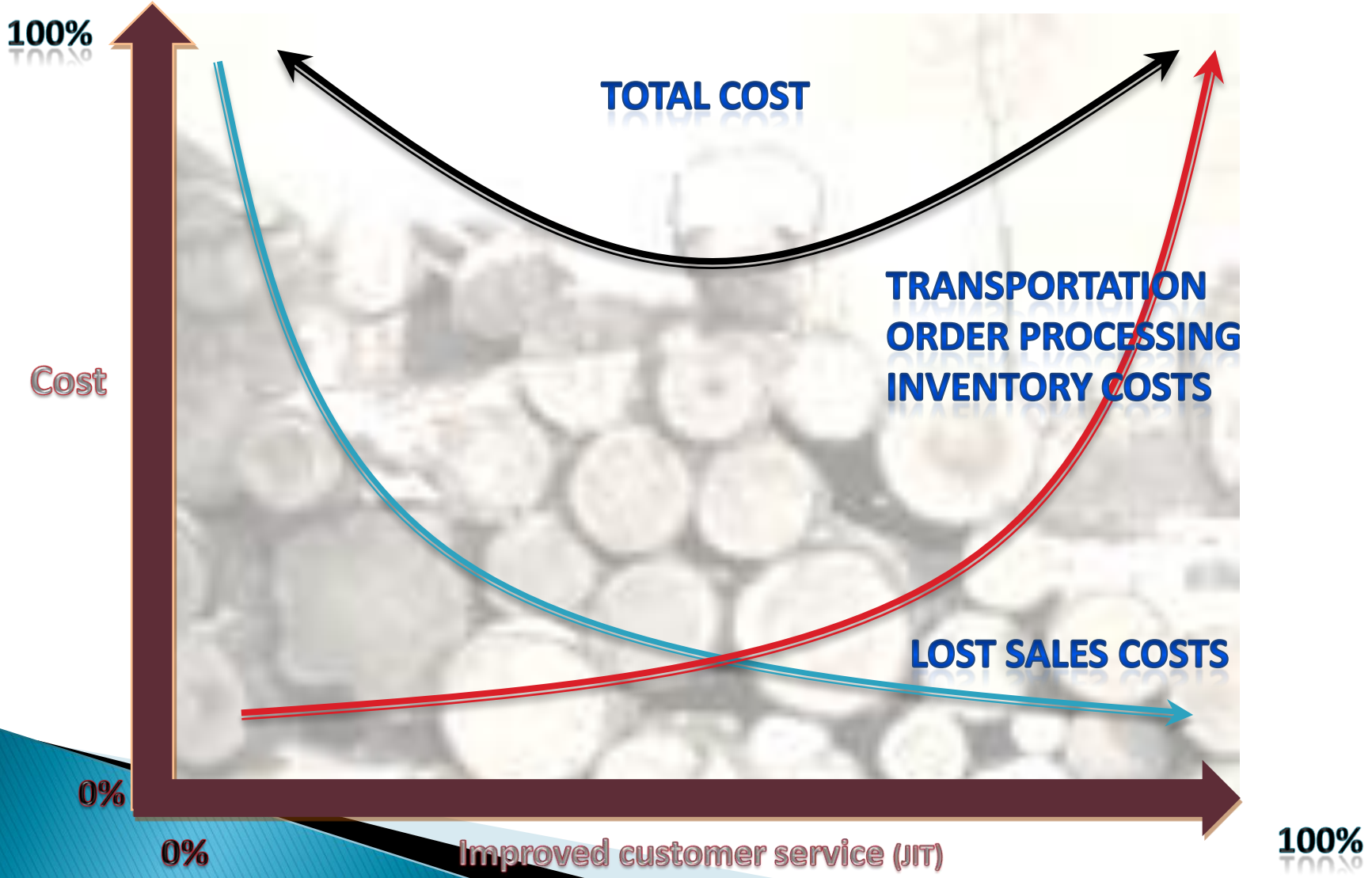
- Handling pro's/cons
  - Offloading equipment – FEL
  - Time spend
  - 12 hour shifts
  - Different service providers – no synergies
- Track and trace (excessive Mill times) – no weighbridge
  - Re-recording all the logs
  - Piece count disputes
- Available capacity after fires – market meltdown
- Avg fleet age (prev shorter supply)
- No innovation (>1980's – Stinger steer, Rigid & Tag/pup trailer)
- Performance Based Standards (PBS) – lack of buy in
- Price wars
- Supplementation of other freight on BH

Depot dev/rehab + Handling costs R20-30/m^3

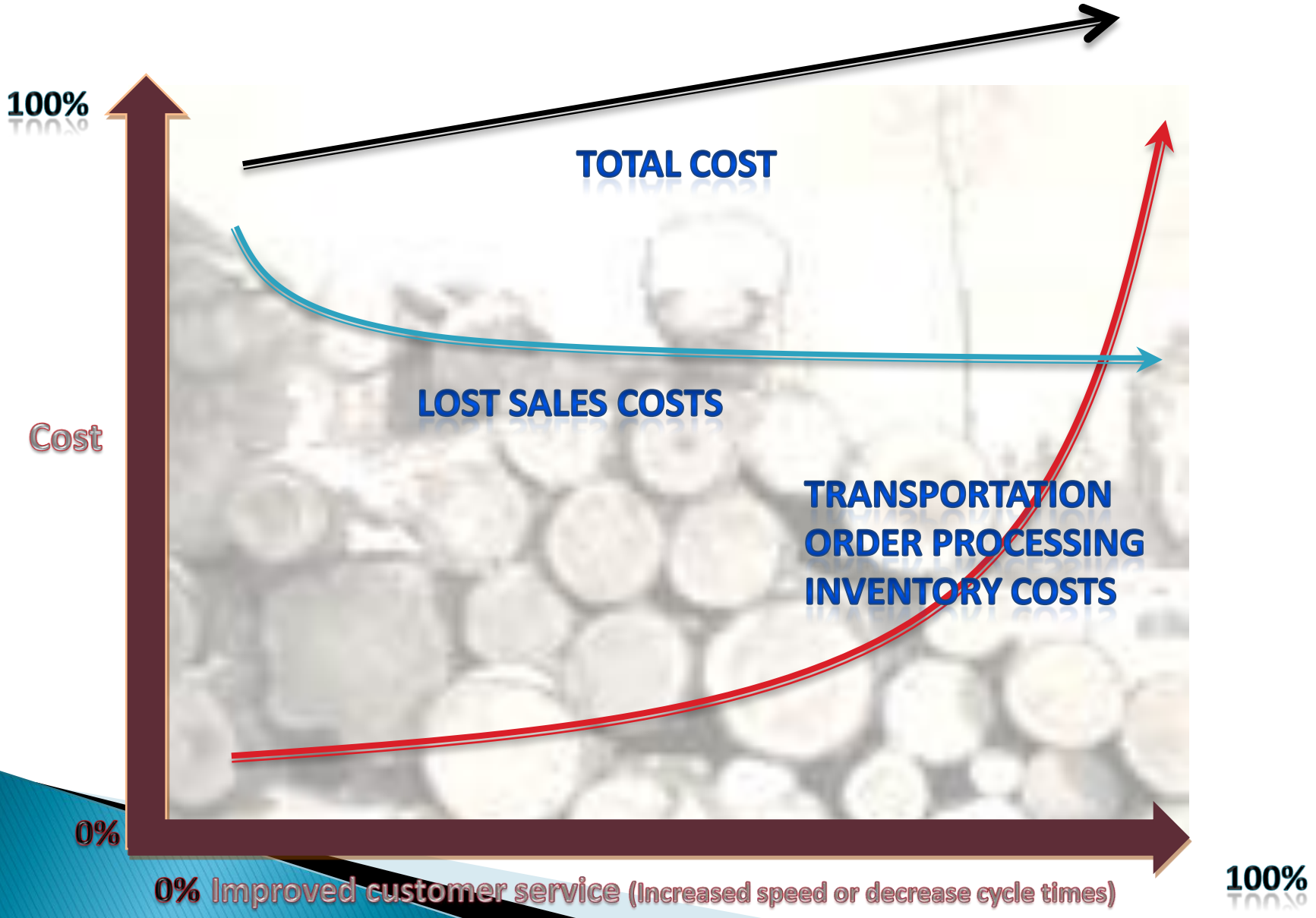
Recent carrier trends

- Exit
- Expanding operations – flat deck conversions
- Overheads and infrastructure stretched to save costs
- Decreased service levels
- Multiple products (chips, cement, lumber) and customer lines (Price relations) – future sawlog threat
- Sawlog source area expansion
- Transport versus logistics service provider – integration?
  - Centralised dispatch
  - load cells, CTI
  - Fleet management systems
- Own information/optimisation systems not linked with stakeholders
- Effort to keep a float without 1st & 2nd party involvement

Service level versus cost



Service level versus cost current



External factors

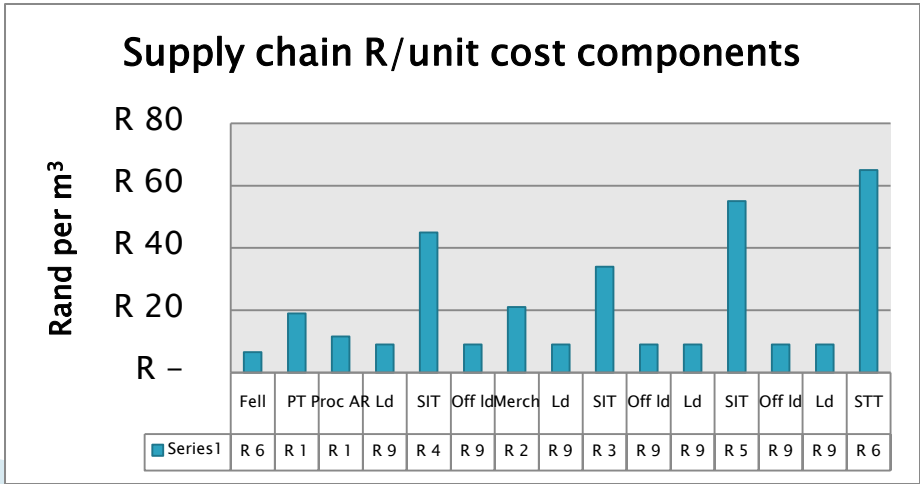
- Sawlog market 2-3year slump
- Exit from LTC and increased prices - past
- Repossession, Auction, banks
- Skills shortage logistics experts, fleet controllers, drivers, mechanics
- AIDS
- Transnet dev.
- Forestry charter May 2009 BBBEE enforcement
  - Numbers game
  - No room for ED - new entrants

"Forced re-look..."

Solutions

- Grower buy in – Marketing, FET, THP
- Processing/merchandising Yard concepts –full/part tree
- Customer involvement lower the specifications
- Longer optimal lengths – logistical fit (Interlink 6;12m, Rigid & Drawbar 8;10m)
- Price structures simplification
- Volume metric scanner & weighbridge algorithm solutions – POS AM
- 4th party logistics specialising optimising/simplifying supply chains
- Geographic industry (cross border) solutions

Transport of sawlogs constitute between 60-70% of delivered cost



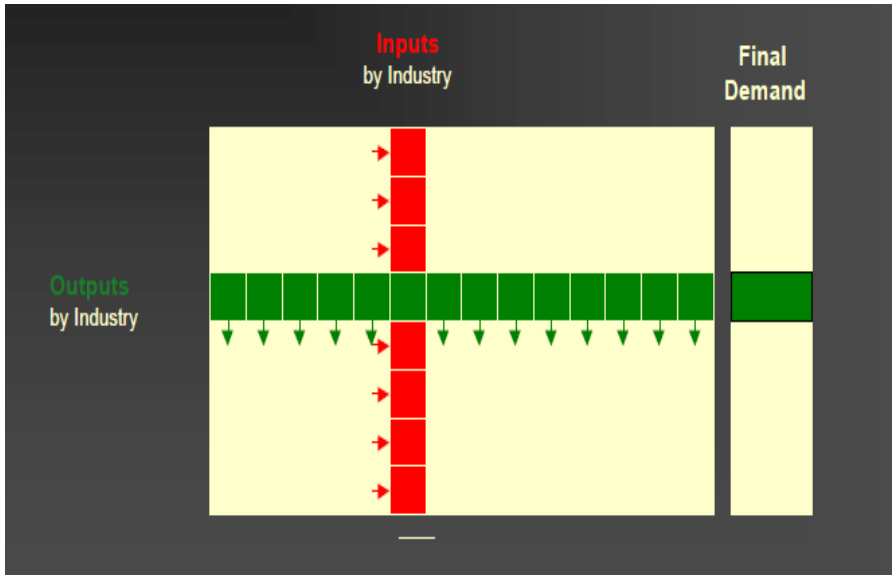
continue

- After sales OEM (hardware & software) involvement
- Create own synergies include/combine lumber, chips, poles, pulp (mixed species and product lines) bio-fuel's (sugar, SASOL) and other products
- Combine lumber (WMS, JIT/quick response)
- Supply chain solutions (materials handling, distribution network hubs) – integrated logistics approach
- WAN software – Fleet management solutions
- Building of partnerships (incubator growth)
- Skills development initiatives
- ABC, Pareto, EOC, Safety stock algorithms, network analysis, quantitative modelling techniques (income and cost base driven) –
  - Decision Support System(DSS) for Multi-Criteria Transportation and Distribution Problems

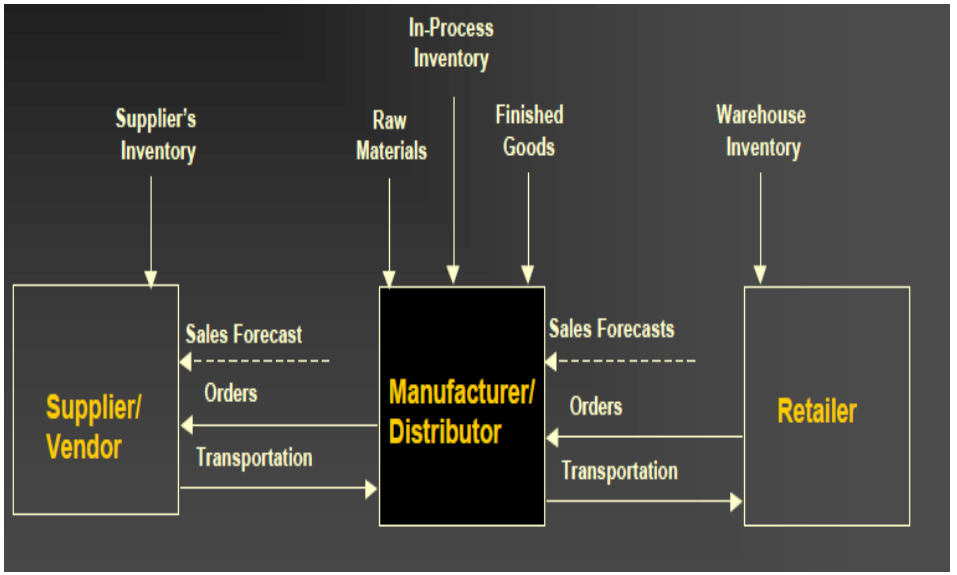
There are several ways to view logistics – integrated approach

- Input/Output view
- Supply chain view
- Geographic view
- Regional economy view

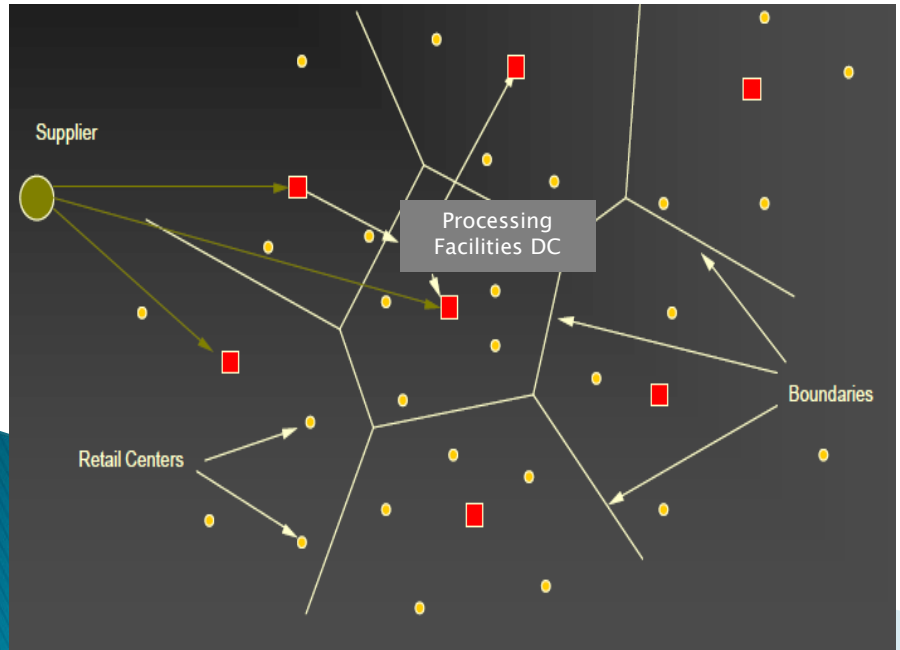
The I-O view shows the sales between individual industries in an economy



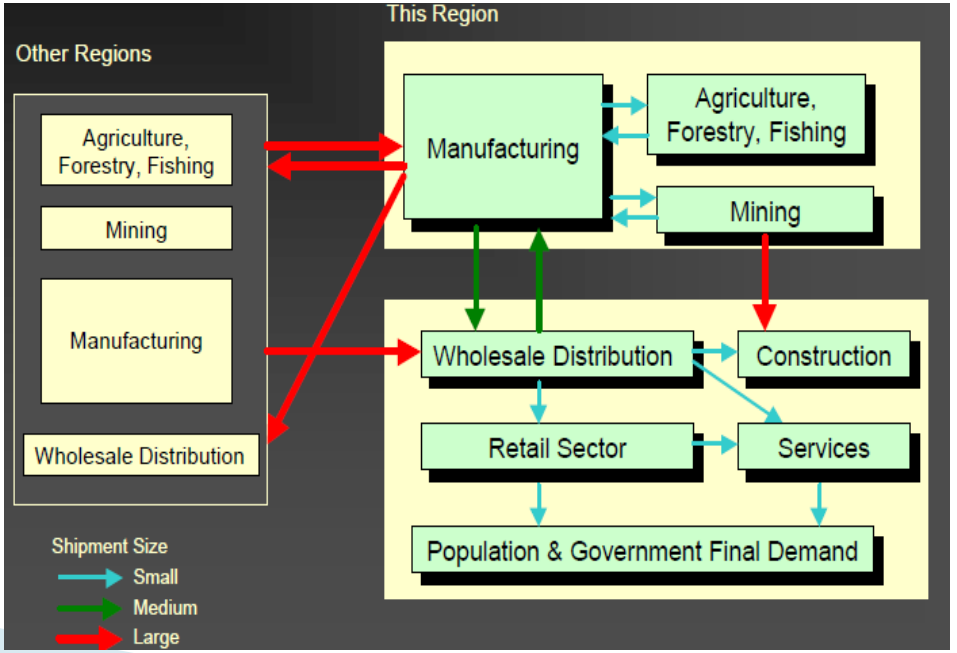
The supply chain view emphasizes the flow of inputs and outputs



The geographic view focuses on the spatial relationships



The regional economy view concerns intersectoral relationships locally



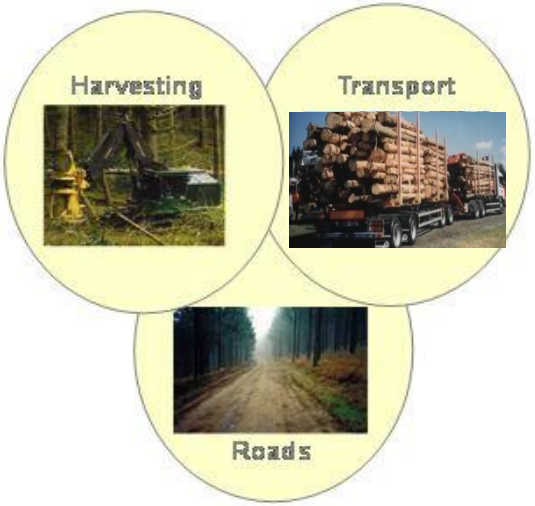
Conclusion

- Growth and sustainability targets going forward
- Individual cluster approach – replaced by integrated collaborative approach
- Total Supply Chain reengineering
- Industry support & commitment
- Longer term partnerships
- Core business – who is better at doing what
- Skills development and focus
- Innovation – FET & logistics forums per area
  - System and unit fits
  - Standardisation
  - Flexibility
  - Compatibility
  - Cross subsidising, sharing cost distributing savings

Process flow

Planning

Product flow



Information flow

Marketing & Finance - Cash flow