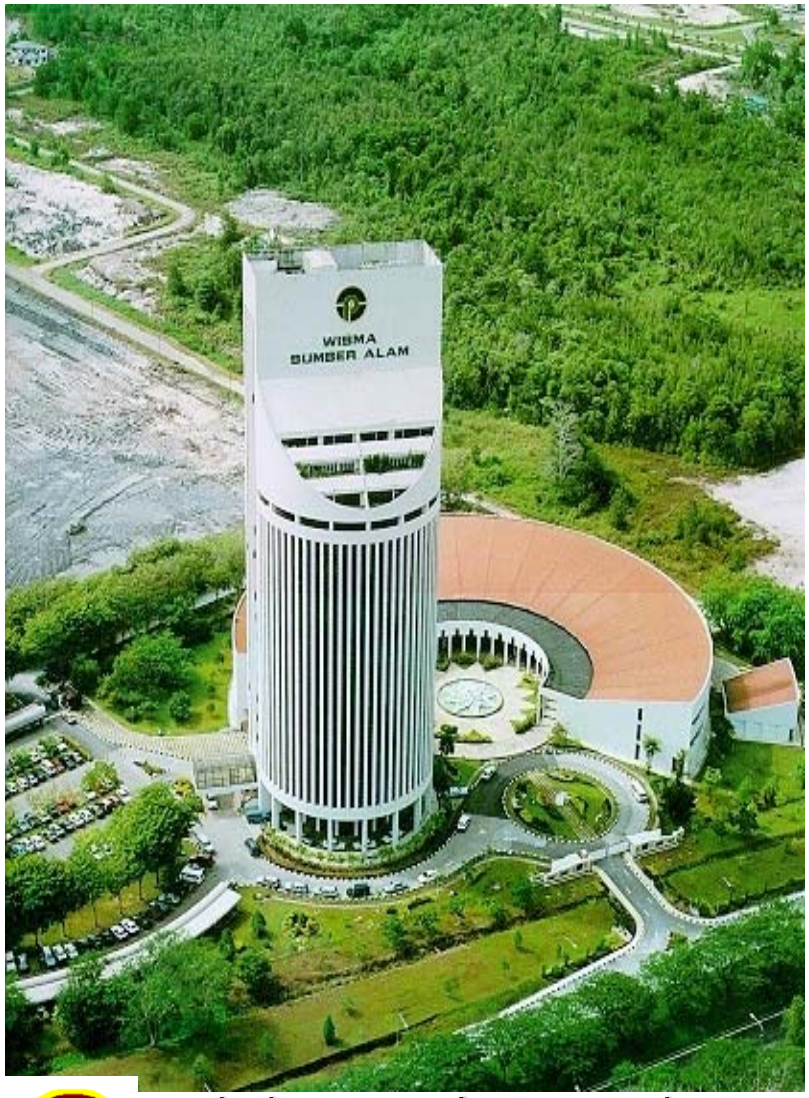

MANAGING FOREST RESOURCE OF SARAWAK FOR A SUSTAINABLE GROWTH TOWARDS 2020

A Paper Presented at the Sarawak Business Submit

Theme :Towards Sustainable Development for Continued Prosperity, Growth and Stability

21st January 2009

BY :

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Content of Discussion

- Scope of timber industry
- Socio-economic contribution of timber industry
- Strategic thrust for future growth
- Planted forest development
- Industry Challenges
- Conclusion

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- **Scope of timber industry**
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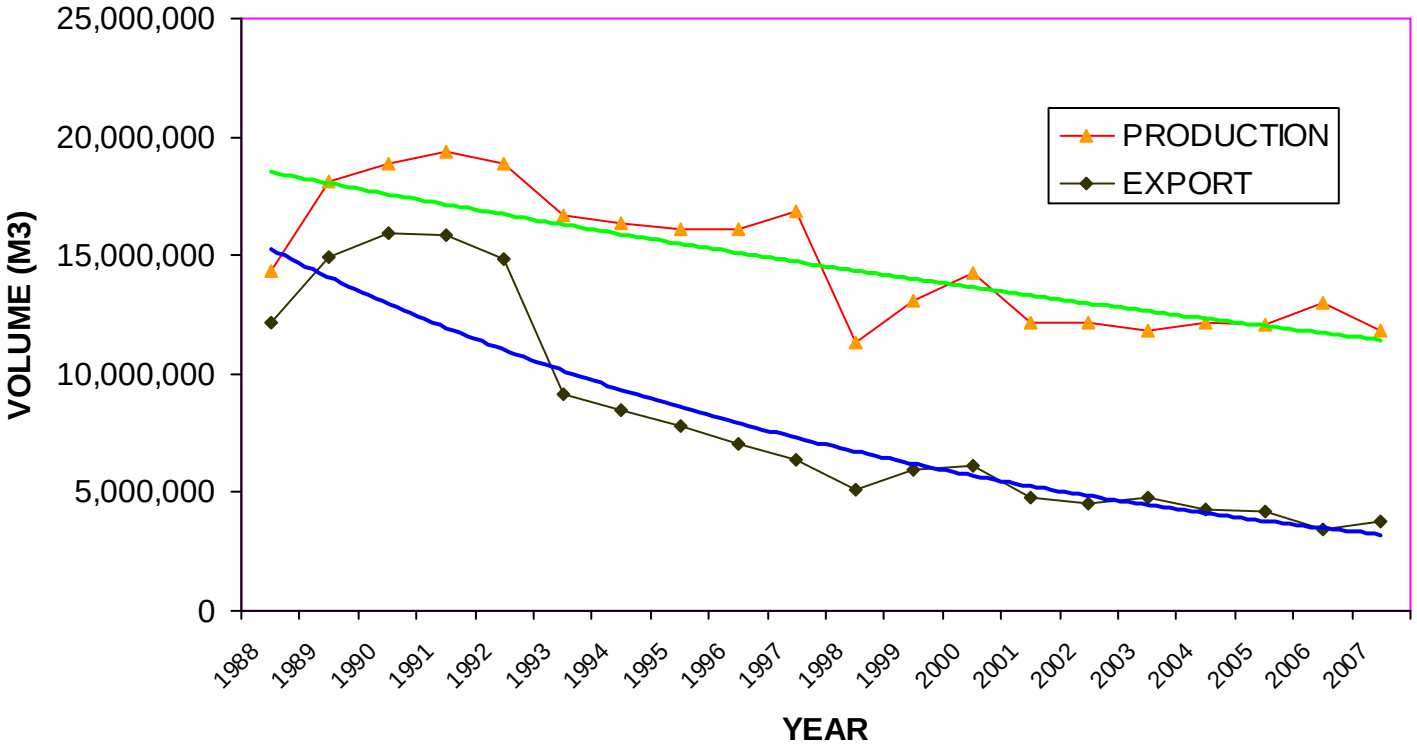
DEVELOPMENT OF WBI IN SARAWAK

1960's	1970's	1980's	1990's	2000's
Peat swamp logging (Ramin, Kapur, Keruing)				
Ramin Sawmill Mangrove woodchip mill	Sawmill processing Mixed Timber from Hill and Swamp forest			
Dowel & Moulding	Dowel, Moulding, Laminated Board			
	Hill/Mixed Dipterocarps Forest, MDF)			
	Plywood/Veneer			
			Fibreboard, particle board, woodchip, cement board , wood composites using mill wastes	
			Pulp and Paper	
			Forest Plantation	
			Log quota policy	

SARAWAK : *Log Production and Export*



Impact of log quota policy to the development of timber industry in Sarawak

SARAWAK : *Timber Industry Utilised Capacity*

NATURAL FOREST PRODUCTION

Sustainable Production :

9.2 million m3

Other Land :
3-4 million m3

UTILIZED CAPACITY

Sawmill : 2,200,000 m3

Plywood : 5,500,000 m3

Veneer : 1,000,000 m3

Logs : 8,700,000 m3

Fibreboard : 750,000 m3

Particle board: 250,000 m3

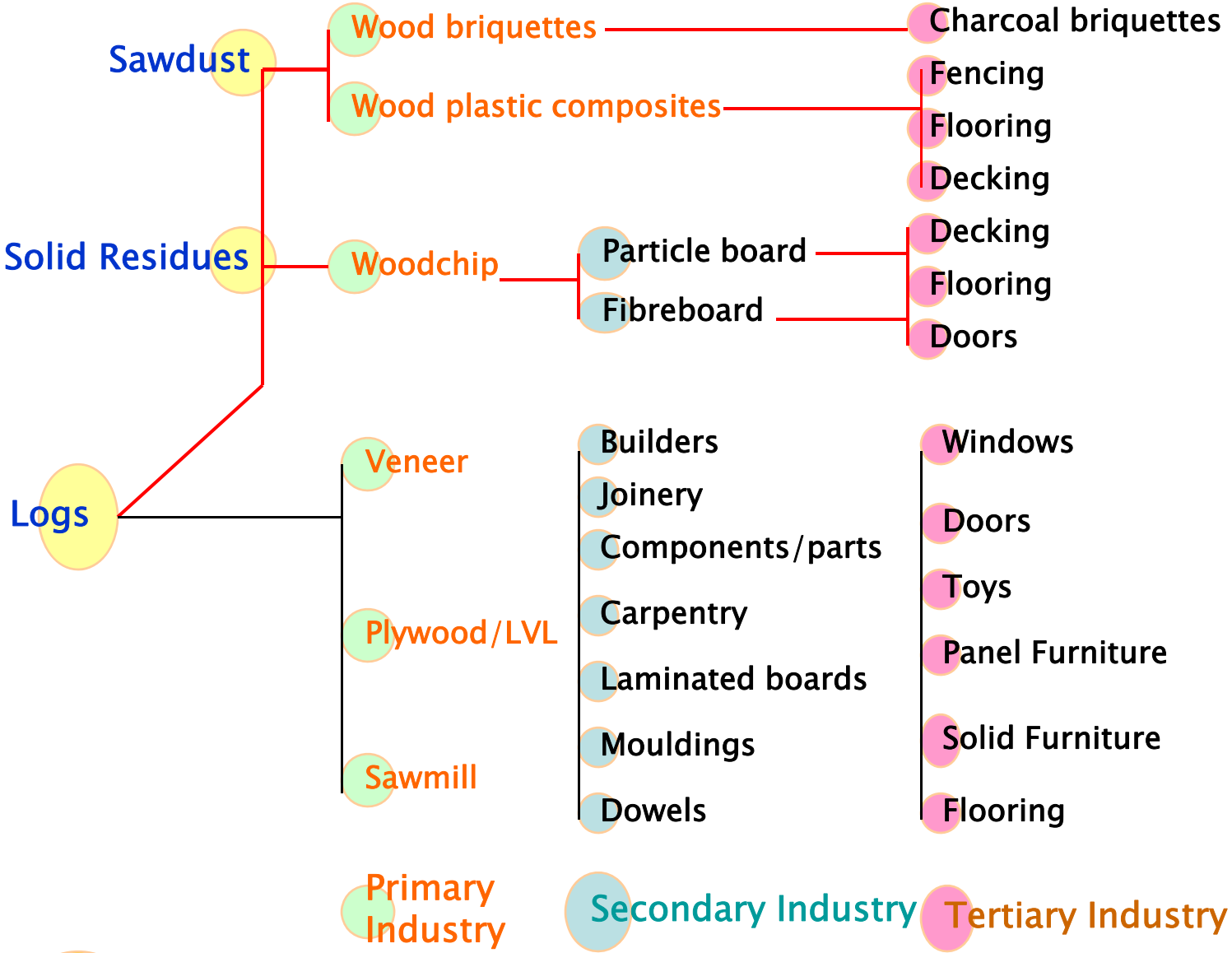
Woodchip : 250,000 m3

Compressed Wood: 50,000 m3

Residues : 1,400,000 m3

Charcoal Briquettes: 350,000 m3

Sawdust : 350,000 m3



SARAWAK : ***Scope of Timber Based Industry***

Content of Discussion

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SARAWAK : *Strategic Thrust for Timber Industry 2020*

- ***Natural Forest*** – to ensure continuous production of native species from PFEs through SFM practices

- ***Planted Forest*** – to successfully develop 1 million hectares of planted forest

- ***Industry Structure*** – to promote and develop industry utilizing planted species

- ***Innovation*** – to encourage applied r & d in the field of planted forests

SARAWAK : *Strategic Thrust for Timber Industry 2020*

- ***Technology*** – acquiring or develop competencies and technology pertaining to processing of planted timber species

- ***Human Capital Development*** – to develop competent human capital in the field of forest plantation management

- ***Financial Policy*** – to encourage financial institutions provide conducive policies for investments in forest plantations

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SARAWAK : *Why Promote Forest Plantation ?*

Industry's future in planted forest

" *The planted forest is our salvation. We must improve our position because we've reached a stage where we are (due to sustainability factor)only allowed to harvest around one million cubic metres of logs every year from the permanent forests"*

Pehin Sri Abdul Taib Mahmud, Chief Minister of Sarawak, 28 November 2008, Kuching

SARAWAK : *Why Promote Forest Plantation ?*

Industry's future in planted forest, continue .....

" . . *Trees from the state's planted forest maybe able to grow 10 times faster than natural forest. That means by 2020 we would be able to develop one million hectares of planted forest. Then we are able to produce more wood from planted forest than from our natural forest even though the planted forest area maybe only 20 per cent of the whole forest."*

Pehin Sri Abdul Taib Mahmud, Chief Minister of Sarawak, 28 November 2008, Kuching

SARAWAK : *Why Promote Forest Plantation ?*

- ***Productive*** – forest plantations yield at least 25 m3/yr/ha compared to 2-2.5 m3/yr/ha for natural forest

- ***SFM*** – reduce dependent on log supply from natural forest

- ***Industry Structure*** – to encourage development of industry utilizing fast growing planted species

- ***Experience*** – apply knowledge/experiences acquired by others in the field of planted forest

SARAWAK: *Planted Forest Plan 2020*

- LPF Issued : 43 licenses
- Total Gross Area: 2.4 million ha
- Nett Plantable Area: 1.0 million ha
- Annual Area: 64,000 ha/yr
- Government: 24,000 ha/yr
- Private Sector : 40,000 ha/yr

SARAWAK : *Log Production 2020*

[1]Native Timber
9.2 mil m^3

[2]Planted Forest
(Government)
4.2 mil m3
24,000 ha/yr

[3]Planted Forest
(Private)
15 mil m3
40,000 ha/yr

28.4
mil. m^3

Primary Industry : 24.2 mil m^3
Wood panels
Sawn timber

Reconstituted Panels and
Wood Composites

Pulp : Year 2011
Input : 3.6 mil. m^3 /yr
Output : 750,000 adt/yr
Paper :After 2011
350,000 ton/yr

Note :

1. Additional of 2 million m^3/yr from State Land
2. Cycle of 7 years @ MAI 25 m3/yr/ha
3. Cycle of 12-15 years, First cut 2020; MAI 25 m3/yr/ha

WBI 2020 : INDUSTRY SCOPE

Raw Material	Industry Type
Native Species Vol : 9.2 mil m3	Primary Industry Specialized products Niche market
Planted Species Vol : 19.2 mil m3	Sawn timber Panel products Reconstituted panels & composites Pulp and paper

WBI 2020 : SCOPE AND SCALE

Timber Resource	Natural : 9.2 million m^3 Planted : 19.2 million m^3
Primary Industry	Installed capacity: 24 mil m^3 Able to mix native and planted timber
Pulp and Paper	Capacity : 750,000 adt pulp : 350,000 t/paper Utilize Acacia : 3.6 mil m^3 /yr
Secondary & tertiary	Utilize native and planted timber
Reconstituted panels	Utilize mill and plantation residues
Composites	Mill and plantation residues

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WBI 2020 : *Raw Material*

- Native species logs only sufficient to support current capacity
- Growth depend on the success of planted forest programme
- Smaller diameter logs from planted forest
- Younger trees (12-15 years)
- Facilitate certification of legality of source

WBI 2020 : *Industry Structure*

- Development of pulp and paper industry
- Allow industry capacity to expand for those having readily available of raw material from planted forest
- Promote value-added products using fast growing planted species

WBI 2020 : *Technology*

- Ability to process smaller logs
- Mixture of native and planted logs
- Mechanization of production processes
- Producing product in higher value chain
- Optimum utilization of timber resources including converting mill residues
- Harvesting of planted forest
- Environment management

WBI 2020 : *Human Resource Development*

- Forest plantation management in the field of nursery, planting, pest/disease control, harvesting, infrastructure, etc
- Capability to process plantation logs
- Knowledge to utilize biomass
- Pulp and paper manufacturing
- Production technology
- Application of ICT
- Restructure and re-visit into the training programs offered at all level (more so for management and skilled workers)

Content of Discussion

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WBI 2020 : *Conclusion*

1. Timber Resource :
- Increase in planted forest major source of timber
2. Industry :
- Expanding in scope and scale
3. Technology :
- Automation and ICT application to process smaller diameter logs
- Higher value-added products
- Pulp and paper industry
4. Human resource :
- Requires continuous human (skill & mgt) development in all aspects from plantation to pulp and paper
5. Revenue :
- RM 18 billion at current price including RM3 billion from pulp and paper

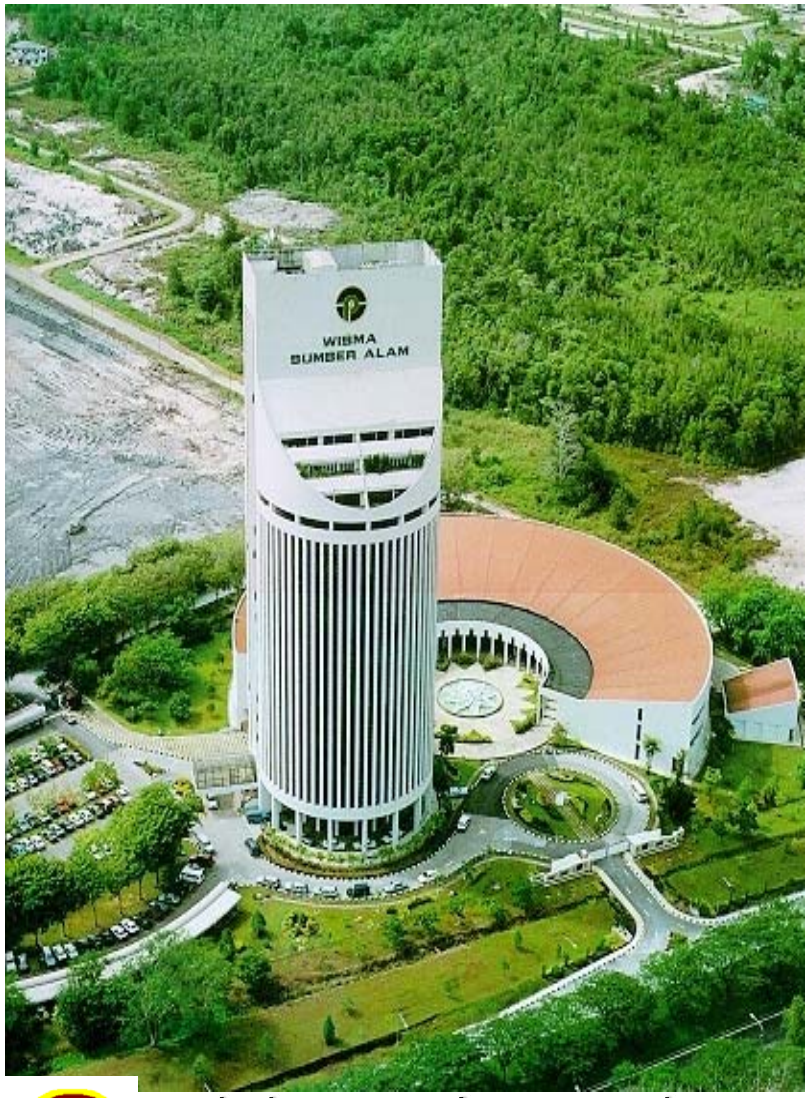
WBI 2020 : CONCLUSION

6. **Incentive** – Educate relevant supporting industry on the importance of forest plantation to the economy so that conducive fiscal and non-fiscal incentives for the forest plantation industry can be introduced

7. **Promotion** - Aggressive market promotions of our products to improve value and market acceptance

8. **Human Resource Development** - Restructure and re-visit into the training programs offered at all level (more so for management and skilled workers)

9. **Innovation** – Applied R & D for forest plantation species and its' utilization



Thank You