

**Public Seminar on the Promotion of Sustainable Forest Management to
Achieve Sustainable Development Goals**

Implementing Sustainable Forest Management – Some Experiences from Malaysia

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Presentation Outline

- **Introduction**
- **Global Forest Situation**
- **Essentials of Sustainable Forest Management**
- **Sustainable Forest Management in Malaysia**
- **Malaysian Timber Certification Council (MTCC) & Implementation of Timber Certification**
- **Challenges**
- **Conclusions**



SUSTAINABLE DEVELOPMENT GOALS

1 NO POVERTY



2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



4 QUALITY EDUCATION



5 GENDER EQUALITY



6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



8 DECENT WORK AND ECONOMIC GROWTH



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



10 REDUCED INEQUALITIES



11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



14 LIFE BELOW WATER



15 LIFE ON LAND



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



17 PARTNERSHIPS FOR THE GOALS



SUSTAINABLE DEVELOPMENT GOALS

2030 Agenda for Sustainable Development

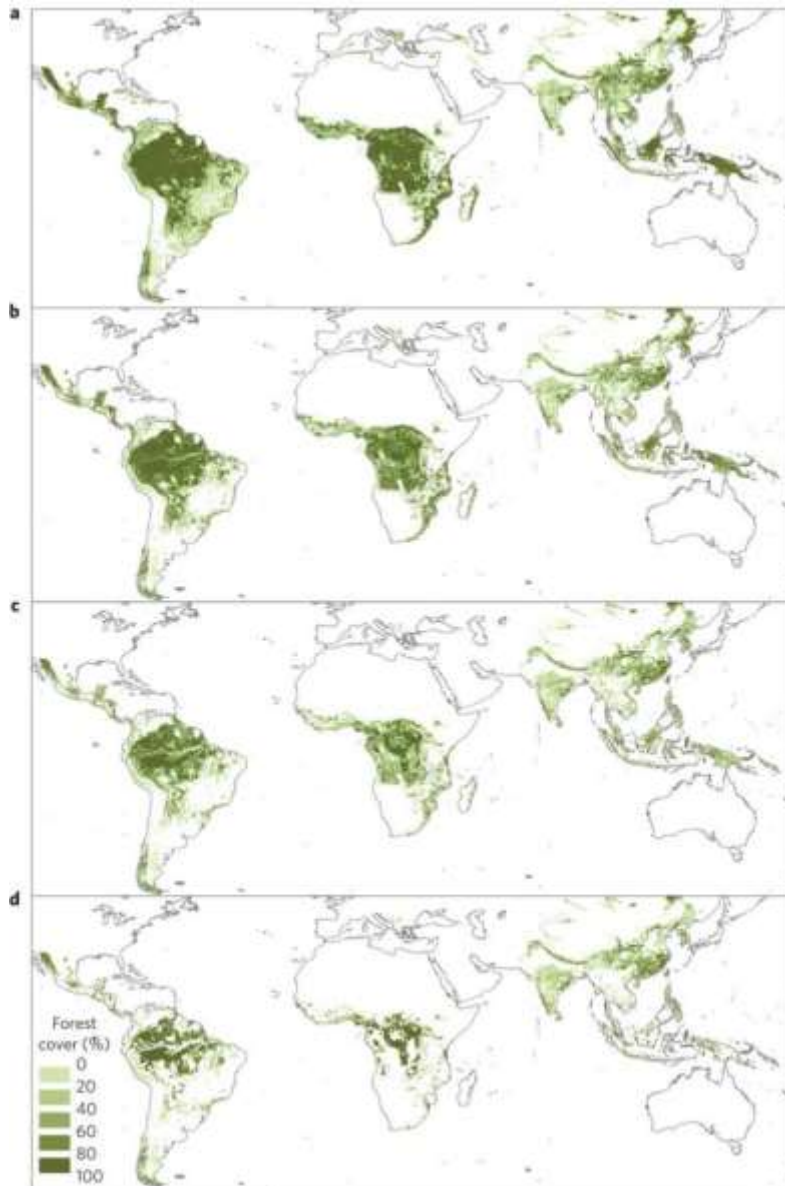
- Adopted on 25 September 2015 by the UN General Assembly, it includes 17 SDGs including item 15.2 on SFM:



“By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally”

- Focus of presentation on implementation of sustainable management of natural tropical forests based on experiences in Malaysia where about 1/3 of its Permanent Reserved Forests have been certified under the PEFC-endorsed MTCS

Extent of Global Forests



- Pre-industrial forest area: 6 billion ha
- Currently only 3.6 billion ha equally distributed between tropical and non-tropical forests
- Global deforestation:
 - 1990-2000: 16 mil ha/year
 - 2000-2010: 13 mil ha/year
- Tropical deforestation serious
- Illegal logging

State of Tropical Forest Management

ITTO Report (2011)

- Survey in 33 tropical countries with forest area totaling 1.4 billion ha
- 30.6 million ha under management
- Only 17.0 million ha under SFM and certified

Current situation: 37 million ha of tropical forest certified

Current Status of Forest Certification

GLOBAL

Total Certified Forests: 446 million ha

(10% of the world's forests)



Total Certified Tropical Forests: 37 million ha

(8.3% of total certified forests)

Tropical Forest Crisis



- Deforestation and degradation
- Unsustainable timber harvesting
- Illegal logging
- Unsustainable conversion
- Impact on forest dependent communities
- Loss of biodiversity
- Global warming
- Negative impact on tropical timber trade

Definition of Sustainable Forest Management (SFM)

ITTO (1992)

“The process of managing forest to achieve one or more clearly specified objectives of management with regard to the production of a **continuous flow of desired forest products and services without undue reduction of its inherent values and future productivity and without undue undesirable effects on the physical and social environment**”

United Nations (2007)

“a dynamic and evolving concept, [that] aims to maintain and enhance the **economic, social and environmental values** of all types of forests, for the benefit of present and future generations”

Guidelines for the Sustainable Management of Tropical Forests

Guidelines for SFM

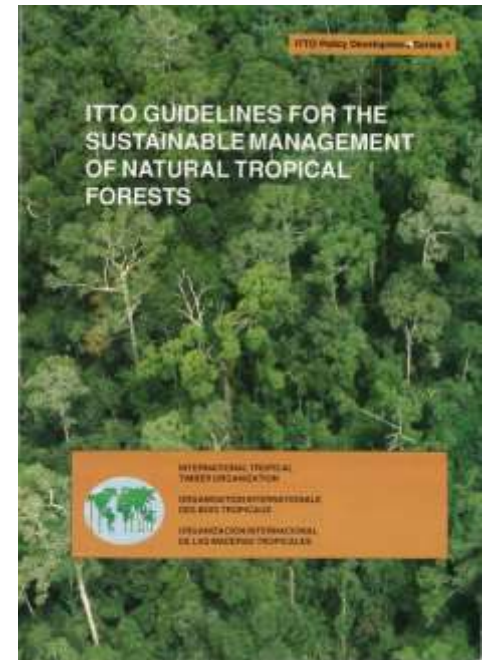
- Guidelines are presented in the form of Principles and possible actions covering considerations ranging from general policy to forestry operational aspects embracing forest sustainability – social, environmental and economic aspects

Criteria & Indicators for SFM

- *Criterion* is an aspect that is considered important by which SFM may be assessed. A *Criterion* is accompanied by a set of related indicators
- *Indicator* is a quantitative, qualitative or descriptive attribute that, when periodically measured or monitored indicates the direction of change in a criterion

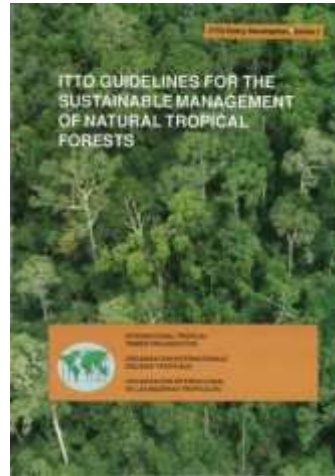
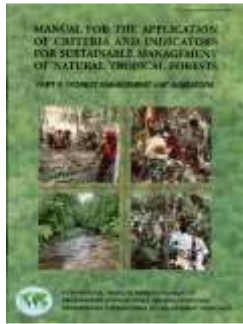
ITTO Guidelines for the Sustainable Management of Natural Tropical Forests, 1990

- ITTO pioneered the development of guidelines for sustainable management of natural tropical forests
- “to be the international reference standard for the development of more specific guidelines of the national level, for sustainable management of natural tropical forests for timber production ...”
- Very innovative and controversial at that time
- Development of new concepts:
 - Criteria and Indicators for SFM
 - Forest Management Certification
- Revised 2005 and 2015

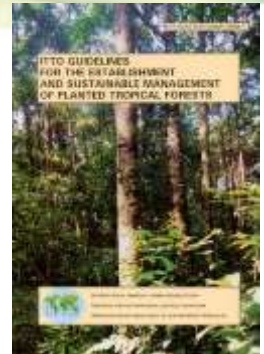


Related Guidelines for the Sustainable Management of Tropical Forests

- ITTO C&I (1992, 1998, 2005)



- Guidelines for Sustainable Management of Planted Tropical Forest (1993)



- Guidelines for Conserving Biodiversity in Production Forests (1993, 2008)



- Guidelines for the Management of Secondary Tropical Forests, Tropical Forest Restoration and the Rehabilitation of Degraded Forest Lands (2002)



- Guidelines on Fire Management (1998)



ITTO Guidelines for SFM (2015) – Objectives & Principles

Objective	Principles for managing natural tropical forests	
	Principle	Observations
1. Providing the enabling conditions for SFM	Principle 1: Forest governance and security of tenure	Necessary conditions for SFM: • Political commitment • Supportive national policies • Strong institutions, laws and regulations, • Appropriate governance • Security of forest tenure • Clearly defined access and use rights, including customary and traditional rights
	Principle 2: Land-use planning, permanent forest estate and forest management planning	• Managing tropical forests sustainably requires that land allocation and spatial planning within and outside forests maintain or enhance the economic, social and environmental values of forests at a landscape scale. • This requires the adoption of a forest planning framework at the national, subnational or landscape scale

ITTO Guidelines for SFM (2015) – Objectives & Principles

Objective	Principles for managing natural tropical forests	
	Principle	Observations
2. Ensuring forest ecosystem health and vitality	Principle 3: Ecological resilience, ecosystem health and climate-change adaptation	• Resilience is a key tenet of SFM in natural tropical forests; it is essential to maintain or enhance it to reduce risks to sustainability • Climate change is likely to affect tropical forests and the people who depend on them • It is essential to identify, prevent, monitor and manage threats to forests and to protect them from destructive agents and stresses

ITTO Guidelines for SFM (2015) – Objectives & Principles

Objective	Principles for managing natural tropical forests	
	Principle	Observations
3. Maintaining the multiple functions of forests to deliver products and environmental services	Principle 4: Multipurpose forest management Principle 5: Silvicultural management	• The role of natural tropical forests as providers of multiple goods and environmental services should be safeguarded by the application of sound planning and management practices that maintain ecosystem functions and the potential of the forest to yield the full range of benefits to society • In timber production forests, it is essential to have an approved management plan with clearly stated objectives and the silvicultural measures to help meet those objectives

ITTO Guidelines for SFM (2015) – Objectives & Principles

Objective	Principles for managing natural tropical forests	
	Principle	Observations
4. Integrating social, cultural and economic aspects to implement SFM	Principle 6: Social values, community involvement and forest-worker safety and health Principle 7: Investment in natural forest management and economic Instruments	• SFM needs to accommodate forest-based production (particularly of timber), environmental protection and local development concerns • Natural tropical forests perform a wide range of socioeconomic and cultural functions, which must be recognized and maintained

Timber Legality & Sustainability

- Sustainable timber product of SFM (social, environmental & economic factors required by law and forest management principles)
- Sustainable timber assured through both international and national certification schemes
- SFM/certification long-term goal
- Legal timber milestone on journey to attain SFM/sustainable timber
- Legal timber embraces social, environmental & economic aspects required by law and thus with lesser number of criteria and indicators

Timber Legality & Sustainability

- Verification of legal timber through Timber Legality Assurance System (TLAS)
- Certification voluntary
- TLAS under the EU Forest Law Enforcement, Governance and Trade Voluntary Partnership Agreement (FLEGT VPA) legally binding through bi-lateral agreements between EU & partner countries

Actions by Consumer Countries to Combat Illegal Logging & Trade in Illegal Timber

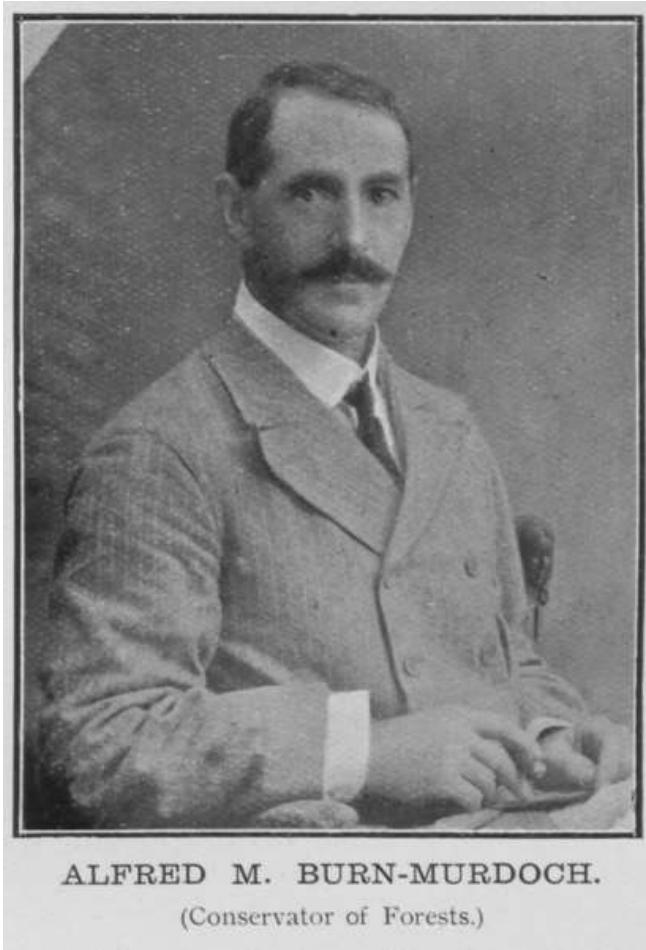
- G-8 initiatives, (2005)
- US Lacey Amendment Act, May 2008
- EU Timber Regulation, March 2013
 - FLEGT VPA
 - Due Diligence
- Australian Illegal Logging Prohibition Act, November 2014
- Public Procurement Policy
- Other consumer countries expected to take similar measures



Some Elements of Forest Management Plan (FMP)

- Forest Management Plan (FMP) fundamental to SFM at the FMU level
- Contents of FMP includes among others the following elements:
 - Objectives of management
 - Resources assessment
 - Incorporation of elements related to the 3 pillars of sustainability – social, environmental and economic considerations which define SFM
 - Biodiversity conservation
 - Analyses of issues
 - Growth & yield
 - Annual coupe
 - Harvesting Plans
 - Silviculture system
 - Post-Felling assessment on regeneration status and follow-up treatment
 - Monitoring

History of Forest Management in Peninsular Malaysia



- First Forest Officer appointed in 1901
- Gazettement of permanent forests comprising of Totally Protected Areas (TPAs) for biodiversity conservation & forest reserves sustainably managed for timber production and other goods & services since 1906 which now total about 50% of Malaysia's land mass
- First Forest Ordinance enacted in 1907
- Matang mangroves managed since 1904

Selective Management System (SMS)

- Conservation of the forest resources
- Sustainability of the productive resource base
- Minimize reinvestment for forest rehabilitation work
- Ensure environmental stability and quality
- Reduce damage to the advanced growth

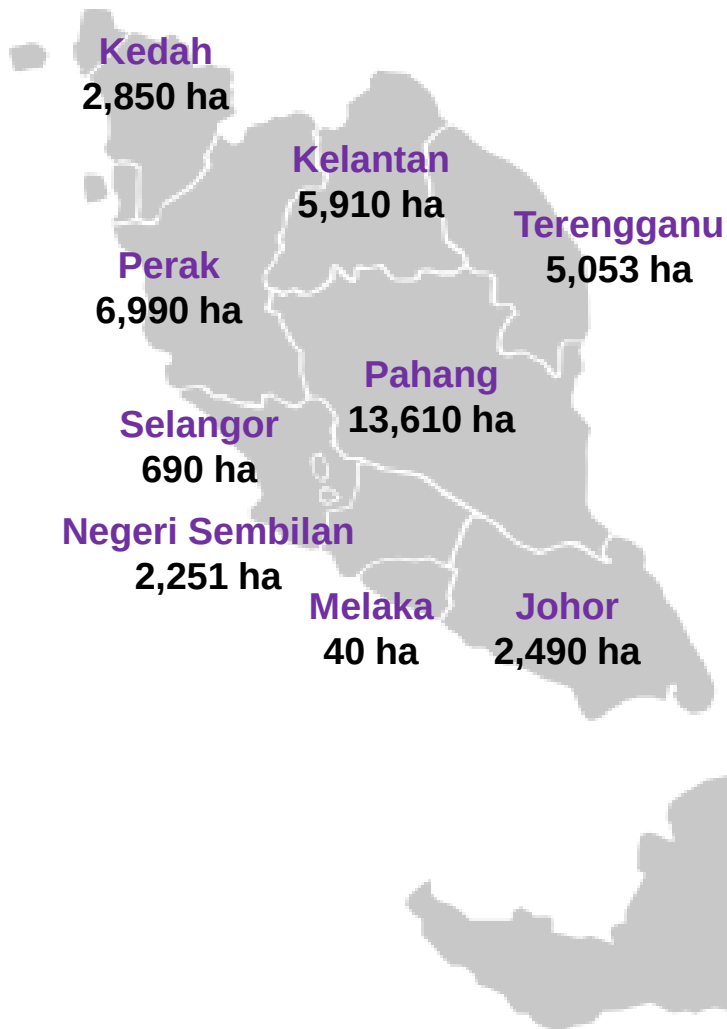


Sequence of Operations of SMS

Year	Operation
n-2 to n-1	Pre-felling forest inventory of 10% sampling intensity using systematic-line-plots to determine appropriate cutting limits (regimes); minimum cutting limit 50 cm dbh for dipterocarp species and 45 cm for non-dipterocarp species
n-1 to n	Tree marking incorporating directional felling ▪ Marking of trees to be felled (some 7 -12 trees harvested per ha) ▪ Marking for mother trees (4 trees per ha) ▪ Marking of protection and protected trees ▪ Demarcating boundaries of buffer zone for watercourses
n	Felling of trees
n¹/₄ to n¹/₂	Forest survey to determine damage to residuals and royalty on short logs and tops
n+2 to n+5	Post-felling forest inventory of 10% sampling intensity using systematic-line-plots to determine residual stocking and appropriate silvicultural treatments
n+10	Forest inventory to determine regeneration status of the forest

Annual Allowable Coupe (AAC) under 10th Malaysia Plan (2011-2015)

PENINSULAR MALAYSIA



Peninsular Malaysia:	40,334 ha
Sabah:	60,000 ha
Sarawak:	155,000 ha
Total:	255,334 ha

SARAWAK
155,000 ha

SABAH
60,000 ha

Forest Certification

- Forest certification gives assurance of SFM in a credible and transparent manner through independent third party auditing
- Forest certification and Chain of Custody (CoC) assures the sustainability of timber products to consumers
- 2 international schemes:



- National certification schemes include:



China



India



Indonesia



Lembaga Ekolabel Indonesia



Malaysia

- Endorsed by PEFC: MTCC (1 May 2009), CFCC (5 Feb 2014), IFCC (1 Oct 2014)

Establishment of MTCC

- MTCC was established in January 1999
- Independent & non-profit organisation
- To develop & operate a voluntary & independent national certification scheme - Malaysian Timber Certification Scheme (MTCS)
- Governed by an 11-member Board of Trustees (BOT) comprising representatives from:
 - timber industry
 - academic & research institutions
 - non-governmental organisations (social, environmental & workers' groups)
 - governmental agencies
- Funded by Endowment Fund
- 16 person secretariat



Development of MTCS

The development of the Malaysian Timber Certification Scheme (MTCS) is both a country- and market-driven initiative.

Country-driven:

- Malaysia 1 of 12 countries with mega-biodiversity
- Rich resources should be sustainably managed to ensure environmental & socio-economic benefits
- Increasing awareness and concern among local stakeholder groups

Market-driven:

Export requirements in major timber markets:

- Demand for sustainable/legal timber & timber products
- Procurement policies in key importing countries
- Possible price premium & better market access
- Legislation requiring legal timber & timber products

Operation of MTCS

- MTCS started operations in October 2001
- Provides independent assessment of forest management practices, to ensure the sustainable management of Malaysia's natural forest and forest plantations to meet the demand for certified timber products
- Comprises two components:
 - Forest Management Certification (FMC)
 - Chain of Custody (CoC) Certification



FMC audit

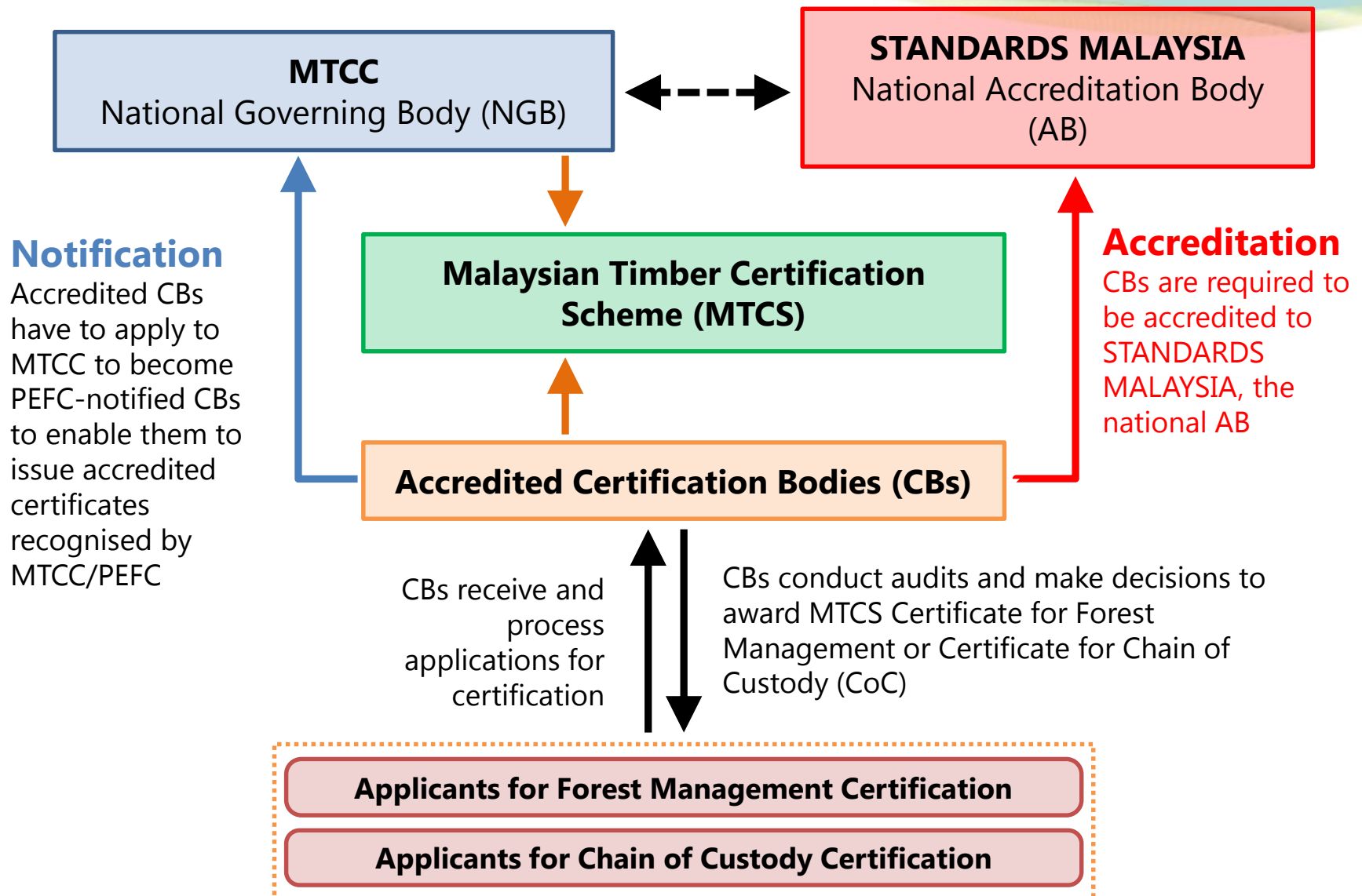


CoC audit

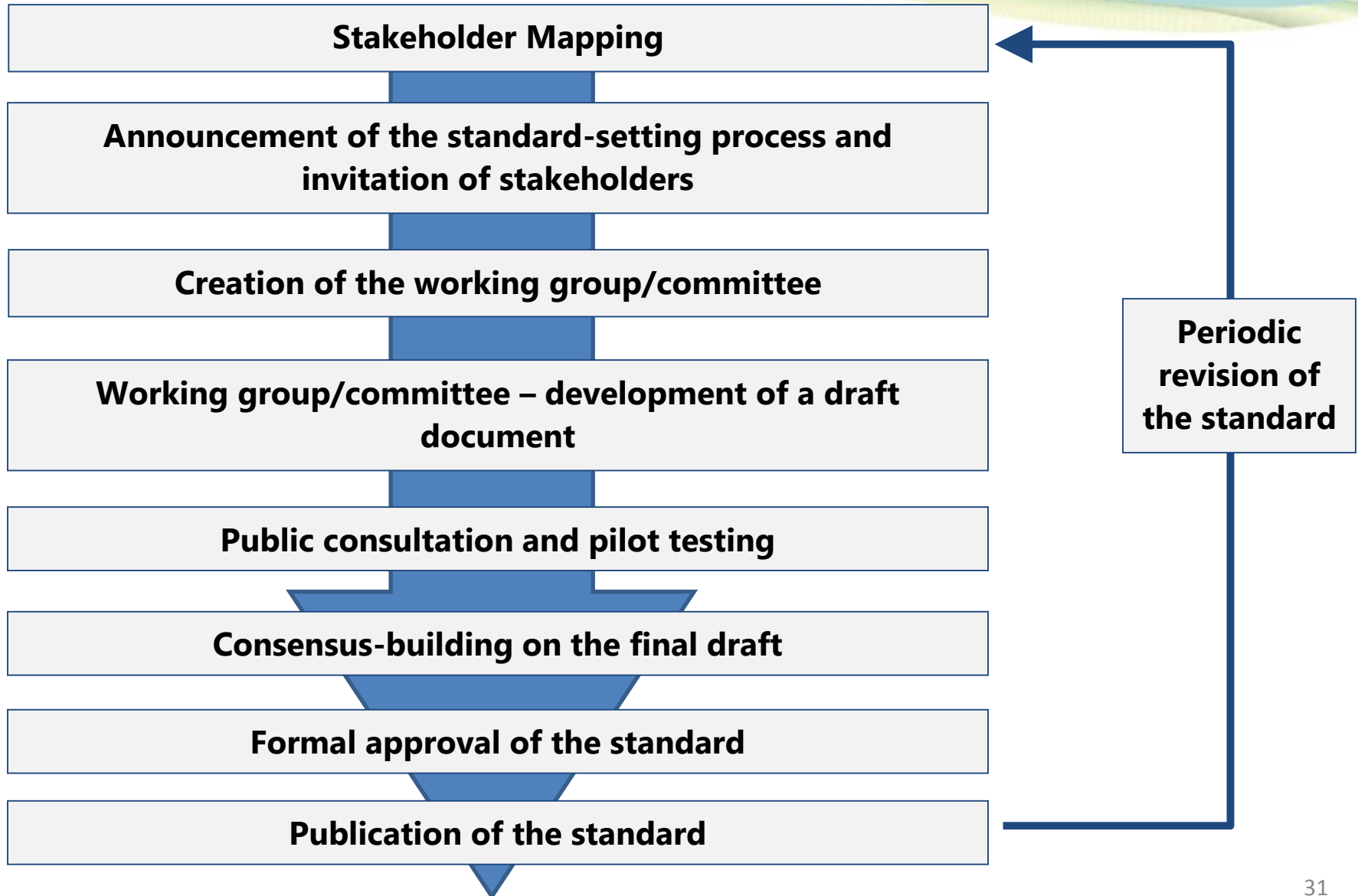
Operation of MTCS

- Certification covers only Permanent Reserved Forests (PRFs) and community owned or managed forests and established forest plantation in the country
- Endorsed by the Programme for the Endorsement of Forest Certification (PEFC) since May 2009.
 - Re-endorsed in July 2014 for another 5 years
- Success of the MTCC is attributed to the cooperation of all stakeholders and the professionalism of the forest managers. Also technical assistance from Netherlands & City of Hamburg

Institutional Arrangements of MTCS



Development of Forest Certification Standards – Standard Setting Process



Certification Standards – Forest Management

MC&I(Natural Forest)

9 Principles, 47 Criteria, 97 Indicators



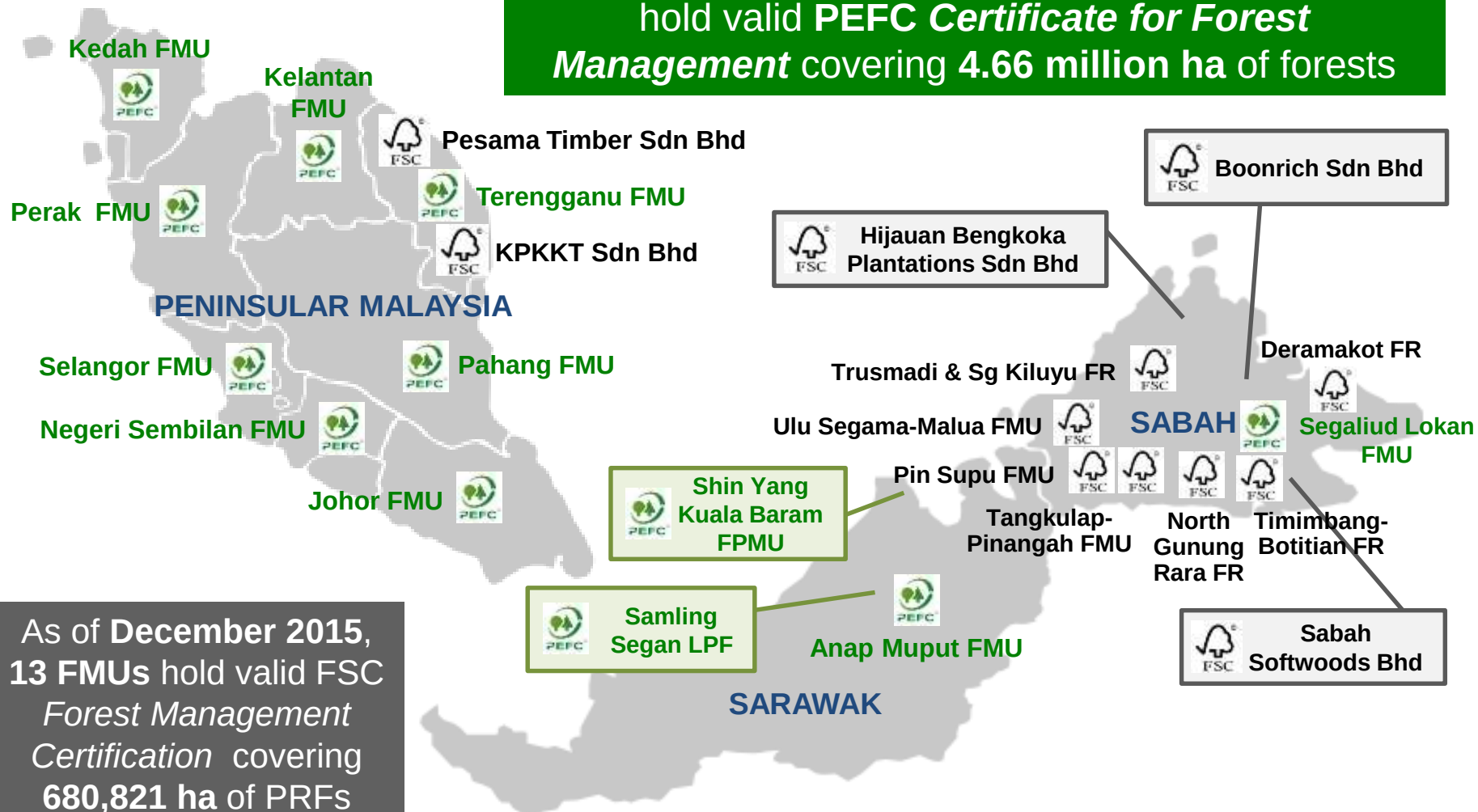
MC&I Forest Plantation.v2

10 Principles, 55 Criteria, 108 Indicators

Both standards embrace environmental, social and economic aspects of forest management

Status of Forest Management Certification in Malaysia (2015)

As of December 2015, 10 FMUs and 2 FPMUs hold valid **PEFC Certificate for Forest Management** covering 4.66 million ha of forests



As of December 2015, 13 FMUs hold valid **FSC Forest Management Certification** covering 680,821 ha of PRFs

Recognition of MTCS

- As a PEFC endorsed scheme, MTCS is recognised by various national timber procurement policies:



- Green Building systems:

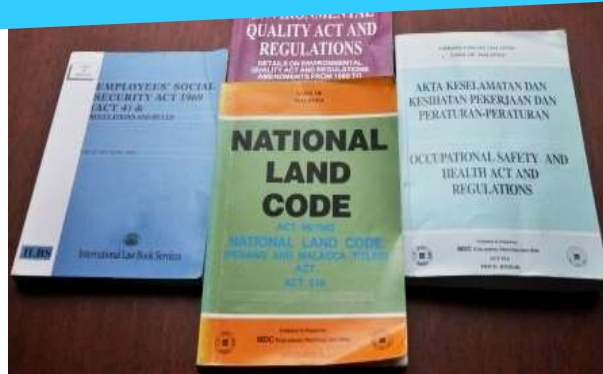


- Other policies:



Impact of Forest Certification on SFM in Malaysia

1. Better documentation



2. Increase in consultation and involvement of stakeholder groups

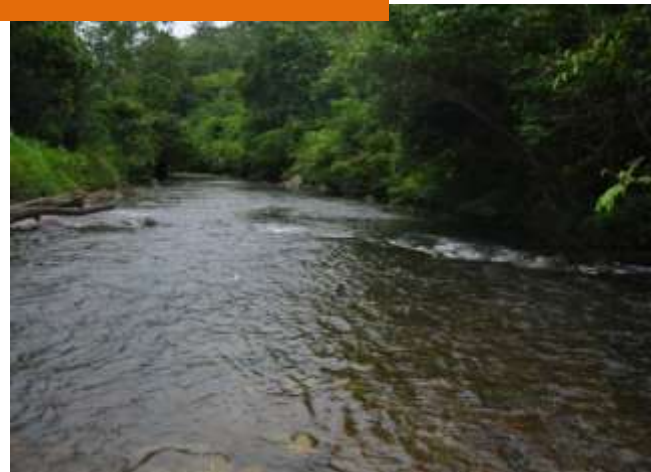


Impact of Forest Certification on SFM in Malaysia

3. Enhances implementation & enforcement



4. Environmental Protection



Impact of Forest Certification on SFM in Malaysia

5. Biodiversity Conservation



6. Identification of gaps for research & development



Challenges

- Complexity of the tropical forest ecosystem
- Land use and tenure policies
- Need to conserve biodiversity, social and environmental values apart from economic viability – the pillars of sustainability
- Low commercial timber productivity of natural tropical forests
- Proliferation of timber legality requirements by consumer countries
- Stringency of certification standards

Challenges

- SFM & certification of natural tropical forests most demanding requiring:
 - Political commitment
 - Enabling legal infrastructure
 - Manpower with necessary skills
 - Cooperation & better understanding between stakeholders & schemes
 - Strong institutions
 - Adequate financial resources most crucial

Conclusions

- Enormous challenge to implement SFM and certification of tropical forests
- Sound land use policy and security of tenure of gazetted permanent forests to implement SFM
- Legality verification is synergistic with and can catalyse achievement of SFM and certification - the EU FLEGT has enormous potential
- Role of international tropical timber trade to influence policies and practices on promoting implementation of SFM & certification
- Certification for SFM & verification for legality are important tools to achieve SDG on SFM, but if standards are too stringent/inflexible – unintended & negative impact on tropical timber trade & forests

Conclusions

- Coordination amongst consumer countries on procurement policies & standards for legality & sustainability urgently needed
- Understanding & cooperation to implement both verification for legality and certification for sustainability using an internationally negotiated phased approach with clear time-bound targets within the framework of SDG 15
- Assistance to tropical countries as stated in Item 15.5 of the SDG:

“Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation”

Conclusions

- Item 15.b of the SDG, has to be thoroughly discussed to determine the extent and sources of such resources that could be mobilised to assist tropical countries and the criteria for their disbursement based on specific achievement goals
- Formulate market incentives to contribute to the implementation of SFM to produce certified timber products – studies on economics & cost of implementing SFM required to provide the basis and justification for incentives
- Progress in promoting the implementation of SFM of tropical forests depend on enhanced level of understanding and cooperation by the international community and organisations, and relevant non-governmental organisations based on short-term, medium-term and long-term goals.

Conclusions

- As evident from the tropical forest crisis, there is a serious disconnect between the capacity of tropical countries to achieve SFM and certification to fully comply with the stringent standards for timber legality & sustainability which the world demands
- The way forward is for all parties to agree on implementation by stages with time-bound targets within the framework of SDG 15 of the 2030 Agenda for Sustainable Development