



Analysing of trade and environment in the sustainable forest management towards sustainable development

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ABSTRACT

This paper analysed the issues of market access, trade agreements of trade and environment on sustainable forest management towards sustainable development. Sustainable forest management is a part of sustainable development. It is a controlling system that participates and stabilizes societal, monetary, environmental, racial and mystical requirements to current and forthcoming peers. Firstly, we discussed the market access and trade agreements of trade and environment on sustainable development. Secondly, we analysed the criteria & indicators for sustainable forest management in Malaysia. Finally, we related the sustainable forest management through sustainable development of trade and environment. The purposes of this learning were to high light and simplify the analysing of trade and environment on sustainable development. This study found the potential impacts of the development of market access, trade agreements, criteria & indicators for sustainable forest management and sustainable development in Malaysia.

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Introduction

Trade and environment are a significant part for sustainable development. They touch directly and indirectly on sustainable development. Siwar *et al.* (2008) state a framework for analyzing the links between poverty, environment and sustainable development of developing countries. They also analyze that the issues of economic growth, poverty and sustainable development are well known in the development debate during the past couple of decades.

The maintenance of the sustainability of environmental functions constitutes a community interest, so that it demands responsibility, openness, and a role for members of the community, which can be channelled by people individually, environmental organizations, such as non-government organizations, traditional community groups, and others, for maintaining and increasing environmental supportive and carrying capacity which becomes a mainstay of sustainable development. Development which incorporates the environment, including natural resources, is a medium for attaining sustainable development which is a guarantee of prosperity and quality of life of present and future generations (APEC, 1998).

International trade and environmental agreements are aimed at addressing problems of global proportions. Malaysia has ratified several international agreements including the framework convention on climate change, the convention on biological diversity, the basel convention on the transboundary movement of toxic and hazardous wastes and their disposal, Convention on International Trade in Endangered Species (CITES), wetlands of international importance (RAMSAR), the convention on desertification and the montreal protocol for the protection of the ozone layer to phase out CFCs (Khalid, and Braden, 1993).

Environmental laws and regulations can be divided into two broad categories. The first represent policies that are domestically initiated and aimed at environmental protection and

conservation. These measures generally affect exports indirectly. The second generally consist of environment measures that are the outcomes of international agreement, conventions or arrangements (APEC, 1998).

Siwar *et al.* (2008) state that trade can affect the environment in two ways: firstly, trade and trade liberalization encourage industrialization and manufacturing of production, leading to increased pollution. Secondly, industrialization and manufacturing of production lead to increased overuses of environmental resources and environmental degradation.

Sustainable Forest Management (SFM) is the way of management in which growth exceeds timber harvest, now also encompasses economics, environmental and social qualities that contribute to the sustainability of forest dependent communities and ecosystems as well as the forest itself. Malaysia has a plan more environmentally-friendly and responsible business practices. This will help reduce operating costs in the long-run and is a wise investment in the future, safeguarding the natural resources depending on corporations and communities. For example, local corporations in forest industries are joining WWF's Global Forest & Trade Network. They are targeting European and US markets, where consumers are increasingly demanding wood products from sustainably managed forests (WWF-Malaysia 2008).

According to International Tropical Timber Organization (ITTO, 1992) sustainable forest management is defined as the process of managing permanent forest land 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 while FAO (1993) defines it as one which ensures that the values derived from forest meet present day needs while at the same time ensuring their

continued availability and utilization to long-term development needs.

Sustainable Forest Management (SFM) is impossible to achieve if a country does not have a management system. In this regard, the use of more systematic approach in managing the forests in Peninsular Malaysia began in 1901 when the first Forest Officer was appointed (Ismail 1996). Since then, forest management practices in Peninsular Malaysia had been subjected to constant review and refinement so as to ensure their suitability in achieving forest renewal and sustained yield.

Kamaruzaman et al. (2008) state the sustainable forest management practices and environmental protection in Malaysia. In response to the needs to promote SFM, the Forestry Department Peninsular Malaysia has produced the Malaysian Criteria and Indicators (MC&I) that clarify major activities that have to be complied with sustainable basis. To ensure that the forest is better conserved, the annual coupe in Peninsular Malaysia has been scaled down for each Malaysian Plan starting from the 4th Malaysia Plan (1981-1985) of 74,869 ha/year to 36,940 ha/year under the 9th Malaysia Plan (2006-2010).

Rahim et al. (2009) represents the sustainable forest management practices and west Malaysian log market. The sustainable management definition and objectives required maintenance of the forest stand re-generation not only for timber production, also for environmental stability, biodiversity conservation, but recreational values preservation and other forest products and forest components conservation. Motivated by ITTO target, National Committee Sustainable Forest Management was established in 1994 under the Ministry of Primary Industries. This committee has formulated a total of 92 activities, based on 5 criteria and 27 indicators to implement the ITTO criteria at the national level (Thang, 2002). SFM has led to greater planning and monitoring of the environment. In term of economic, there are indications to incur incremental costs.

With regards to SFM practices, Schwarzbauer & Rametsteiner (2001) have analysed the potential impacts of SFM certification on forest products markets using a simulation model of the Western European forest sector. The empirical evidence shows that rather modest changes are to be expected from SFM certification in forest products markets. The market impact of timber supply reduction from certified forest would be more distinct than the impact of chain of custody costs. That means, a decrease of harvesting levels in certified forest will affect forest products markets more than the increase costs related to the installation and maintenance of SFM certification in the forest sector.

The aim of this study is to obtain the development of market access, trade agreements, criteria & indicators for sustainable forest management and sustainable development in Malaysia.

Materials and methods

Data attainment: The study is conducted in University Utara Malaysia, Kedah since July, 2011 to April, 2012. The data for analysis is perceived from secondary sources in Malaysia. The significant manipulations for acquired data are criteria & indicators for sustainable forest management. The corresponding outcomes are demonstrated from the analysis of collected data.

Link between trade and environment

Trade and environment are related at the most basic level, because all economic activity is based on the environment – whether because the energy needed to process them is derived from the environment. The waste produced at the end of most tradable goods' life cycle is also absorbed by the environment.

The environment affects trade, in turn, because exporters often have to respond to consumer demand for 'green' or 'greener' goods. Two distinct bodies of international law govern trade and the environment. Trade law is governed by the World Trade Organization, regional and bilateral trade agreements.

Environment and trade linkages are not isolated, they are fundamentally related. Much environmental damage is due to the increased scale of global economic activity. International trade constitutes a growing portion of that growing scale, making it increasingly important as a driver of environmental change. Trade can actually be good for the environment, since it creates wealth that can be used for environmental improvement, since the efficiency gains from trade can mean fewer resources used and less waste produced and since trade can enhance access to efficient and environmentally friendly technologies (UNEP, 2005).

Trade may have at least four types of physical and economic impacts on environment and development: i) Product Effects ii) Scale Effects iii) Structural Effects and iv) Direct Effects.

Product Effects: Trade can have positive and negative effects.

Positive Effects:

- wide dissemination of environmentally friendly technologies and technology for protecting the environment

Negative Effects:

- facilitation of international trade in environmentally harmful products

Scale Effects: Expansion of the level of economic activity due to allocate efficiency.

Positive Effects:

- efficient use of natural resources
- increased wealth – higher demand for environmental protection
- increased wealth - less pressure to exploit natural resources

Negative Effects:

- increased environmental pressure and/or environmental damage
- increased wealth – increase in environmentally harmful activities

Structural Effects: Specialization in sectors for which country has a comparative advantage

Positive Effects:

- increased share of environmentally friendly sectors
- creation of new environmentally friendly products/sectors
- removal of subsidies, quotas, other restrictive measures

Negative Effects:

- increased share of environmentally harmful sectors

Direct Effects: Direct environmental impacts of economic activity and trade

- increased levels of transportation – increased air pollution
- invasive species of plants and animals



Source: Author's

International trade is an essential driver for economic prosperity. The global trading system is vulnerable to terrorist exploitation that would severely damage the entire global economy. As government organizations that control and administer the international movement of goods, customs administrations are in a unique position to provide increased security to the global supply chain and to contribute to socio-economic development through revenue collection and trade facilitation.

The promotion of sustainable development through trade further requires a multilateral trading system which, while being responsive to environmental objectives, is capable of preventing unnecessary adverse impacts of environmentally related policies and measures on trade and on development. High priority should be given to the avoidance of protectionist trade measures and the adherence to effective multilateral discipline, including Principle 12 of the Rio Declaration. The following figure indicates the link between trade and environment.

Market Access:

Market Access: Market access is an important role in the tropical timber trade to international tropical timber markets. It can be described as the conditions under which producers are able to offer products for sale. These conditions are the consequences of decisions by importers and exporters, and also a consequence of the inherent characteristics of the sector and products. Trade, environment, development, welfare and social are the complex issues of market access of tropical timber trade. The issues related to market access, tend to be both complicated and highly political. The market access of tropical timber needs a comprehensive approach to international markets. Market access is influenced by importing-exporting countries and international trade regime. The influences are less clearly defined due to numerous linkages between forests, the environment and the sustainable development (Rytkonen, 2003).

Some studies examine the downturn in the market access of international tropical timber market. The importance of their studies shows the Organization's work on trade and environment, the issue of substitution by non-wood materials, and the importance of life-cycle comparisons. The item as a key action area has been identified by the intergovernmental panel on forests (IPF, 1997).

Agreements on Trade and Environment:

International Trade Agreements: International trade agreements are the essential to ensure proper functioning of free trade, while taking into account the protection of the environment. There are a lot of agreements on tropical timber trade. World Trade Organization (WTO) legislation is the main part of international trade agreements which is based on the General Agreements on Tariffs and Trade (GATT). The WTO agreement has specific implications for the conservation and sustainable forest management: Sanitary and Phyto-sanitary measures (SPS); Technical Barriers to Trade (TBT); Trade Related Investment Methods (TRIM); Trade-Related Intellectual Property Rights (TRIPS) (Rytkonen, 2003).

International trade rules under the GATT/WTO agreements have been recognized for the need of environmental protection. The WTO Committee on Trade and Environment (CTE) has reviewed environmental issues related to products and their production and processing methods (PPMs) but no significant decisions have been made due to slow progress in this area. The WTO Committee on Trade and Environment (CTE) has

recognized the environmental benefits arising from the removal of trade restrictions and distortions in the forest area (WTO, 1997).

Multilateral Environmental Agreements: Multilateral environmental agreements (MEAs) are the essential to ensure proper functioning of free trade, while taking into account the protection of the environment and legally binding international agreements with a global scope. There are a lot of environmental agreements on tropical timber trade. From the point of view of forestry, the Convention on Biological Diversity (CBD) is one of the most important of the MEAs. MEAs have addressed that the Convention on Biological Diversity (CBD), United Nations Framework Convention on Climate Change (UNFCCC), and United Nations Convention to Combat Desertification (UNCCD) are the most important from the forestry point of view. Multilateral environmental agreements have become of a growing concern with WTO and non-governmental organizations (NGOs) which leading towards a higher coherence of the two large bodies of legislation. Multilateral environmental agreements are international agreements between countries generally aimed at increased protection of the world's natural resources or the promotion of environmental quality. The growing global economy is placing an increasing strain upon global ecosystems while putting them at risk of extinction. As regards, it needs to be recognized that the volume of trade has not shown a growing trend timber from natural tropical forests (Rytkonen, 2003).

Simula (1999) has stated that CITES listing effective measures are needed both in exporting and importing countries. Trade measures as CITES listings should be limited to achieve the objective from the trade point of view. On the other hand, CITES trade restrictions should be made and implemented effectively so that the survival of a species, which is endangered by commercial trade, is indeed ensured by the measures taken.

WTO (1997) has stated that most of the environmental effects are indirect in causing changes in levels and patterns of production and consumption while recognizing the potential benefits of trade to the environment. Complementarily can be observed in the WTO and CBD rules can be identified in the area of forest biodiversity (Simula, 1999). The United Nations Framework Convention on Climate Change (UNFCCC) addresses the issues related to climatic influences, including the interface with forest ecosystems.

Sustainable Forest Management:

Sustainable forest management implies the sustainable utilization of forest resources for the benefit of communities and states. The concept not only aims to maintain the value of forest resources, it also has a huge potential for creating employment, income and wealth for the populations and states concerned. The sustainable forest management programme seeks to improve the management of natural tropical forests by increasing the adoption of sustainable forest management practices by forest managers from industries to communities. Good forest management can both reduce the negative impacts of timber harvesting on other forest resources and services and increase yields of desired products and services from a given area of forest.

Criteria and Indicators for Sustainable Forest Management in Malaysia:

Sustainable forest management is considered as one of the most important contributions which the forestry sector can make to the sustainable development objectives of any nation,

particularly those richly endowed with forest. The UNCED, held in Rio de Janeiro in 1992, set the guiding principles for sustainable forest management as a contribution towards sustainable development.

MTCC (2001) states that the Malaysian Criteria, Indicators, activities and Standards of Performance for Forest Management Certification (MC &I) will be used for assessing forest management practices in the Permanent Forest Estate (PFE) at forest management unit (FMU) level for the purpose of certification.

Wolfslehner et al. (2005) addresses the application of the analytic network process in multi-criteria analysis of sustainable forest management. The demand to assess forest-management regimes and alternatives in regards to their specific benefits and to sustainability in general has lead to the use of criteria and indicators (C&I) (Prabhu et al., 1996; Van Bueren and Blom, 1997). Criteria are the essential elements against which sustainability is assessed to the productive, protective and social roles of forests and forest ecosystems. Each criterion relates to a key element of sustainability, and may be described by one or more indicators. Indicators are parameters which can be measured and correspond to a particular criterion (Prabhu et al. 1999). C&I-approaches appear to be highly capable of measuring aspects of SFM at national, regional, and forest management unit levels.

Regional Level Criteria and Indicators:

Criteria and indicators for sustainable forest management have become an important issue in many countries around the world. At present, many countries are taking part the sets of criteria in all nine processes that SFM comprises the following thematic areas:

- extent of forest resources,
- biological diversity,
- forest health and vitality,
- protective functions of forests,
- productive functions of forests,
- socio-economic functions,
- legal policy and institutional framework. (FAO, 2005).

National Level Criteria and Indicators:

National level criteria and indicators help decision makers, including planners and policy makers, to define what makes up SFM, and to establish guidelines and monitor trends in the sustainability of the goods and services being provided by a nation's forests.

Table 1: Criteria, Indicator, Activities and Standards of Performance for Sustainable Forest Management at the National Level in the MC&I

Criteria	Indicators	Activities	Standards of Performance +
1.Enabling condition for sustainable forest management	9	31	20
2.Forest resource security	5	22	17
3.Forest ecosystem health and condition	5	20	13
4.Flow of forest produce	12	37	31
5.Biological diversity	8	25	22
6.Soil and water	9	26	29
7.Economics, social and cultural aspects	16	39	38
Total : 7	64	200	170

+For Peninsular Malaysia Only

Major Criteria and Indicator Processes and Initiatives:

- International Tropical Timber Organization (ITTO).

- Pan-European.
- Montreal.
- Tarapoto.
- Dry Zone Africa.
- Near East.

Forest Management Unit Level Criteria and Indicators:

Forest management unit level criteria and indicators have been increasingly developed and implemented to complement national criteria. The forest management unit level indicators depend on local, often site-specific, environmental factors such as forest type and topography, local economic and social considerations and priorities. The criteria at forest management unit level are likely to be identical or very similar to those defined at national level, although they are more flexible. Thus, they must be mutually compatible to help ensure complementarily over the country.

Table 2: Criteria, Indicators, Activities and Standards of Performance for Sustainable Forest Management at the Forest Management Unit Level in the MC&I.

Criteria	Indicators	Activities	Standards of Performance +
1.Enabling condition for sustainable forest management	8	26	17
2.Forest resource security	5	22	17
3.Forest ecosystem health and condition	3	12	9
4.Flow of forest produce	12	37	31
5.Biological diversity	7	21	18
6.Soil and water	9	26	29
7.Economics, social and cultural aspects	12	27	29
Total : 7	56	171	150

+For Peninsular Malaysia Only

C&I-approaches is that it can be used to collect and report information within a system, which is usually characterized by a lack of knowledge, uncertainties, and missing information about impacts, dependencies, and feedbacks (Rametsteiner, 2001; Brang et al., 2002). C&I has become a common approach to assess the aspects of SFM. Among these approaches, multi-criteria analysis (MCA) techniques have been adapted to structure and implement the C&I-based assessment of SFM (Varma et al., 2000; Bousson, 2001; Mendoza and Prabhu, 2003). Ecologically and environmentally sound forest conservation and management practices have been developed to ensure that the forest resources are managed for the sustainable timber production, ensuring climatic stability and ecological balance, safeguarding of water supply and environmental quality, and the conservation of biological diversity. Today, Malaysia, as a member of the International Tropical Timber Organization (ITTO) which is fully committed to ITTO's objectives, is striving towards the achievement of forest management that is environmentally responsible, socially beneficial and economically viable. ITTO has developed a set of key criteria and indicators (C&I) for the sustainable management of tropical forests (ITTO, 2005).

Kamaruzaman and Dahlan (2008) state that Malaysia is a producer member country of the International Tropical Timber Organization (ITTO) which is committed to achieve sustainable forest management of sustainable development. Developing countries follow timber certification in order to protect domestic timber products. Today, timber certification is the slogan in forest harvesting. Malaysia timber certification began in 1994 in stages. The Malaysian Timber Certification Council (MTCC) is

an independent organization established in 1998 to develop and operate the Malaysian Timber Certification Scheme (MTCS) in order to provide independent assessments of forest management practices in Malaysia as well as to meet the demand for certified timber products. Timber certification is a market-linked tool to promote and encourage sustainable forest management as well as to provide an assurance to buyers that the timber products they buy come from sustainably managed forests. The Malaysian Criteria, Indicators, activities and Standards of Performance for Forest Management Certification (MC&I) is the standard that will be used for assessing forest management practices in the Permanent Forest Estate (PFE) at forest management unit (FMU) level for the purpose of certification.

Thang (2003) states that timber certification can be defined as a process which entails an independent assessment of a forest management operation, according to specific economic, social, environmental and ecological criteria, indicators, activities and management specifications or standards of performance. Forest Management Unit is defined as an area of forest land that is managed by an organizational entity which decides on and subsequently implements forest activities to ensure the economic, ecological, biological and socio-cultural sustainability of the area. It addressed the issues of forest inventory, management planning, silviculture, harvesting, forest road construction and other related forest management operations.

MTCC addresses the eight forest management units in Malaysia, namely the states of Johor, Kedah, Negeri Sembilan, Pahang, Perak, Selangor, Terengganu and Kelantan. They are covering 4.7mil.ha of the PRFs in Peninsular Malaysia which are certified using the set of Malaysian criteria and indicators (MC & I, 2001).

The standard currently being used for assessing Forest Management Units (FMUs) is the Malaysian Criteria, Indicators, Activities and Standards of Performance for Forest Management Certification (MC&I). The MC&I are based on the 1998 ITTO Criteria and Indicators for Sustainable Management of Natural Tropical Forests. It contains the key elements for sustainable forest management covering economic, social, environmental and conservational aspects, and incorporates the corresponding standards of performance for Sabah, Sarawak and Peninsular Malaysia identified during the regional and national level consultations held in 1999.

Results

Sustainable Forest Management: Sustainable Forest Management (SFM) is the process of managing forest land to achieve one or more clearly specified objectives of management without undue reduction of its inherent values and future productivity or undesirable effects on the economic, social and environment (ITTO, 1992) and integrates and balances social, economic, ecological, cultural and spiritual needs to present and future generations (United Nations, 1992). There are three pillars of SFM include the Fig. 1.

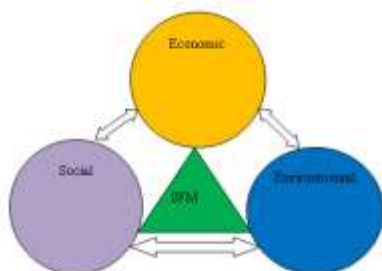


Fig. 1: Pillars of Sustainable Forest Management

Economic: The capacity of the forests to attract investment and support economically viable forest uses in the present and the future is undiminished. The forest is not used beyond its long-term capacity for production of wood and non-wood forest products.

Social: There are a variety of pillars include social such as:

- The rights of indigenous peoples and local communities are respected and protected
- Forest workers are healthy, safe and their rights are protected (e.g., freedom of association, right to bargain, child labor, forced labor, equal remuneration and non-discrimination)
- Local communities, including indigenous peoples, benefit economically from forest management; and
- Sites of religious, spiritual, archaeological, historic as well as of aesthetic and recreational value are preserved

Environmental: Forest use protects biodiversity (ecosystems, species, genes and ecological processes) and the capacity to maintain ecosystem processes and services such as watershed protection, pollination, protection against mudslides, aesthetic beauty, carbon storage, etc.

Sustainable Development: At present and in future, sustainability is related to the economic, social and environmental systems that make up the community provide a healthy, productive and meaningful life for all community residents (Fig. 2).

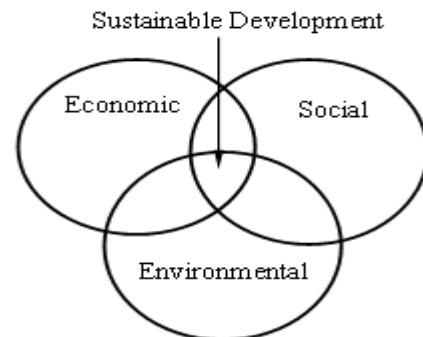


Fig. 2: Sustainable development; Source: WCED (1987).

International institutions, in particular GATT, UNCTAD and UNEP, are implementing comprehensive work programmes on trade and environment, in accordance with their respective mandates and areas of competence. The OECD has developed procedural guidelines on integrating trade and environmental policies and is currently undertaking analysis aimed at designing substantive guidelines. National governments and NGOs are also undertaking efforts to clarify trade and environment linkages.

In particular, the WTO Doha Ministerial Declaration strongly reaffirms a commitment to the objective of sustainable development. There is now a sizeable literature on the effects of trade liberalization on sustainable development, i.e. on its social and environmental impacts as well as its economic ones. Potential impacts in each of the three spheres include:

- Economic impacts: changes in per capita incomes, net capital formation, and employment.
- Environmental impacts: changes in air, water and land quality, in biological abundance and diversity; and in other environmental resource stocks.
- Social impacts: impacts on poverty and other measures of inequality; effects on levels of health and education; changes in the culture and cohesion of community life.

The analytical framework, which has been used in interpreting the literature, is shown in the following Figure. Trade measures can have direct (positive or negative) economic, social and environmental impacts but often also have indirect consequences. Some measures (e.g. changes in tariffs or quotas) influence trade flows, which then have a number of direct economic consequences (e.g. on production, employment and income). In turn, these may have social and environmental repercussions. The routes through which the cause-effect relationships operate may be numerous and complex.

The path to sustainable is a threefold process. Sustainable development has three aspects: economic, social and environmental, which are linked together and have overlapping within themselves. So, the three parts and their links are to understanding sustainable development, because sustainable development is about more than quality of life and achieving balance among the social, economic and environmental price of a community.

The analytical framework, which has been used in interpreting the impacts on sustainable development, is shown in the Fig. 3.

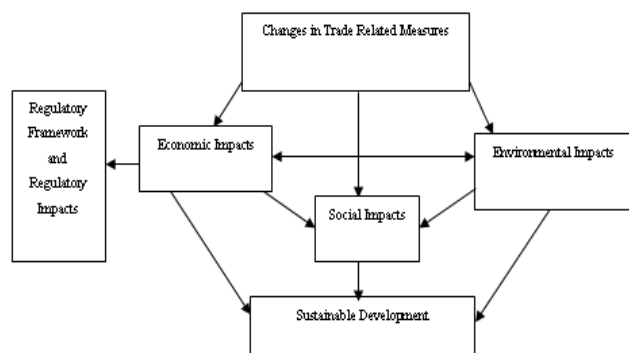


Fig. 3: Impact Types of Trade Liberalization on Sustainable Development

Source: Kirkpatrick et al. (2004)

Discussion

Trade rules may influence on the components of sustainable development, such that the effects of liberalization are felt primarily through the extent to which it accelerates or decelerates these other processes. The direction and significance of impacts depends on the nature of the policy and regulatory frameworks are under-developed and well-developed capacity for policy analysis and implementation.

Sustainable forest management implies the sustainable utilization of forest resources for the benefit of communities and states. The concept not only aims to maintain the value of forest resources, it also has a huge potential for creating employment, income and wealth for the populations and states concerned. The sustainable forest management programme seeks to improve the management of natural tropical forests by increasing the adoption of sustainable forest management practices by forest managers from industries to communities. Good forest management can both reduce the negative impacts of timber harvesting on other forest resources and services and increase yields of desired products and services from a given area of forest.

The concept of sustainable development has a fundamental nature, and serves as the basis for other new and innovative concepts and principles arising within environmental conventions. Sustainable development is development that lasts for long time. The Brundtland Commission (1987) correctly

defined sustainable development as, "meeting the needs of the present generation without compromising the ability of the future generations to meet their needs".

The economic pillar is a suitable mix of wood products and non-wood products (plants, animals, etc.), that does not diminish the productive capacity of the forest. Social pillars include respect for labor and indigenous rights, the health and safety of forest workers, sharing of economic benefits, and protection of sites of spiritual or historic value. Environmental pillars can include soil protection, biodiversity, maintenance of air and water quality, and aesthetics. The appropriate balance of these pillars will vary among regions and contexts.

Conclusion

The literature about the impact of trade and environment on sustainable development has been reviewed. The links of indicators to policy processes, though a relatively new concern for sustainable development, has long been recognized mainly by scholars working on social indicators as a key factor in ensuring effective use. Environmental protection is the concern of all people, including those from developing economies. Developing economies suspect that measures taken by developed economies to link environment with trade might simply be disguised trade barriers. This can be seen from the actions and measures taken by the developing economies to protect the environment and to engage in sustainable development programs. It is argued here that environmental measures should be confined to environmental protection alone and not linked with trade sanctions.

Environmental degradation and carelessness in developing economies are mainly due to ignorance and to backwardness in environment technology. Industrialization and economic growth have both positive and negative effects on the environment. Malaysia's economic development has brought large improvements in those environmental problems that are primarily related to poverty and to a low level of economic development. Sustainable development not only yields benefits for the environment, but also it signifies poverty alleviation and giving developing countries a chance to work their way out of poverty and produce jobs, economic growth, and better quality of life for employees.

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