SUSTAINABLE PRODUCTION AND TRADE IN PALM OIL IN ASIA: ROLE OF ENVIRONMENTAL INITIATIVES

GAMINI HERATH HERATH*
MONASH UNIVERSITY.

Malaysia and Indonesia are major producers of palm oil and contribute to 85% of total world trade. It is the second most consumed edible oil globally. The international demand for palm oil will increase in the future especially from India, China and the European Union for the following reasons:

• The EU is increasing its use of biodiesel, and palm oil is an attractive candidate for biodiesel because it is at least US$200/ tonne cheaper than other vegetable oils (Tan et al, 2007).

• Trade liberalization and the lowering of tariffs under the new WTO rules would boost demand for Malaysian oil palm imports.

• Increase in the use of palm oil for feed and livestock industries.

The global demand is estimated to increase by 4 million tonnes of palm oil per year in the next 20 years (Basiron 2002, Basiron and Simeh 2005). Expansion of oil palm in Malaysia is a concern due to loss of tropical forests, biodiversity, pollution due to fertilizer and pesticides and waste generation specially mill effluent polluting waterways (Fitzherbert et al 2008, Turner et al 2008, Vincent 1993, Koh and Wilcove 2007, Yule 2010). Malaysia had a forest loss of about 5 million hectares (20% reduction of forrest land) and the projected expansion for palm oil in Malaysis is 0.06 -5 million by 2020 (Wicke et al 2010).

The Malaysian government has introduced provisions on (a) open burning (b) industrial waste (c) environmentally benign technologies and (d) Environmental Impact assessment (EIA) and adoption of ISO 14001 Environmental Management Standards Certification by the Malaysian Palm Oil Promotion Council (MPOPC). Nearly 30% of the edible oils imported to the EU is certified. In spite of these measures, progress towards sustainable palm oil production is slow. A study of 23 oil palm companies showed that only 3 gave strong commitment towards the environment. Many comapanies provided only brief narartive accounts of adoption of zero burning, planting legume covers, biological control and adoption of ISO 14001 environmnetal standards. A 2001 study showed that only 9 mills out of 352 received certification to the ISO 14001 standards. In year 2000 action was taken against 213 palm oil mills for various environmnetal offences.

This paper further evaluates the potential of the following measures by the Asian oil palm producing countries like Malaysia and Indonesia in achieving sustainable production of oil palm:

• innovative utilization of oil palm biomass and green energy development including potential for recycling and reuse to promote renewable energy use. By 2010 the biomass energy potential is expected to rise to 820 TJ (Shuit et al 2009).

• better governance and monitoring of land use, protection of forest land, and supporting socio-economic research to uncover the dynamics of the causes and drivers of land degradation and soil erosion.

• EU Directives that stipulate that biofuels that achieve green house emissions reduction of 35% will meet the 2020 target of 10% for the share of biofuels (Thamsiriroj and Murphy 2009).

• privately owned nature reserves for biodiversity conservation within oil palm plantations funded by the profits in the industry (Koh and Wilcove 2007).