GOOD AGRICULTURE PRACTICE AS DATA SOURCE FOR LCIs ON FOOD AGRICULTURE PRODUCE

S.S.Chen and Hasnah Mohd. Zain
SIRIM Environment & Bioprocess Technology Centre
P.O.Box 7035, 40911 Shah Alam, MALAYSIA

Malaysia has just embarked on the 9th Malaysia Plan (2006-2010) where the aspiration of the country is to make the agriculture sector the third engine of growth. Malaysia’s agriculture sector is divided into two sub-set namely industrial commodities comprising oil palm, forestry and logging, rubber and cocoa; and the food commodities covering fisheries, livestock, paddy and other agriculture (coconut, vegetables, fruits, tobacco and pepper).

The food commodities account for about 16% of the total agriculture exports in 2005. In terms of agriculture land use, food commodities account for about 12.5% as compared to oil palm plantations coverage at 63.4%. Of the food commodities, only fruits and vegetables are exported but they each contribute to only ~6% of the total food exports in 2005. It is the target of the Malaysian government to attain an average annual growth rate of 35.5% for fruits export over the next five years and this will be done through enhancing productivity. The productivity indices of food commodities targeted for growth as at 2005 are pineapple – 21.1 metric tones/hectare/cycle; fruits – 4.8 metric tones/hectares/season; and vegetables – 12.1 metric tones/hectare/cycle.

Efforts to enhance productivity include introduction of the national Good Agriculture Practice (GAP) scheme known as the ‘Farm Accreditation Scheme of Malaysia’ (SALM – acronym in the Malaysian language) by the Department of Agriculture in 2002. SALM is a programme designed to accredit farms that adopt GAP, and are operated in a sustainable and environmentally way, and yield produce that are of quality and safe for consumption. The basic reference used in developing SALM include the FAO Draft on GAP; EUREGAP for Fresh Fruits and Vegetables; WHO/FAO Codex of Hygiene Practice for Packaging of Fresh Fruits and Vegetables, and The Malaysian Standard MS 1747:2005 for Crop Commodities- Good Agricultural Practice.

Three major aspects are evaluated under SALM namely ‘Environmental Setting of Farm’, ‘Verification of Farm Practices’ and ‘Safety of Farm Products’. Under these aspects are 21 elements that will be evaluated under a third party certification scheme, of which 17 types of records need to be maintained. Examples of information available from SALM-certified farms are on land use, soil types, source and quality of irrigation water, soil preparation including soil fumigation, fertilizer programme, harvesting techniques and field transport, post harvest treatment and packaging and farm waste disposal.

Impacts commonly associated with agricultural practice include eutrophication, greenhouse gases emission, acidification and human toxicity. The SALM records can be reliable sources of data for development of gate-to-gate LCIs related to production of agricultural produce.

As at June 2006, there are 182 SALM accredited farms in Malaysia.