

XII.A.1. Economic Implications of Environmental Life Cycle Assessment Standards - The Case of Coffee Enterprises In India

A. Damodran

Indian Institute of plantation Management, No. 8, Cunningham Road, KSCMF Building, P.B 223, Block III, 4th Floor, Bangalore-560 052.

One of the important consequences of the WTO Agreement on Technical Barriers to Trade has been its sanctification of technical standards, particularly those falling in the ISO series. The ISO series of standards though voluntary in theory has proved to be mandatory in international trade practice. The advent of the ISO 14000 series of environmental standards since 1990s is a matter of great purport to the issue of trade and environment. Accordingly, this paper brings out the economic implications and nature of environmental benefits of ISO 14040 standards based on evidence from the coffee enterprises of India. Coffee enterprises of India which form the focus of this paper are located in the Western Ghats tracts of die States of Karnataka, Tamil Nadu and Kerala. These enterprises have come up in the evergreen and moist deciduous forest sections of the Western Ghats and thereby have significant bearing on bio-diversity conservation in this bio-geographically sensitive zone. Coffee enterprises of the Western Ghats have traditionally been a source of considerable economic advantage to the local communities and to their labour communities. This has also been due to the fact that coffee is a crop with high export linkage. Nearly three-quarters of Indian Coffee is exported to international markets in Europe, Far East and North America. It is this factor which make these enterprises vulnerable to international technical standards including the ISO 14000 series of environmental standards.

Coffee enterprises combine in them a variety of functions. These enterprises carry out agricultural operations concerned with planting and nurturing of coffee. In addition, a large section of these enterprises are involved in post-harvest operations of processing of coffee crops through a system of pulping, washing and drying of coffee. Presently, only few of post-harvest operations associated with microbial contamination have a bearing on trade. However the entire gamut of the outlined operations could come under scrutiny under the ISO 14040 standards.

Based on empirical data from a cross section of coffee enterprises in Karnataka, this paper examines the possible economic and environmental implications of life cycle assessment standards on these enterprises. The paper brings out the principal features of life cycle assessment for a coffee enterprise, the un-sustainability factors that could get focused upon in a life cycle assessment, and the economic implications of converting these un-sustainability factors into sustainable ones in terms of the ISO 14040 standards. Besides the paper also examines as to how far ISO 14040 would facilitate attainment of local environmental benefits by coffee enterprises. The paper hopes to advance a possible position for India on ISO related environmental standards at the WTO and the Commission on Sustainable Development fora.