WHAT INCENTIVES TRIGGER FIRMS TO BE "ADOPTERS" OF ENVIRONMENTAL CONTROLS? EVIDENCE FROM SOLID WASTE MANAGEMENT IN AGRI-FOOD PROCESSING SECTOR IN SRI LANKA

W.K.A.M.D.S. Aththanayake¹, U.K. Jayasinghe-Mudalige², S.N. Dissanayake¹ and J.M.M. Udugama²

Dept. of Agricultural Systems, Faculty of Agriculture, Rajarata University of Sri Lanka, Puliyankulama, Anuradhapura, Sri Lanka.

²Dept. of Agribusiness Management, Faculty of Agriculture & Plantation Management, Wayamba University of Sri Lanka, Makandura, Gonawila (NWP), Sri Lanka.

This study assesses the impact of both private and public incentives for a firm to adopt enhanced environmental controls, recommended by the Ministry of Environment of Sri Lanka on solid waste management practices (SWMPs) for agrifood processing firms. It was hypothesized that: (1) cost and financial implications; (2) increased human and technical efficiency (3) market-forces and (4) government regulation and liability laws have a significant impact on non adopting firms to become "adopters" by the end of 2011. The data collected from 153 firms operate in the Western, North-Western, Central and Southern province by personal interviews with the owner/top-executive of firms using a structured questionnaire and analyzed by Kruskal-Wallis test. The results showed that trigger firms do not act on existing regulations on waste management but firms' restrict on costs/financial implications. Human and technical efficiency of firm and market-forces did not play a significant role. Relative impact of these incentives varied significantly with the firm's characteristics such as firm type and size. The importance of strict regulations for the agri-food processing industry, to ensure that they comply with the recommendations was highlighted. Care must be taken to strengthen the base of private/market incentives so that regulation would not lead to complete or partial exit, of non-adopting small firms, due to financial constraints associated with the adoption of advanced environmental controls.

Key words: Agri-food processing sector, Economic incentives, Environmental quality, Regulation, Waste management