

ADOPTION OF IN-PLANT POLLUTION CONTROL TECHNIQUES BY SMALL AND
MEDIUM-SCALE ENTERPRISES:
(CASE OF FOOD PROCESSING SECTOR IN THE NORTH-WESTERN PROVINCE)

W.D.C. Perera¹, U.K. Jayasinghe-Mudalige² and S.N. Dissanayake¹

¹ *Department of Agricultural Systems, Faculty of Agriculture, Rajarata University of Sri Lanka, Anuradhapura, Sri Lanka.*

² *Department of Agribusiness Management, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Makandura, Gonawila (NWP), Sri Lanka.*

With the idea of improving the quality of environment, the Ministry of Environment & Natural Resources in Sri Lanka recommends a set of in-plant pollution control techniques (e.g. 3R system, Composting, Biogas unit, sanitary land filling site, Biodegradable packaging, Good Manufacturing Practices, Waste auditing and ISO 14000 etc.) for food processing firms to adopt voluntarily. It has, however, been reported that the rates of adoption of which is by far low, especially amongst the Small and Medium-scale Enterprises (SMEs).

The purpose of this study was to examine, in the context of SMEs in the North Western Province in Sri Lanka, the: (1) motivational factor affecting this behaviour; (2) constraints faced by firms in their decision to adopt such techniques, and (3) the relative weight given by firms to solve the recurrent problems associated with environment. To collect data, first, a structured questionnaire was prepared with the inputs from experts in this area including the senior officials from the Wayamba, Puttalam and Federation of Chambers of Commerce and Industry and panel of experienced managers from food processing firms), in which a list of incentives (9), constraints (9) and the recurrent problems face by a firm (8) was included. A Postal Survey was carried out next from June to August 2008 with a randomly selected sample of 120 SMEs where the respondents express their view by scoring on five-point Likert scales. The data collected from 40 firms (response rate = 28%) were analyzed using tabular and graphical methods.

According to the results, Liability Laws (4.68) and Cost/financial implications (4.6) were considered as the most important incentives, whilst anticipating government regulation (3.23) and commercial pressure (3.73) were the least important. The lack of financial support (4.74), need to retrain staff (4.58) and unavailability of reliable consultants (4.53) were rated as the major constraints. Addressing the recurrent problems linked to credit (1.98), marketing (3.15) and labor (3.68) were considered more important in compared to the environmental problems, which was rated at the last (6.53). The results show that advanced environmental controls brings into the system should come up with appropriate institutional framework which is capable of identifying the "little" incentives and "big" constraints faced by SMEs and provide appropriate solutions.

Key words: Environmental quality management, Food processing sector, Incentives, Pollution control, Small and medium-scale enterprises