Sustainable Consumption and Production: Awareness among the Undergraduates - A Case Study

S.A.Jayasundera¹, A.K.Kulatunga², G. Rajasinghe², W.M.P.S.Gunaratne² and C.W.K.Gunasekara²

¹Department of Engineering Mathematics, Faculty of Engineering,
University of Peradeniya

²Department of Production Engineering, Faculty of Engineering, University of Peradeniya

Sustainable Consumption and Production (SCP) is an emerging concept which answers many global environmental problems. The most important feature in SCP is that it integrates the two sides of business: production activities on the supply side, and consumption activities on the demand side. Thereby, it can give rise to a complete and integrated picture of the overall impact of business on the environment. Furthermore, it acknowledges the importance of the interrelationships between business activities, political decisions, and everyday consumer behaviour. The most important aspect of SCP thinking is that it provides relationships between resources used during the development of products and services, the energy consumed during their use, and the protection of ecosystems - during the entire Life Cycle (LC) of a product or service. It can therefore, clearly identify areas having a significant impact on the climate, and consequently, highlight key 'hotspots' for intervention. Maintaining sustainability in both consumption and production phases is a responsibility of both consumers and producers. In the consumption phase, consumers are supposed to consume the product ensuring minimum damages to the environment while producers have a responsibility towards the effect on the environment when the product is consumed. The results of this research can be used to link the consumers and the producers to achieve more sustainable objectives in future. In this study, consumer awareness on SCP was taken into consideration. This was done by conducting interviewis on undergraduates of the University of Peradeniya who posess similar educational qualifications but are specialised in different fields of study. From the findings, it can be seen that 61% were aware of the environmental issues faced by the world but only 21% believe that their buying patterns has a link to environmental issues. However, this was changed during the consumption phase, since 41% believe that there is an impact on the environment when they consume or use different items. It was seen that 47% agreed that they have to act in a responsible manner when they dispose used items to the environment and only 27% did not consider this as an important practice. In addition, there was a clear relationship between environmental consciousness and pollution issues with awareness being higher in biological and physical science stream undergraduates than in social sciences undergraduates. This may be due to the different attitudes inculcated in them during the learning process, as a science-based background is usually necessary when analysing an environmental issue. Furthermore, it has been revealed that local producers should be educated on a number of issues, since the majority are not aware of good environmental practices to be adopted by manufacturers and that consumers are willing to select products from manufacturers who practice these over other products. The following results of the study are of relevance to producers: (i) 48% revealed that they are not aware of the producer's commitment towards environment protection and their responsibility towards society, (ii) 64% of the consumers stated that they are ready to select products from producers who are conscious about the environment and society among other competitive brands, (iii) 86% agreed that the ecofriendly level of a product should be included in the product specification given by the producer, (iv) 46% stated that they would like to see the level of eco-friendliness on a product as a colour-rating scale and (v) 67% of the consumers stated that displaying the eco-friendly level of a product would strengthen their decision to buy a specific product. In the next phase of this research, the producer end of this concept will be investigated to correlate findings and to provide suggestions to bridge the gap between the two ends