

(212)

## Uncovering Industrial Symbiosis in Sri Lanka-Exploring a Possible Approach

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Most of the industries in the country generate a considerable amount of waste which are either open dumped or disposed without due consideration of the environment and ecosystem. The haphazard disposal of the untreated waste is growing in to a major problem in the country due to high cost of treatment for industries, lack of infrastructure for industrial waste management, ineffective enforcement of environmental regulations and insufficient capacity for waste management of local authorities. This paper presents a study conducted to analyse waste generation patterns, types and quantities in local industrial sector. Further discuss the application potential of Industrial Symbiosis of Sri Lankan industrial-sector to identify secondary usage of waste, avoiding direct discharge in to the environment. Data were collected using different appropriate methods. Results showed that textile and apparel, food, ceramic and rubber industries are the major effluent treatment sludge producers, totalling to 50,000 Mt per annum amounting to 80% of the ETP (Effluent Treatment Process)-sludge generated. Textile sector generate around 40,000 Mt of fabric off-cuts including cotton, polyester, nylon and mixed material. In addition, rubber sector disposes around 37,000 Mt of waste per annum during different manufacturing stages. The results from the analysis indicate some support to the theories that industrial symbiosis can have benefits both from an economical and an environmental point of view. The overall conclusion is that most of the industries in the country generate waste which can be used for an alternative usage and much could be done by the private sector to increase the use of this waste, if government policy were to support the effort.

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