Resource Flow Analysis and Umberto Life Cycle Assessment Training

A five-day training from 21st to 25th January 2019 on Resource Flow Analysis and Umberto tool was held at Development Alternatives Head Quarters in Delhi. The Umberto tool is used for modelling and assessment of all types of material and energy flow systems, in order to identify improvement potentials, conduct scenario analysis or develop models for alternative processes. The tool helps in calculating and analysing the Life Cycle Assessment (LCA) of a product from its source to disposal. LCA addresses the environmental aspects and potential environmental impacts (e.g. use of resources and environmental consequences of releases) throughout a product's life cycle from raw material acquisition through production, use, end-of-life treatment, recycling and final disposal (i.e. cradle-to-grave). LCA can also help to identify system related environmental weak points to uncover potentials of ecological optimisation. Life cycle studies give ecological relevant information for products/processes and provide foundations for decision making. Project based examples were tested on the tool to gain a clear understanding of the operations of the tool. The training was provided by Martina Prox from IFU (Investment Fund for Developing Countries and the key personnel involved, were Dr Rachna Arora (Technical Advisor, GIZ), Zeenat Niazi (Vice President, DA) and Gitika Goswami (Programme Director, DA) moderated the sessions.

DA plans to apply this tool in projects which require mapping of resources and determining the environmental impacts of the processes and products developed. The EU-REI (Resource Efficiency Initiative) project with GIZ will be implementing this tool to map the material flow in the construction sector within the cities of Bhubaneswar and Ahmedabad.