LCA Activities in Africa

LCA Knowledge Network in Africa (ALCANET)

**Toolseeram Ramjeawon* (ramjawon@uom.ac.mu), Harro von Blottnitz (hvb@chemeng.ac.za),
Evans Kituyi (ekituyi@uonbi.ac.ke) and Desta Mebratu (desta.mebratu@unep.org)**

* **Corresponding author:** Toolseeram Ramjeawon, Department of Civil Engineering, University of Mauritius, Reduit, Mauritius
(ramjawon@uom.ac.mu)

Unlike the more developed regions of the world, Africa has bee unable so far to harness the potential in LCA for sustainable development. Three key reasons account for that. First, LCA's traditional product-service focus has evolved in a context of over-consumption, and its potential to inform and evaluate development alternatives remains under-explored. Second, LCA is a new tool to the region and the level of awareness by government and industry on its potential to support sustainable consumption and production is low. Third, capacity building institutions such as universities are not well equipped to meet training requirements.

In particular, NEPAD's vision of fast economic growth of 6% per annum necessitates the development of adequately trained human resources to orient such economic growth along sustainability paths informed by life-cycle thinking. The African 10 Year Framework Programme on Sustainable Consumption and Production, which was approved by the African Ministerial Conference on Environment (AMCEN) in March 2005, recognizes the need to enhance capacities on the application of LCA within the specific context and development priorities of the region.

There is thus an urgent need to develop a critical mass of personnel who would take lead in disseminating the LCA concept in key development sectors and programmes in Africa. The African Life Cycle Assessment Network (ALCANET) is a regional knowledge network aiming to support the research process, to provide teaching and training activities, and to foster public understanding of LCA. The rationale for the establishment of the network is that by combining their efforts, network members are able to have a greater impact on decision makers, policy and practice than they would have alone.

UNEP, working together with the African Roundtable for Sustainable Consumption and Production (ARSCP), and ALCANET, together with inputs from members of the Life Cycle Inventory Task Force on Capacity Building of the UNEP/SETAC Life Cycle Initiative, held a four-day training workshop aimed at capacity building from 30th August to 2nd September. 35 participants from 11 African countries attended the training workshop. The objective of the training workshop was to introduce the participants from Universities and National Cleaner Production Centres (NCPCs) of the region on how to train and/or educate on LCA including LCI and LCM, with a focus on methods and resources including software. Part of the training involved constructing country level life cycle inventory databases from a generic data set. These databases, needed to do country-specific analyses, were a take-home product of the workshop. The workshop was structured in such a way to share with the participants the skills and knowledge that would enable them to take a leadership role in the training and support of LCA and LCI development in the region.

The participants were also introduced to website creation using the ESTIS platform. ESTIS is a multi-language, Information System (IS) management tool to assist the transfer of Environmentally Sound Technologies (EST). ESTIS encompasses two integrated components providing a decentralized IT network for improved access and local control in EST related information transfer. Results of the workshop are being recorded in a series of ESTIS websites (see www.estis.net/sites/afr_lca).

This training meeting was preceded by a day-long Symposium on 29th August 2005 organized, *inter alia*, to encourage the exchange of experiences on the application of the LCA tool in Africa, to work towards a body of science to support its application in all three spheres of sustainable development, and to strengthen the recently founded ALCANET. One of the aims of the Symposium was to deliberate on how to make LCA relevant to Africa's sustainable development priorities. Participants suggested a number of areas for future activities amongst which the following were the major ones:

- developing a simplified language that communicates the concepts and tools of LCA together with its benefits to policy and decision-makers in Africa;
- enhancing the capacities of African Universities and LCA-related institutions to create a pool of expertise that would develop the effective application of LCA in the region;
- promoting the application and further development of the LCA technique through targeted applications of the technique on sectors that are of particular importance to the African economy.

It is envisaged that the participants will influence the integration of life-cycle approaches in general, and LCA in particular, in teaching and research programmes of their respective university divisions while the NCPCs will be encouraged to train local SMEs in this tool's application.

**Comments and suggestions are welcome to help the network.
Please contact Toolseeram Ramjeawon
(ramjawon@uom.ac.mu).**