

# *Developing LCM Capability in Africa – How successful was LCM2009 in Cape Town?*

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# LCA in Africa

- Universities
  - South Africa, Mauritius, Zimbabwe, Ghana and Nigeria
- Commercial application in SA
  - Energy, chemicals, fast moving consumer goods (packaging)
- African LCA Network
  - Set up during 1<sup>st</sup> phase of UNEP/SETAC LCI
  - 1<sup>st</sup> training workshop on LCA, 2005 in Nairobi
  - Set-up of website on ESTIS
- UNEP/SETAC LCA awards
  - UCT, South Africa (1<sup>st</sup> prize 2007)
  - Koforidua Polytechnic, Ghana (runner up 2007 & 2009)

# LCM2009

- 6-9 September in Cape Town
- 4<sup>th</sup> International LCM conference



# LCM2009

- 140 academic contributions
  - Resources (biofuels, energy and carbon, food, waste and minerals, water), Human settlements, Complexity, Implementation (company focus, education, supply chains), Policy, governance & delivery, LCA
- Industry contributions
  - LCM thinking and practice from five global companies (Unilever, Hewlett-Packard, Sasol, SAB Miller, and Novozymes).
- Specialist training workshops

# LCM 2009 delegates

176 in total

- 70 from Europe
- 63 from Africa

Ghana(4), Kenya (3), Lesotho, Madagascar, Mauritius (2), Namibia, Nigeria (3), Rwanda, South Africa (46) and Uganda

- 16 from Asia
- 12 from North America
- 8 from Australasia
- 7 from South America

# LCM 2009 – delegate demographics

- Overall
  - 80% research institutes / universities
  - 22% consultants
  - 6% industry
- Africa
  - 76% research institutes / universities
  - 10% consultants
  - 6 delegates from industry
  - 3 delegates from local government
  - 1 NGO

# Training aspects of LCM 2009

- UNEP/SETAC workshops
  - Life-cycle based decisions for governments
  - Life-cycle based decisions for business
- Introductory courses and software training
  - Introduction to LCA and SimaPro
  - Introduction to LCA and carbon footprinting (GaBi)
- Training workshops
  - Restorative urban water management
  - Challenges of energy, climate and carbon trading
  - Life cycle based waste management

# Training workshops

- Well attended
  - majority local and African participants
- Positive feedback
  - worthwhile and lots learned
- understanding the vastly different challenges around the world



# Learning both ways...

- 12 contributions from African research groups
- Best student poster:
  - Comparative LCA of Charcoal, Biogas and LPG as Cooking Fuels in Ghana.  
(Augustine Ntiamoah, George Afrane, Cynthia Ofori-Boateng)
- Novel topics:
  - Traditional vs new building construction concepts in Madagascar, evaluated from LCA point of view (Randrianarison and Raheliarilalao)

# Success of LCM2009?

- Good turnout
  - Funding needed to ensure participation
- Informal feedback very positive
  - Networking opportunities
  - Exposure to LCM thinking and current research
- Re-invigorate the African LCA Network
  - Too soon to tell but positive signs
  - Formation of steering group of LCA-active researchers and practitioners

# Next steps...

- Keeping the website alive
  - [www.lcm2009.org](http://www.lcm2009.org)
- Special Issue of the Journal of Industrial Ecology
  - *The Global Challenge of Managing Life Cycles*
  - Downloadable free to researchers in non-OECD countries

# Barriers

- Small field
  - Need to reach critical mass
  - Move beyond academia
- Lack of data
- Methods less applicable
- Lack of funding
  - Expensive softwares and databases
  - Expensive to travel

# Opportunities

- Increased networking
  - African LCA Network / ARSPC
- Increased recognition of global nature of supply chains
  - Database and software development
    - › Unit process data / parametric models
  - Funding opportunities for national databases
- Training opportunities
  - UNEP/SETAC LCI
  - LCM 2009

Thank-you.

