EDUCATION FOR SUSTAINABLE DEVELOPMENT IN AFRICA (ESDA)

Sustainable Urban Development (SUD) Programme

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Presentation outline

• Brief background to ESDA-SUD
• ESDA-SUD Conceptualization
• ESDA-SUD Curriculum
• Programme Implementation
ESDA Background (2008-2011)

• Started by UNU-ISP, African Universities, UN-HABITAT, UNEP, UNESCO etc
• A 3-year project supported by Japanese Govt
• To develop & test graduate level education programme for SD in Africa
• Programme to reflect development reality in Africa
• Incorporating holistic view, transdisciplinary thinking & multi-cultural understanding
ESDA Background (2008-2011)

• Also to be reflected in the programme
  – inter-university collaboration mechanisms
  – Cross-border systems of delivery for academic instruction and exchanges
Working Groups/Outputs

• Integrated Environmental, Economic & Social development in rural Africa (IRD) – WA
• Sustainable Urban Development in Africa (ESDA-SUD) – EA
• Management of Mineral Resources for Sustainable Development in Africa (MMR) - SA
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<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3 (July 2010-October 2011)</th>
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| • Conceptualization of ESDA-SUD Programme to respond to sustainability challenges in urban areas | • Development of the Program curriculum  
• Identification of core units  
• Thematic Areas  
  • Water and Sanitation  
  • Urban Food Security  
  • Renewable Energy Alternatives | • ESDA-SUD Programme Testing  
• Development of programme modalities  
• Induction of facilitators  
• Development of field Learning Sites  
• Preparation of Video Documentary  
• Course Testing Workshop  
• Internal review of the curriculum |
Overall ESDA Approach in Curriculum Development

• Issue-based and grounded in reality of socio-economic development in Africa – relevance and impact
• Greater focus on practical learning through field experience
• Emphasis on problem-solving capacities and inter-personal work skills
• Inter-university collaboration for excellence & impact
• Use of ICT – good for inter-uni collaboration
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<th>ESDA-SUD Focus</th>
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<td><strong>Re-tooling of teaching methodologies from theoretical to practical learning.</strong></td>
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<td><strong>Development of curriculum responsive to community needs through urban community based processes</strong></td>
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<td><strong>Recognize the potential of communities for urban SD with all stakeholders valued equally.</strong></td>
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<td><strong>Participatory methods and bottom-up development approaches with communities in control of initiatives.</strong></td>
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<td><strong>Through action research and innovation and experiential learning to promote the use of indigenous knowledge.</strong></td>
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<td><strong>Appropriate technology in facilitation of community product design, development, production, marketing and distribution.</strong></td>
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Rationale for ESDA-SUD

Diagram showing the relationships between Problem Solving, Research, Education, and Society.
Duration and programme structure

MASTER DEGREE PROGRAMME – 2 yrs

(60% Practicals assignments, studio & 40% Examinations)

- 11 core units (1st & 2nd semesters).
- Specialization of one option & 4 elective units in 3rd semester

Coursework
Examination
Innovative Based Research Project (4th Semester)

Community-based conceptualisation and development of innovation projects
Mandatory field work amongst target communities
Exchange visits - Outside the University
Community-based demonstration of Innovations
ESDA- Core Courses

1. Introduction to Sustainable Development in Africa
2. Foundations of Sustainable Development
3. Ecosystem-Based Development
4. Climate Change and Sustainable Urban Communities
5. Urban Governance and Ethics
6. Sustainable Entrepreneurship
ESDA- Core Courses

1. Community Innovation for Sustainable Development
2. Principles of Cleaner Production and Green Economy
3. Community Resource Development
4. Sustainable Urban Planning
5. Research and Field Methods
6. Seminar
ESDA-SUD Course Electives

Water and Sanitation Development Option

1. Water and environmental sanitation
2. Urban Water Supply and Sanitation
3. Urban Waste Water Treatment and Management
4. Urban Community WATSAN and Utilities Management
5. Urban Solid Waste Management
6. Public Health Engineering for Water and Sanitation
ESDA-SUD Course Electives

Urban Food Security option

1. Concepts and Principles of Food Security
2. Urban Household Food Security
3. Sustainable Urban Agriculture
4. Assessment of Food Security
5. Urban Community Development and Food Security
6. Best Practices and Innovations in Enhancing Food Security
7. Field Class In Urban Food Security
ESDA-SUD Course Electives

Renewable Energy Alternatives

1. Energy Systems in Urban Areas
2. Bio-energy
3. Solar Energy
4. Wind and Hydropower Technologies
5. Energy Resources, Utilization and Management
6. Energy Economics, Policy and Environment
Certification

The degree to be awarded shall be called Master of Science in Sustainable Urban Development in three specialization options:

1) M.Sc. in Sustainable Urban Development (Water and Sanitation Development Option)

2) M.Sc. in Sustainable Urban Development (Urban Food Security)

3) M.Sc. in Sustainable Urban Development (Renewable Energy Alternatives)
Proposed modalities for the inter-university and international collaboration

- **ESDA-SUD PROGRAMME**
- **United Nation University**
  - Supports the ESDA-SUD program
  - Develops MOU
  - Kenyatta University
  - University of Nairobi

**Partner Institutions**
- UNEP
- UN-HABITAT
- UNESCO
- U Tokyo
- Karlastad
- U Agder
- Yokohama NU

- Teaching, and research infrastructure
- Joint degrees with UNU
- MoUs
- Hosting & implementing the programme
- UNU Sustainability centre
Programme Implementation

• Target year 2013
• Preparatory work on-going