CAMPUS GREENING INITIATIVES IN UNIVERSITIES: THE CASE OF RHODES UNIVERSITY IN SOUTH AFRICA

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Introduction

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Rhodes University
Presentation outline

- Background
- Objectives
- Methods
- Results and Discussion
Background

Global context
- DESD (2005 to 2014)
- Green economy – UNEP 2009 (global green new deal)
- Rio + 20 sustainability initiative

South Africa
- Apartheid history
- Education
  - Transformation focus
  - Community engagement
- Environment
  - Biggest GHG emitter – emissions comparable to top global emitters
  - Committed to Green Economy agenda
  - Involvement in climate negotiation structures
  - Climate Policy
  - Green economy accord
  - Climate financing (including research e.g. Green fund)

Campus greening
- reducing carbon footprint
- sustainable procurement practices;
- sustainable mobility options for students and faculty;
- effective programmes for waste minimization, recycling and reuse
- encouraging more sustainable lifestyles

The role of education: Green skills
Rhodes University

Background:
- Established 1904
- Initially acquiescent to apartheid policies of segregation

Location:
Grahamstown:
- Small (91548 people in 2010)
- Rural

Participation mainstreaming environmental issues:
- Signatory to Talloires Declaration
- Environmental policy
- CE policy with transformation objectives

View over Campus towards 1820 Settler's Monument
Research questions/aims

- Identify green economy practices at RU
- Compare the level of involvement in such practices: 2008 versus 2014
- Involvement in green practices (what, to what extend, how)
- Develop an understanding of how the practices contribute to GE [Rio + 20 sustainability initiative (campus greening)]
- Discuss how the university is contributing to a low carbon economy in general (broad environment)
Research methods

Theory: Systems thinking – a systems view of the university as a sub-systems of society

Design: Qualitative case study with numerical data which is based on qualitative ordered response levels based on the Likert scale

Data collection methods: Interviews, Sustainability assessment using the USAT, Content analysis of websites

Data analyses methods: Induction – generations of themes (practices); comparative analyses of levels of sustainability mainstreaming based on USAT indicators; abduction – recontextualising practices within the broad environment (contribution to GE)
Results

Practices

• WR 1 - Waste reduction practices
• RW 2 - Recycling of solid waste
• TW 3 – Source reduction of toxic waste
• AP 4 - CO₂ and air pollution reduction practices (including alternative fuel use, renewable energy sources, emission control, etc.)
• BC 6 - Building construction and renovation based on ecological design principles
• EC 7 - Energy conservation practices (in offices, laboratories, libraries, classrooms and dormitories)
• LP 8 - Local food purchasing programme
• PE 9 - Purchasing from environmentally and socially responsible companies
• TP 11 - Transportation programme (including bicycle/ pedestrian friendly systems, car pools, bus pass programmes, electric/natural gas campus vehicles)
• BF 12 - Use of bio-fuel
Results

The level of involvement

2008

2014
Results

Comparative analysis

Changes

• **Improvements**
  – Waste reduction practices
  – Recycling of waste
  – Source reduction of toxic waste material
  – Purchasing from environmentally and socially responsible companies
  – Transportation programme

• **Decline**
  – Use of biofuel

• **Constant**
  – AP4; BC6; EC7

Approach: Incremental rather than rethinking!! – Prof Wals today
Discussion

Responding to Rio + 20

- **Reducing carbon footprint**
  - Energy savings (low energy consumption fittings, renovations and new buildings based on ecological design)
  - Less paper demand
  - Campus greening
  - Tree planting incl. in the community

- **Sustainable procurement practices**
  - Local purchasing
  - Purchasing from environmentally and socially responsible companies
  - Asking suppliers to take back their waste

- **Sustainable mobility options**
  - Pedestrian campus design (except priority parking)
  - Peripheral parking for students
  - Student car pooling initiative – green wheels
  - Creation of more bicycle & motor-cycle bays

- **Effective programmes for waste minimization, recycling and reuse**
  - Printing on both sides of paper
  - Limiting printing of memos and hand-outs for students
  - Paper recycling
  - Composting of kitchen and garden waste

- **Encouraging more sustainable lifestyles**
  - Environmental awareness
  - Environmental policy audits by Environmental Science students
  - Environmental website: energy saving guidelines, electricity monitor guidelines; sustainable energy options

Contribution to broad GE agenda

- Reduction of direct emissions
- Reduction of indirect emissions
- Value addition through practices that enhance environmental well-being
- Influencing student behaviour – *the campus as a learning environment*

~ Dalai Lama

Thank you