The role of South African universities in the revitalisation of African higher education: Stellenbosch University’s approach

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27 January 2009

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Coordinator: Initiatives in the South
Division of Research Development
Stellenbosch University
UNIVERSITEIT • STELLENBOSCH • UNIVERSITY
jou kennisvennoot • your knowledge partner
The following countries could fit within Africa:

- China: 3,705,387 sq. mi.
- U.S.A.: 3,615,102
- India: 1,269,338
- Europe: 1,900,176
- Argentina: 1,068,296
- New Zealand: 103,736
- China: 11,666,035 sq. mi.

The area of Africa is 11,706,168 sq. mi.

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Africa’s Human Footprint
“The university must become a primary tool for Africa’s development in the new century. Universities can help develop African expertise; they can enhance the analysis of African problems; strengthen domestic institutions; serve as a model environment for the practice of good governance, conflict resolution and respect for human rights, and enable African academics to play an active part in the global community of scholars.”

Higher education and economic growth

Africa’s developmental challenges

- **External forces:**
  - Conflicting Cold War public systems: growth model vs centrally planned system
  - Africa failed to modernise on its own terms: dependency on foreign capital, aid, technology and expertise

- **Internal factors:**
  - Failures of post-colonial governance (militarisation)
  - Distanced from the poor; obstructed human development

- Requires a quantum-leap into the knowledge economy
Signs of hope

• Political democracy and economic growth
• NEPAD: recognises Africa’s problems and marginalisation in the global economy
• NEPAD’s Threefold strategy:
  • Establish **conditions** for sustainable development
  • Invest in a number of **priority sectors**
  • Mobilise **resources**
• Greater emphasis on HE for development:
  • AU’s Second Decade of Education for Africa (2006-2015) acknowledges key role of HE
  • ACU/AAU “Renewing the African University” provides substantial funding via the MRCI
  • NEPAD’s Consolidated African Science and Technology Plan of Action highlights knowledge production for development
  • AAU appointed by AU to implement the Revitalization of Higher Education in Africa

• What drives renewal and revitalisation?
  • Inter-institutional collaboration within regional networks
Stellenbosch University: a strategic thematic approach

• A Pedagogy of Hope within the context of Africa (NEPAD/CPA)
  • Inculcate critical thinking
  • Engage in dialogue
  • Transform the community

• Integrated Strategic Plan (ISP):
  1. Consolidating democracy and ensuring regional peace and security
  2. Eradicating endemic poverty
  3. Contributing to human dignity and health
  4. Ensuring environmental and resource sustainability
  5. Maintaining the competitiveness of the industry

Derived from the Millennium Development Goals of the UN
Vision: SU wants to contribute to African scientific capacity

- Start with what we have, then identify where we must go
- Create an image/typology of SU’s African involvement and from there develop an approach for Africa

Database of Africa Initiatives

- Records all joint research, teaching, development projects
Stellenbosch University
Africa Initiatives

Add New Entry
Edit Existing Entry
Display All Information

Sort Africa Initiatives By:
- All Entries
- Classification
- African
- Faculties

Exit Database
STELLENBOSCH UNIVERSITY: AFRICA INITIATIVES

Acronym: ASNAPP    Project Number: AS001

Classification: Agricultural economics

Full Title: Agribusiness in Sustainable Natural African Plant Products

Website: http://www.asnapp.org/

<table>
<thead>
<tr>
<th>Stellenbosch Partner(s)</th>
<th>Africa Partner(s)</th>
<th>Other Partner(s)</th>
<th>Project Data</th>
<th>Funding</th>
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<tbody>
<tr>
<td></td>
<td>Mr Elton Jeftas</td>
<td>Dr Emmy Reinten</td>
<td><a href="mailto:emmy@sun.ac.za">emmy@sun.ac.za</a></td>
<td>(021) 808 2922</td>
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FurtherInformation

Record: 1 of 2
### Stellenbosch Partner(s) | Africa Partner(s) | Other Partner(s) | Project Data | Funding

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Development</th>
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<tbody>
<tr>
<td>Project Scope</td>
<td>Level 1</td>
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<tr>
<td>Task</td>
<td>To help create and develop successful African businesses in the natural products sector by providing income, employment and development through environmentally and socially conscious sustainable</td>
</tr>
<tr>
<td>Method And Sources</td>
<td>Project indicator based (technology transfer &amp; market linkage establishment with entrepreneurs and community development). Collaboration between project partners and local communities aim to:</td>
</tr>
<tr>
<td>Output</td>
<td>Various in different countries, e.g. in SA: Wupperthal, Haarlem &amp; Ericville indigenous tea production – from organic production; post-harvest and marketing. Greenhouse technology implementation through training courses and technology transfer. See website</td>
</tr>
</tbody>
</table>

### Secondary Classification
- Food sciences and technology

### Keywords
- natural plant products, sustainable production, African agribusiness, Mpunu herbal teas, spices, phytomedicinals, essential oils

### Timeframe:
- **Start Date**: 01/01/1999
- **EndDate**: 
- **Activity**: Active

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**Acronym**: ASNAPP  
**Project Number**: AS001  
**Classification**: Agricultural economics  
**Full Title**: Agribusiness in Sustainable Natural African Plant Products  
**Website**: [http://www.asnapp.org/](http://www.asnapp.org/)
STELLENBOSCH UNIVERSITY: AFRICA INITIATIVES

Acronym: ASNAPP  Project Number: AS001

Classification: Agricultural economics

Full Title: Agribusiness in Sustainable Natural African Plant Products

Website: http://www.asnapp.org/

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<td>Website</td>
<td><a href="http://www.unza.zm/schools/agric/">http://www.unza.zm/schools/agric/</a></td>
</tr>
</tbody>
</table>

ResponsiblePerson: Dr Davies M Lungu

ContactPerson: Dr Davies M Lungu

EmailAddress: dlungu@agric.unza.zm

TelephoneNumber: +260 1 295 655

FaxNumber:        |

FurtherInformation:        |
Key data

- Projects recorded (Jan 2009): 135
  - Updated continuously
  - More than 50% research collaboration and 30% teaching
  - Human sciences 40%, Health 30%, Science 30%
- Total number of partners involved: 450
  - Stellenbosch partners: 130
  - African partners: 180 (from 30 countries)
  - Other South African partners: 58
  - “Northern” partners (N-S-S): 80
- Graphical representation of projects and partners follows:
Projects by Type

- Development: 49.0%
- Member of Board: 7.3%
- Examination/Moderation: 8.3%
- Training: 29.2%
- Research: 6.3%
Applications of the database

- Reporting on Africa initiatives
- Mailing lists and contacts for calls/conferences
- Ranking departments for their African involvement
- Identifying possible partners:
  - Four institutional MoU’s signed
  - Numerous new project partners identified
- Comparing SS with SSN projects, including funding partners
- Other partnership datasets
Developing an Approach?

- **Individual initiatives**
  - Joint research and training projects (recorded in database)
  - Contracts to host programmes (IMF, INWENT, etc)
- **Focused bilateral partnerships**
  - MoU’s with Dar es Salaam, Makerere, Botswana, Namibia (incl. exchange agreements)
  - Agreements proposed with Addis Ababa, KNUST
  - In future: Malawi, Zimbabwe, Zambia, Mozambique
  - AIM: be recognised as a reliable partner on the continent
- **Multilateral networks**
  - “Hub & spoke”/Centres of Excellence model?
  - Examples: ASNAPP, AIMS, NetACT, PANGeA?
  - Increasing focus on joint accreditation
- **Databank (overview, resources, policies) of HE collaboration in Africa**
Successful S-S / N-S-S Partnerships?

• Replace dependence with joint ownership
  • Involve all partners from first phase of project design
  • Include technology transfer/ policy implementation/ dissemination as key aspect of the project
  • Share administrative and financial duties (at least some investment from each partner)

• Brain drain?
  • Collaborative research and graduate training
  • More government spending in African S&T

• Africa’s research niche
  • Take advantage of our geo-political location
The Laboratory in our backyard

- Rocks & minerals
- Plants & animals
- Oceans & lakes
- Diverse Communities
  - Languages
  - Economies
- Epidemiology
- East-West and North-South axis
Thank you
International Students

- From 665 in 1997 to 2458 in 2007
  - 10.5% of total
- Overview:
  - SADC: 38%
  - Non-SADC: 15.5%
  - Africa total: 53.5%
  - Outside Africa: 46.5%
Cluster 1: Biodiversity, Biotechnology and Indigenous Knowledge
1. Conservation and Sustainable Use of Biodiversity
2. Safe Development and Application of Biotechnology
3. Securing and Using Africa’s Indigenous Knowledge Base

Cluster 2: Energy, Water and Desertification
4. Building a Sustainable Energy Base
5. Securing and Sustaining Water
6. Combating Drought and Desertification

Cluster 3: Material Sciences, Manufacturing, Laser and Post-Harvest Technologies
7. Building Africa’s Capacity for Material Sciences
8. Building engineering capacity for Manufacturing
9. Strengthening the African Laser Centre (ALC)
10. Technologies to Reduce Post harvest Food Loss

Cluster 4: Information and Communication Technologies and Space Science and Technologies
11. Information and Communication Technologies
12. Establishing the African Institute of Space Science

Additional Programme:
13. Mathematical Sciences