The World Bank and the Africa Centers of Excellence (ACE) projects

ACE Impact

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Outline

• The World Bank
• ACE Impact Project
• Participation of Countries
• Partnerships
• Regional Scholarship and Innovation Fund (RSIF)
The World Bank

- Twin Goals
  - End Extreme Poverty
  - Promote Shared Prosperity
- Systematic Country Diagnostic (SCD)
- Country Partnership Framework (CPF)
- Loans to national governments
World Bank Organization

- Matrix Structure
  - Global Practices (Topical)
  - Regional Approach (Geographical)
- World Bank Headquarters
- Country Offices
- Education is one of the Global Practices at the World Bank
  - Basic, Secondary, TVET, Tertiary
  - Africa Centers of Excellence Program – postgraduate education and applied research
Issues for Consideration

• Limited resources
  – Regional Centers

• Keep talented students in Africa
  – Regional students
  – Programs must have International Quality

• Training must be relevant
  – Advisory Boards
  – Sectoral Stakeholders
  – Partnerships can add value

• Skills gap – in particular in STEM disciplines
  – Who hires the graduates?
  – 50% STEM (Engineering) focused

• Approximately 30% of faculty have PhD

• Transform programs AND institutions
  – Within national context – systems
The Africa Centers of Excellence Program

- To support excellence in postgraduate education and research
  - Train MS and PhD students to address the Skills Gap
  - Provide midcareer Short Courses
  - Applied Research
- Focus on Development Challenges
- Regional (rather than national) Focus
- Partnering:
  - Sectoral Stakeholders
  - Global Excellence
- Competitive Selection Process
- Government Ownership
Current Africa Centers of Excellence (ACE I & II)

Distribution by Country: 46 Centers in 16 Countries

Senegal
- IT
- Maternal Health

Burkina Faso
- Water

Ivory Coast
- Climate change
- Statistics
- Mining environ

Ghana
- Crop Improvement
- Water Mgt.
- Infectious Diseases

Benin
- Math

Togo
- Poultry Science

Nigeria
- Agriculture (3)
- IT (1)
- Oil fields (1)
- Material Science (1)
- Health (4)

Cameroon
- IT (1)

Rwanda
- IT (1); Energy (1)
- Education (1);
- Statistics (1)

Uganda
- Agriculture (2)
- Material Science
- Health

Ethiopia
- Agriculture; Water;
- Railways engg;
- Health

Kenya
- Agriculture (2)
- Energy (1)

Tanzania
- Agriculture (2)
- Water;
- Health

Malawi
- Agriculture (1)
- Health (1)

Mozambique
- Petroleum (1)

Zambia
- Mining (1); Health (1)
ACE 1 - Lessons Learned and Numbers

- Prior institutional and ministerial buy-in
- Regional engagement
- Institutional impact
- Sector engagement and **upfront** commitment
- Sectoral Advisory Board
- Networking and Partnerships
- Gender
- Plan for sustainability

- 22 Centers in 8 West and Central African countries
- 1600 PhD students
- 6500 MS students
- 16000 short-course students (midcareer)
Objective of the ACE Impact Project

• To increase quantity, quality and development relevance of post-graduate education in selected universities through regional specialization

  ❖ **Increase the number** of enrolled students (ultimately graduates) in post-graduate programs (Master’s, PhDs)

  ❖ **Enhance the quality** of post-graduate programs such that students acquire the necessary theoretical knowledge and applied skills upon graduating

  ❖ **Improve development Impact** such that the knowledge and skills acquired by graduates are closely linked to development challenges

• Project duration – 4 to 5 years

• Total budget - $250 - $350 million
Process

• Project Development
• Country Interest
• Project Signoff
  – World Bank
  – Participating Countries
• Call for Proposals
• Evaluation Process
  – International standards for peer review
  – Panel Evaluation
  – On-site Evaluation
Process

• Selection by Project Steering Committee
• Negotiations with Institutions and National Governments
• Project Approval at World Bank
• Project launch
• Dispersal of funding based on achievement of pre-determined results
• **Strong Supervision**
  – Financial
  – Academic
## Components

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<thead>
<tr>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
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<tbody>
<tr>
<td>• <strong>Subcomponent 1.1</strong>: Support to establish new centers of excellence</td>
<td>• Support to emerging centers of excellence for networking, regional TA and improving learning environment</td>
<td>• <strong>Component 3</strong>: Support for:</td>
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<td>• <strong>Subcomponent 1.2</strong>: Support to scale-up well performing centers of excellence</td>
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<td>- Regional Higher Education policymaking and collaboration</td>
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<td>• Additional financing for institutions with Component 1 Engineering focused centers</td>
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<td>- Regional project facilitation (including M&amp;E)</td>
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Prioritization for New Centers

For each sector, through consultations with experts, governments, industry and development partners, the project identified:

- **Pre-identified Thematic Sectors** focusing on areas such as water, ICT, power, housing, urban design, coastal degradation, education, environment etc..
- **Scope/area** within each of the pre-identified thematic sectors that apply to
  - Current skills gap within this area in West and Central Africa
  - Applied research needs for industry
- **Key partners** (national, regional and international)

- The best proposal within the pre-identified sectors will be selected
Component 1: Expected Results

- International quality post-graduate education
- Targeted research in response to development challenges
- Stronger sectoral engagement
- Increased strategic/functional regional and international partnerships
- Strengthened Institutional-level Impact
- Improved student support and welfare
- Increased enrollment and better retention of women
Component 1: Disbursement Linked Indicators (DLIs)

- Institutional Readiness
- Development Impact of ACE Center
- Number of Students Enrolled
  - Gender
  - MS/PhD
  - Regional
- Quality of Education Activities
- Quality of Research Activities
- Relevance of Education and Research
- Fiduciary Enhancement
- Institutional Impact
Participating Countries

- Benin
- Burkina Faso
- Cameroon
- Cote d’Ivoire
- Djibouti
- Ghana
- Guinea
- Niger
- Nigeria
- Senegal
- The Gambia
- Togo
Partners

• French Development Agency Co-Financing
• France: ANR, CIRAD, CNRS, IRD
• Germany: DAAD, DFG, DLR/BMBF
• UK: UK Research Councils
• US: NSF

• Universities
• Sectoral stakeholders
  – Industry
  – Public stakeholders
The Partnership for Skills in Applied Sciences Engineering and Technology (PASET)

PASET aims to:

• **Support African countries to build a skilled labor force** by focusing on the continuum of skills from foundational skills to upper secondary/technical/vocational training as well as higher education, scientific research and innovation.

• **Target skills in Applied Science, Engineering and Technology (ASET) for specific priority sectors** to complement and maximize returns from domestic and foreign investment in these sectors.

• **Promote strategic partnerships** between African governments, businesses & partner countries to invest in skills in ASET fields.

• **Strengthen mechanisms that promote regional institutional collaboration** in specific ASET programs & areas.

• **Strengthen African ASET systems and institutions**, including through improved policies, systems, standards and mechanisms to assure quality and relevance; to monitor progress and to ensure focus on results; and

• **Enable the systematic sharing of knowledge and experience** among Sub-Saharan African (SSA) countries and between SSA and Partner countries in building ASET capacity to promote development.
Regional Scholarship and Innovation Fund (RSIF)

- Contribute to enlarge the stock of highly skilled scientists, professionals and innovators in Applied Sciences, Engineering & Technology (ASET) areas.
- Identify and nurture young Africans who demonstrate academic talent and wish to further their studies in ASET fields.
- Address imbalances in the number of women and disadvantaged groups in ASET fields in Africa.
- **Build capacity in Africa to provide relevant ASET training** and to ensure continued investment in scaling up ASET education and workforce.
RSIF Funding

• Goal: Raise US$100 million in seed funds and ultimately make the fund sustainable

• Initial seed funding commitment of US $10 million:
  – $2 million each from 5 African countries (Cote d’Ivoire, Ethiopia, Kenya, Rwanda and Senegal)
  – Kenya has already transferred $2 million, Rwanda has transferred $1.5 million and Cote d’Ivoire is in the process of transferring $1 million
  – More African countries have expressed interest to join.

• Samsung Dream Foundation will provide a stipend for select students who will be studying in Korea.

• World Bank Regional Grant and Korean Trust Fund
Thank You!

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