

The Ethiopian Higher Education Landscape and Natural Resources

Education & Research

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ETHIOPIA

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ETHIOPIA



- ◆ Pop: 72+ Million (growth 2.4+%)
- ◆ Altitude: <120 m amsl to over 4600 m amsl
- ◆ Diversity:
 - ❖ Relief, Soils and Climate
 - ❖ Flora and Fauna
 - ❖ Peoples, Culture and Languages

✓ **FACINATING & BREATH-TAKING:**
"UNIQUE, DIVERSE & UNEXPLORED NATURAL LABORATORY"



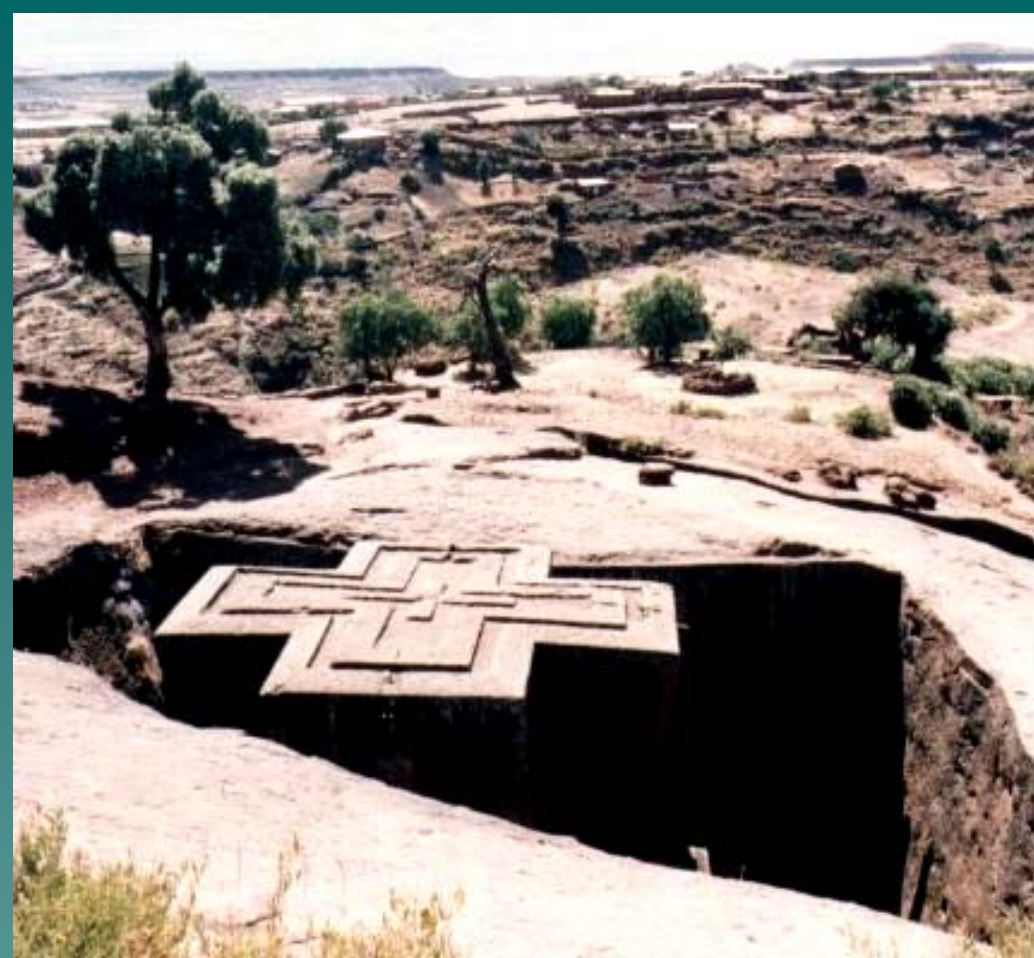
NATURAL FORESTS - 2.3 MILLION HA



Ethiopia – Diverse People











THE ETHIOPIAN EDUCATION LANDSCAPE



Education System

- i. **Primary: 1-8**
- ii. **Lower Secondary: 9-10**
- iii. **Upper Secondary: 11-12**

TVET:

10+1; 10+2; 10+3

- iv. **Higher Education:**

12+3; 12+4; 12+5

MA/MSc; PhD

PARTICIPATION (1995-2003)



- ◆ PRIMARY: 3.8M to over 9 M
 - (1-8): 30.1% to 72%
 - (1-4): 68% to 84.2%
 - (5-8): 22.1% to 42.4%
- ◆ SECONDARY: 0.4M to >0.8 M
 - (9-12): 8.1% to 14%
 - (9-10): 12.4% to 19.3%

PARTICIPATION (1995-2003)....



◆ Higher Education:

Annual intake (degree):
~ 3,000 → 31,921

Total student population
35,027 → 172,111

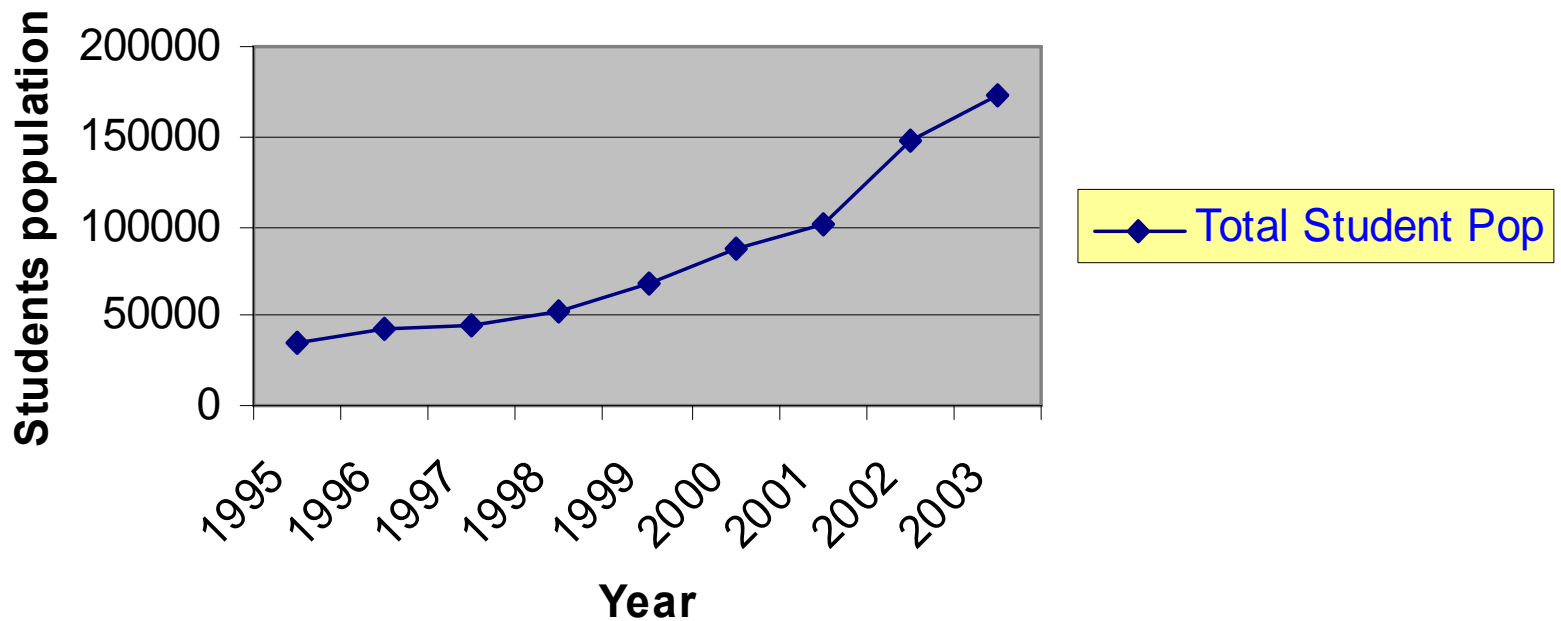
Student Population per
100,000 inhabitants:

65 → 220

GER 0.7 → 1.5

Student Enrolment

Fig 1. Total students enrolled in the higher education system in Ethiopia (1995-2003)



Total student population 172,111



- ◆ **77% in Public and 23% in private**
- ◆ Enrolled in
 - ✓ Nine HEIs under MoE
 - ✓ Three HEI under other Govt. agencies
 - ✓ 64 Accredited private HEIs

HIGHER EDUCATION

Public Institutions (MOE):

- *ALEMAYA UNIVERSITY*
- *ADDIS ABABA UNIVERSITY*
- *DEBUB UNIVERSITY*
- *JIMA UNIVERSITY*
- *MEKELE UNIVERSITY*
- *BAHIRDAR UNIVERSITY*
- *GONDER UNIVERSITY*
- *ARBAMINCH UNIVERISTY*
- *NAZRETH TECHNICAL TECHERS COLLEGE*

Public Budget

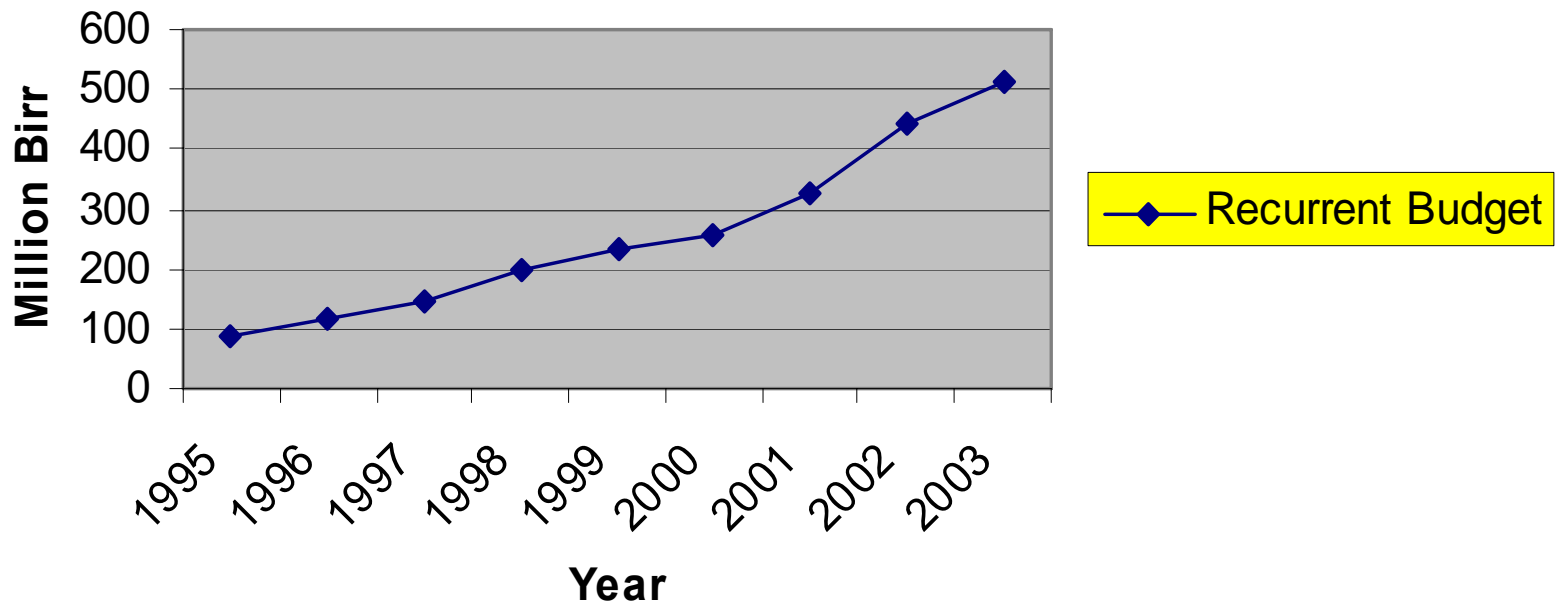
Education budget:

- ◆ **2.8% of GDP (cfr. 3.9% SSA)**
- ◆ **9% (1997) to 14% (2003) of total annual public budget allocation (cfr. 20% for Africa)**
- ◆ **15-20% of education budget for HE**



Recurrent Budget from Treasury

Fig 2. Recurrent budget allocation to universities under the Ministry of Education (1995-2003)



NATURAL RESOURCES

- ◆ **Forest cover: less than 3%**
- ◆ **Soils: huge loss by erosion**
- ◆ **Land: unabated degradation**
- ◆ **Wildlife: endangered and insecure**
- ◆ **Abundant natural resources but deteriorating at alarming rate**
- ◆ **No sound, comprehensive and integrated policy and strategy**
- ◆ **Food insecurity**
- ◆ **Lack skilled human resource**
- ◆ **Poverty (economic & social tensions)**



NATURAL RESOURCES EDUCATION



- ◆ **AGRICULTURE RELATED**
 - **Alemaya, Debub, Mekele & Jima Universities**
- ◆ **FORESTRY/NATURAL RESOURCES**
 - **Debub-Wondo Genet**
- ◆ **Mainly theoretical, poor linkage to research and real-world situations**
- ◆ **Skewed towards agriculture**
- ◆ **Poor institutional capacity**

NATURAL RESOURCES EDUCATION



- ◆ **Alemaya:** Animal Sc; Plant Sc; Extension; Soil & Water conservation;....
- ◆ **Mekele:** Animal, range & wildlife Sc; Land resource mgmt & environmental protection; Natural resource economics & mgmt; Dry land crop Sc;
- ◆ **Dehub:** Animal & range mgmt; Plant production & dry land farming; Agric-resource economics & mgmt; production forestry; Farm forestry; Natural resource mgmt;
- ◆ **Jima:** Crop prod; Animal prod; Natural resource mgmt; horticulture
- ◆ **AAU:** Biology (environment); Geography;

NATURAL RESOURCES RESEARCH



- ◆ Universities
 - Undergraduate and graduate programs
 - Collaborative research
- ◆ EARO
- ◆ NGOs (DO-Action research?)
- ◆ **Not well-articulated, focused and/or integrated**
- ◆ **Not widely disseminated**

STATUS



- ◆ Low participation rate & need LARGE expansion
- ◆ Inadequate academic staff profile and mix
- ◆ Low research undertakings and outputs
- ◆ Huge Brain-Drain
- ◆ Poor Partnership and international networking

STATUS...



- Cumbersome Management and unsophisticated /modern needs
- **Problem of quality & relevance.**
- Poor Library capacity and academic services
- **Inadequate & poor facilities & infrastructure**
- **Poor Institutional Quality Assurance/ Enhancement mechanisms**

POLICY



- ◆ **Education and Training Policy (1994)**
- ◆ **Higher Education Proclamation (2003)**
 - **Autonomy & Accountability**
 - **Quality and Relevance Assurance**
 - **Revenue Diversification & Cost Sharing**
 - **Policy & Strategy Generation**
 - **Development Oriented Research and COPE**

OPPORTUNITIES FOR THE FUTURE

Gov Commitment to Expand =
University and Centers of
Excellence by 2009/10



- Public Investment
 - Public budget: 1.2 to 2.3 Billion Birr per year in 2009 (1USD=8.5 Birr)
- HEIs: from 8 to 21.
- Encourage private sector
- Annual Intake : 30,000 to ~110,000 (~150)
- Population : 172,000 to over ~400,000
- GER :1.5% to ~5%

OPPORTUNITIES FOR THE FUTURE

WONDOGENET FORESTRY COLLEGE

◆ Undergraduate Program

❖ Natural resources:

- ✓ Soil resource & watershed management
- ✓ Ecotourism & nature conservation
- ✓ Natural resource economics & policy
- ✓ Wildlife & fisheries management

◆ Graduate Programs

- ❖ Agroforestry & Soils Fertility Management
- ❖ Watershed management & Eco-tourism
- ❖ Natural Resource Economics & Policy
- ❖ Wildlife & Fisheries Management



OPPORTUNITIES FOR THE FUTURE



➤ Other Universities (UG & PG)

- ◆ Alemaya University
- ◆ Mekele University
- ◆ Jima University
- ◆ Dehub University

➤ Newly Establishing (UG)

- ◆ Mizan/Tepi University College (South)
- ◆ Robe University College (South East)
- ◆ Nekempt University College (West)
- ◆ Debrebirhan University College (Central)

OPPORTUNITIES...

Centers of Excellence:

- *Ethiopian Institute of Natural Resources Sciences (EINRS)*
- *Ethiopian Institute of Biotechnology (EIBT)*
- *Ethiopian Institute of Engineering and Technologies (EIET)*
- *Ethiopian Institute of Industrial Technology (EIIT)*
- *Ethiopian Institute of Information and Communication Technology (EI ICT)*
- *Ethiopian Open University (EOU)*
- *Ethiopian Institute of Medical and Health Sciences (EIMHS)*
- *Ethiopian Institute of Textile & Leather Technology (EITLT)*
- *Ethiopian Institute of Veterinary Sciences & Technology and Plant & Animal Sciences (EIVSTPAS)*

OPPORTUNITIES...



- Positive and able pool of human resource for transformation
- Ready and organized Diaspora
- Upcoming Development Partners
- Developing Public-Private Partnership
- Proactive and engaging International Education and Research Institutions and Universities
 - Develop curricula & teaching materials
 - Upgrade IT systems and skills
 - Engage in teaching and research
 - Generate knowledge
 - Facilitate networking

PARTNERSHIP



- ◆ **“Land Grant” Model**
- ◆ **Collaborative joint undertakings**
- ◆ Interest and commitment to create center of excellence in education and research
- ◆ Opportunity for diverse research possibilities and contribution to improve livelihoods
- ◆ Mutually benefiting and professionally satisfying venture
- ◆ Mobilizing collective wisdom, experiences and resources

THE WAY FORWARD



INVESTMENT IN HIGHER EDUCATION AND RESEARCH IS INVESTMENT IN THE PEOPLE, IN OUR FUTURE.

PARTNERSHIPS WILL HAVE A POWERFUL IMPACT TO CHANGE AND TRANSFORM THE CURRENT LANDSCAPE OF LIVLIHOODS OF OUR PEOPLE.



THANK YOU

