



Next

Recent Developments in African Higher Education

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AFRICA

- Africa is the world's second-largest continent.
- Total 975,330,899 people
- ◆ Over 2300 HEI s
- ◆ About 6.2 million students
- ◆ Public and Private participation
- ◆ Gross Enrolment in HE is 5%



AFRICA

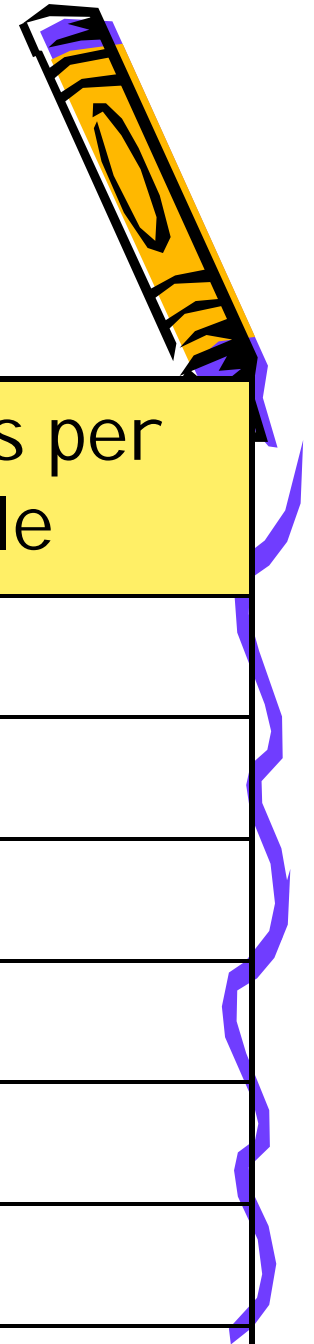
- Spends less than 0.3% GNP on research.
- Accounts for 12% world population but accounts for less than 1.5% of research publications



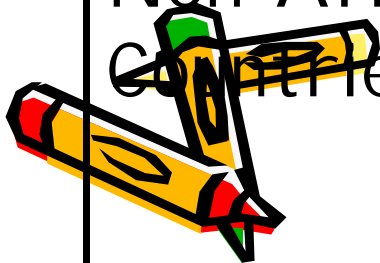
My Agenda

1. Statistics on the status of knowledge and knowledge production in Africa.
2. Challenges facing Higher Education Institutions in Africa.
3. Recent Developments at the Continental Level.
4. Prospects for North-South Collaboration

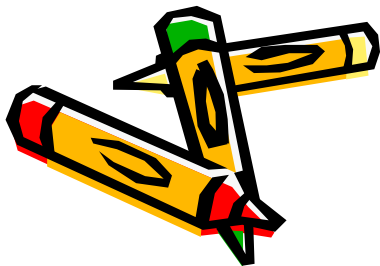
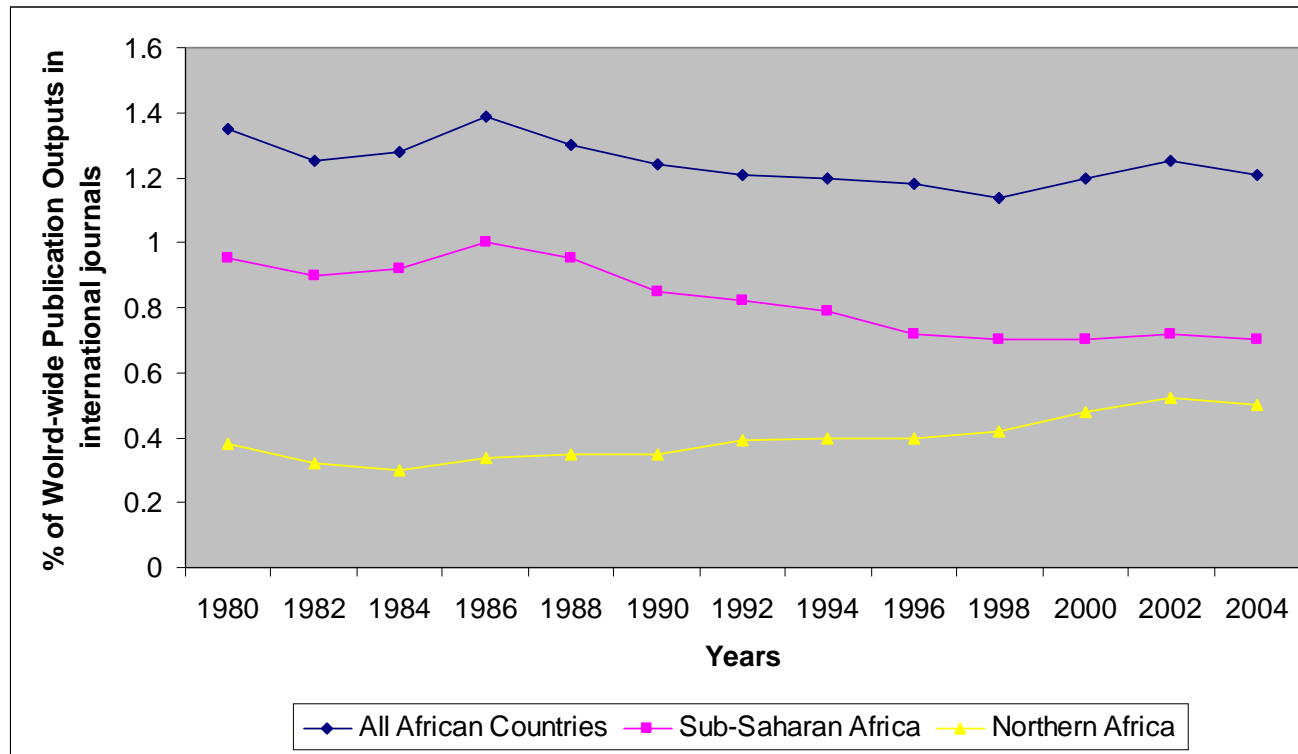
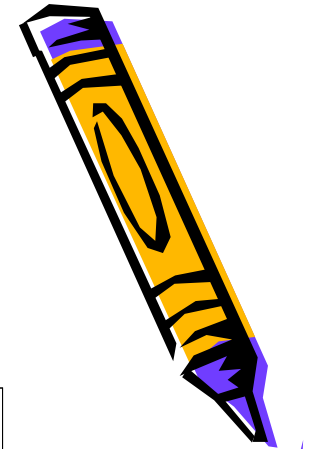
1. Africa's Knowledge Production Capability



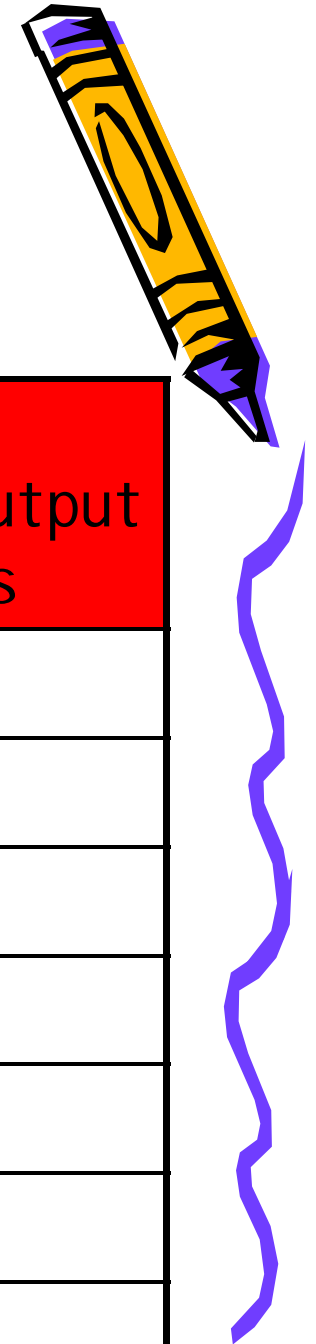
	Country	Researchers per million people
Africa	Nigeria	15
	Mauritius	201
	South Africa	192
	Uganda	25
Non-African Countries	Brazil	168
	China	459
	USA	4,103



2. Africa's Knowledge Access and Dissemination



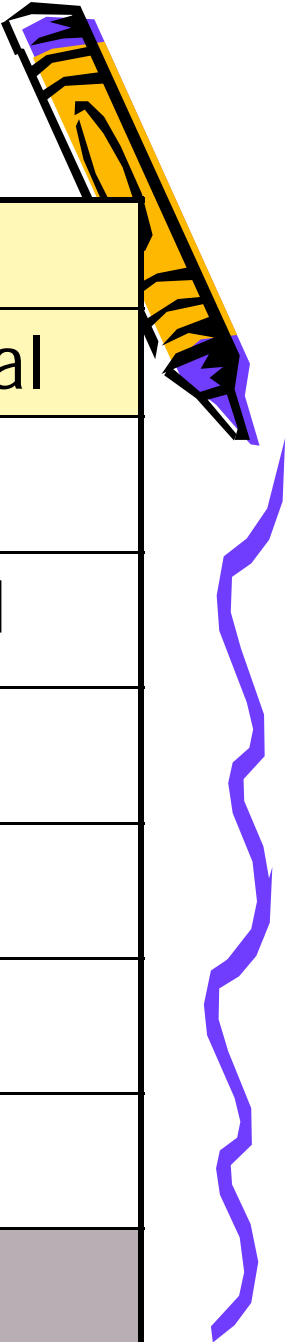
Bibliometric Performance Profiles of African Countries (S & T) : Summary Statistics (2001-2004)




Country	Total Publ.Output in 4 yrs	Country	Total Publ.Output in 4 yrs
S. Africa	14,809	Kenya	2067
Botswana	422	Tanzania	855
Mozam	118	Uganda	724
Mauritius	153	Nigeria	2309
Egypt	9895	Ghana	641
Morocco	3535	Senegal	618
Tunisia	2857	Togo	101




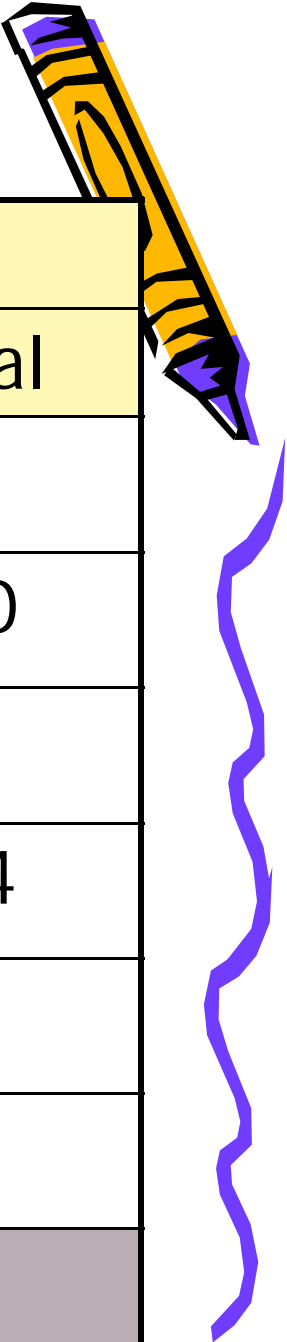
Knowledge Specialization Profiles of African Countries



	Listed Articles by disciplines			
	Medical	Natural	Enginee	Social
S. Africa	50	31	10	9
Mozam	64	18	7	11
Mauriti	46	39	10	6
Egypt	27	52	20	1
Morocc	24	57	18	1
Kenya	75	16	2	7
World Avg	44	37	13	7



Knowledge Specialization Profiles of African Countries



	Listed Articles by disciplines			
	Medical	Natural	Enginee	Social
Tanzania	70	15	6	8
Uganda	78	11	1	10
Nigeria	54	27	9	9
Ghana	60	18	8	14
Senegal	70	19	5	6
Togo	81	15	2	6
World Avg	44	37	13	7

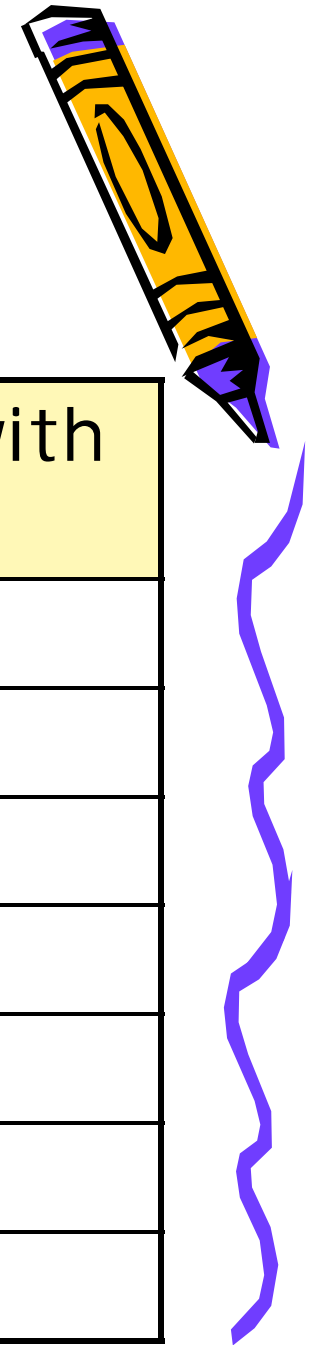
INNOVATIONS – Scientific Publications and Patents



Region	Scientific Publications	Patents filed by Residents
Sub-Saharan	3,499	101
Middle East and N. Afr.	3,123	926
East Asia & the Pacific	14,817	65,506
Europe & Central Asia	34,905	32,728
Latin America	10,093	40,003
South Asia	8,896	2,143



Students Enrolment and Staff Qualifications in some selected African Universities

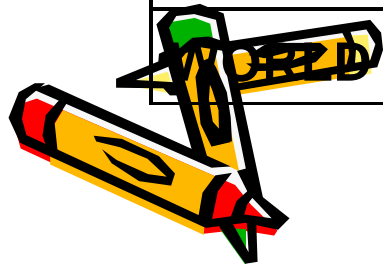
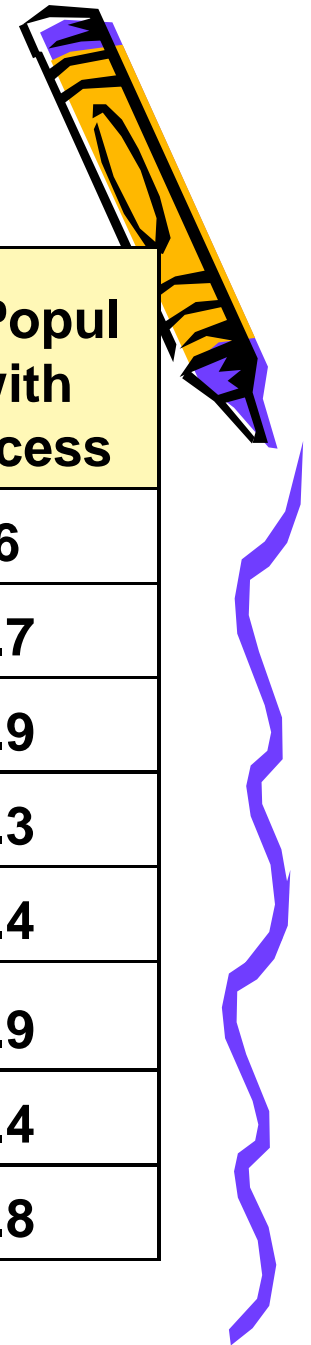


University	Undergra	Post Grad Enrol	Acad with PhD
Univ. I badan	11,695	6196	63%
OAU, I fe	25,650	3,108	41%
Univ. of Gh	26,844	1987	41%Un
Uni.Ed, Win	14,944	434	19%
Makere, Ug	32,140	2366	34%
KwazuluNat	31,805	11,397	31%

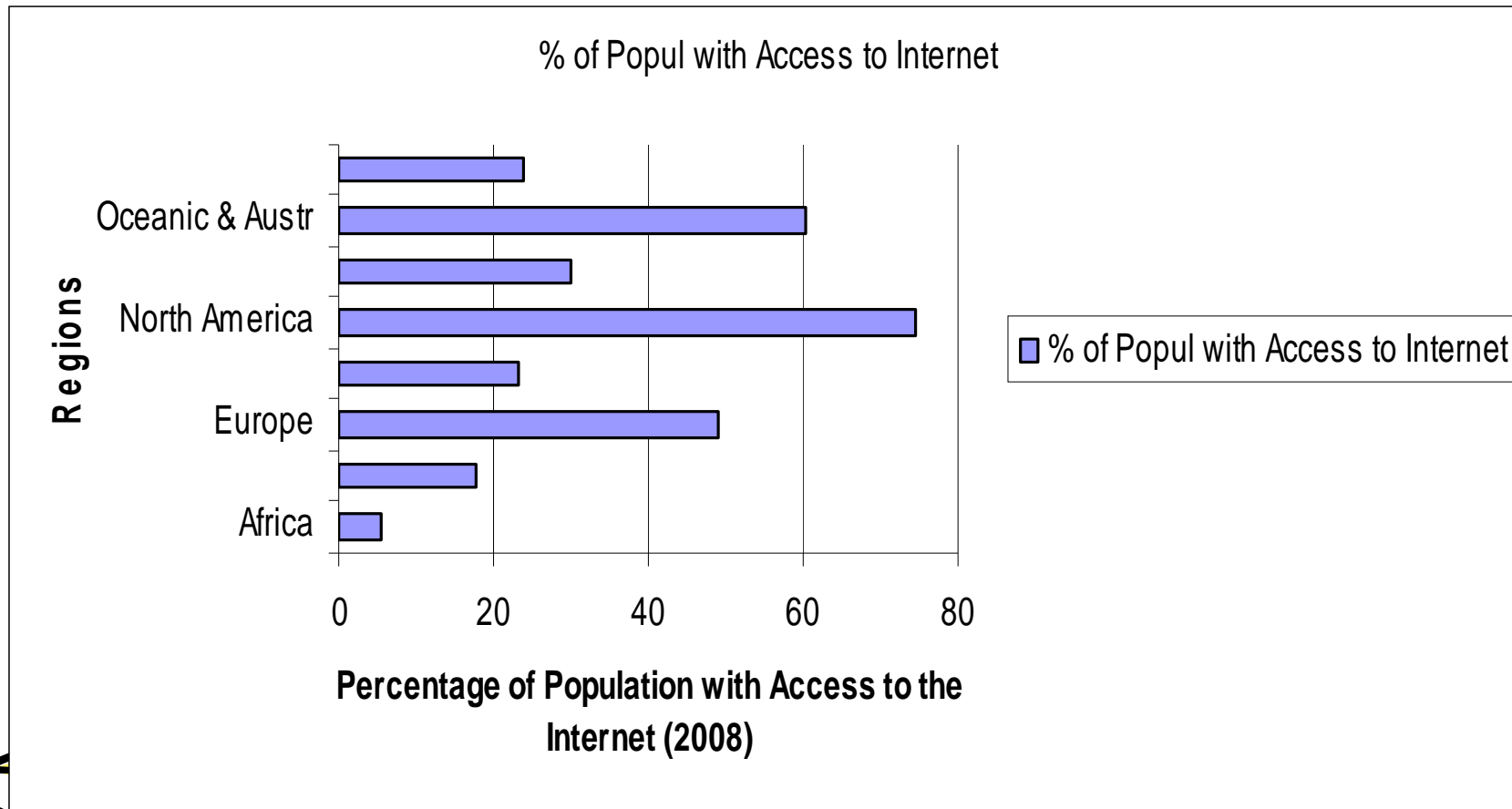
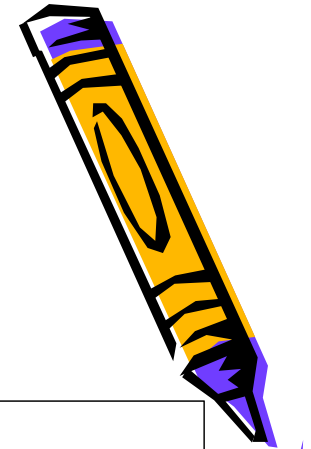


World Internet Users

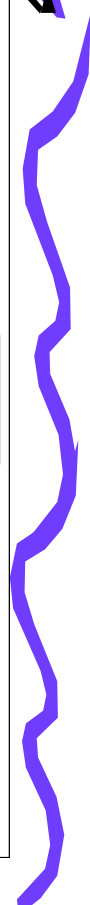
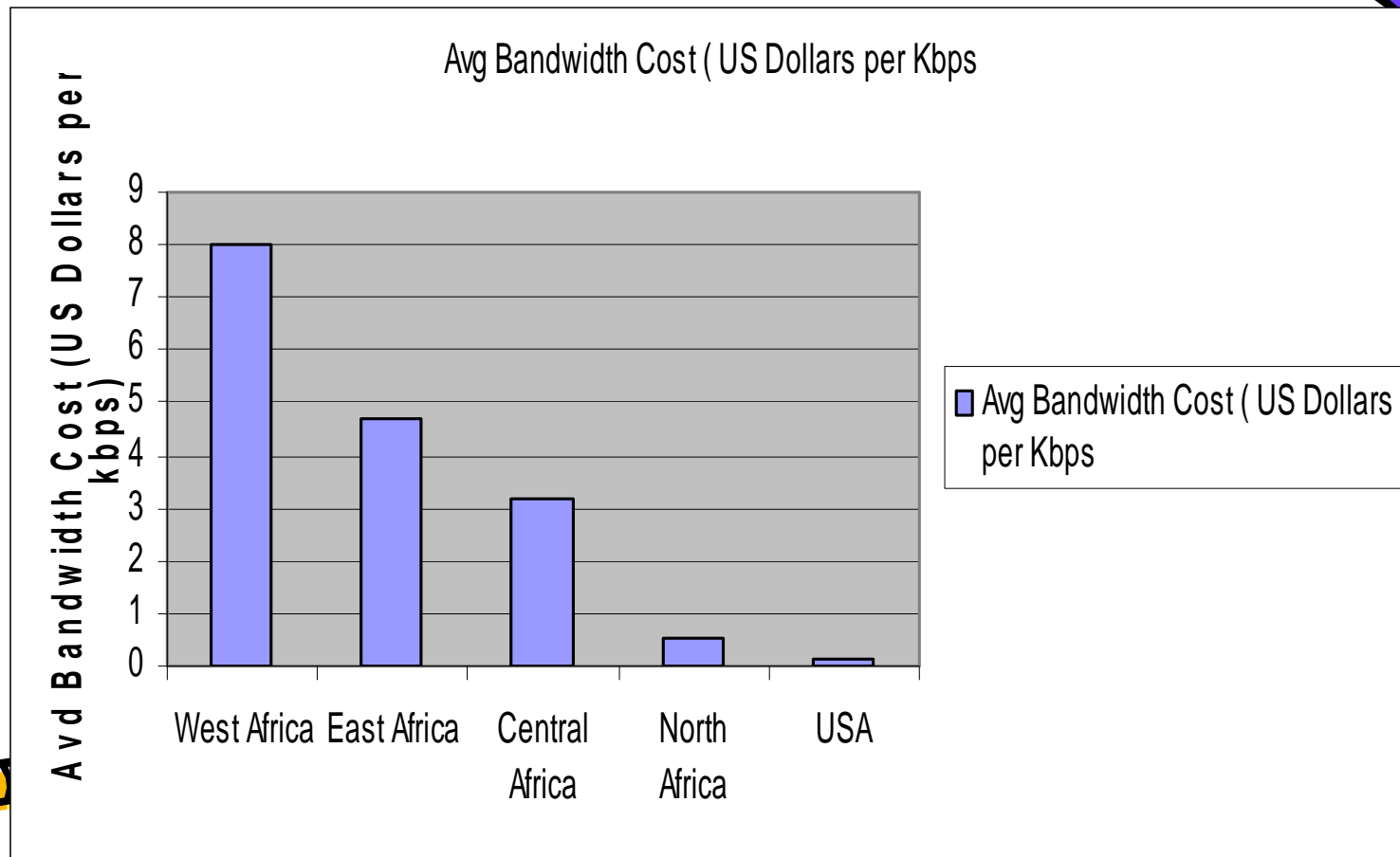
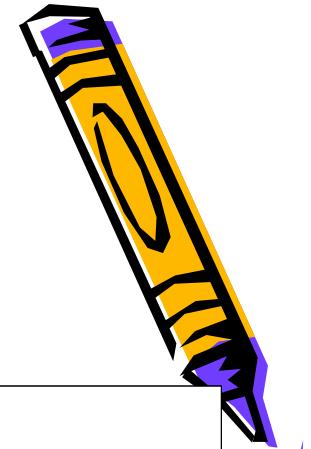
World Regions	Population	2008 Internet Users	% of Popul with Access
Africa	975,330,899	54,171,500	5.6
Asia	3,780,903,540	657,170,816	17.7
Europe	803,903,540	393,373,398	48.9
Middle East	196,767,614	45,861,346	23.3
North America	337,572,949	251,290,489	74.4
Latin Amer Carib.	581,249,892	251,290,490	29.9
Oceanic & Austr	34,384,383	20,783,419	60.4
WORLD TOTAL	6,710,029,070	1,596,270,108	23.8



2008 Access to the Internet



What you pay for your Internet



Roles of Higher Education



Builds up and
Empowers

Preserves
World and
Society



Higher Education

Is a template for
development

Knowledge that
enlightens



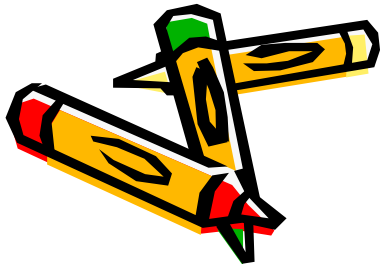
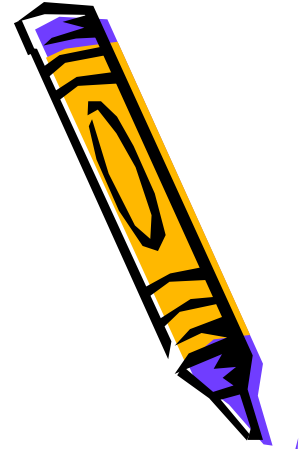
Lack of Appropriate Knowledge:

Conflicts, Wars, Distrust, Confusion, under-
development,

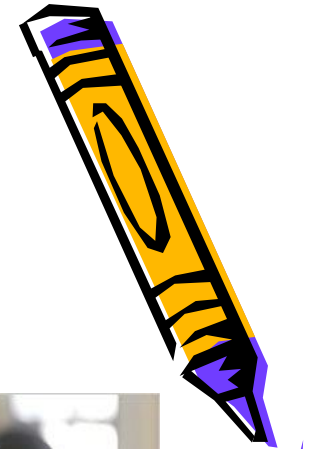


Higher Education

- Critical element of development
- Can be used by Least Developed Countries to bridge their income and social gap with developed countries
- Critical to national competitiveness

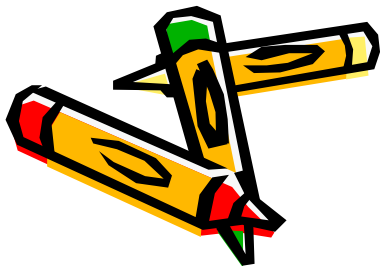


New York Times Story on African HE



Message:

There are challenges facing higher education in Africa



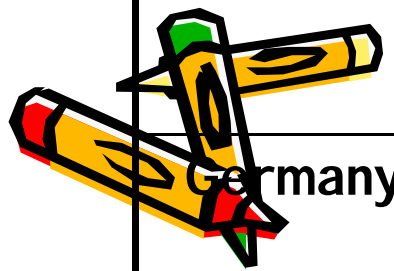
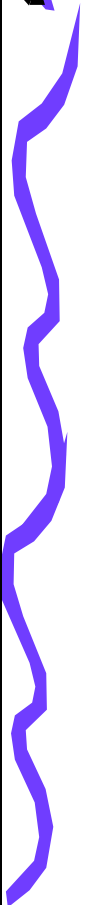
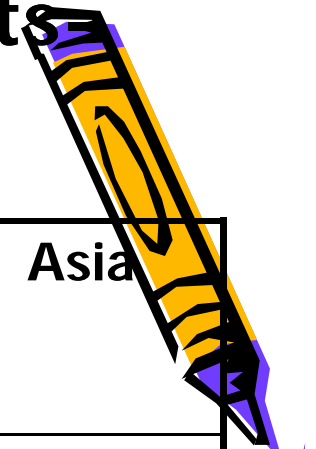
1. Access and Equity

- Low percentage of those who are qualified gained admission;
- Access for the poor and under-privileged population still low
- Africa has the lowest higher education participation rate;
- Less females in science and technology



Europe - Origin of Foreign Students 2006

Country	Foreign Student (Total)	Africa	North America	South America	Asia
Belgium	38,150	10,973	485	646	2,609
Bulgaria	8,130	146	20	10	1,555
Finland	6,288	716	294	69	1,666
France	147,402	75,465	5,242	4,253	19,828
Germany	199,132	10,394	5,387	4,265	67,658



Prof. Olusola Oyewole, Oct 18
2007

II. Funding and Finance

- HEIs still under severe financial crisis
- Many countries of Africa contribute less than 1% of their GDP to education;
- Military wares still take precedence over education and health;
- Govt. contribution still goes largely to meet social needs (e.g. students bursaries)



III. Leadership and Governance

- Inefficiency in leadership and management;
- Corruption in the high tower
- Administrative bureaucracy



IV. Low Research Capacity and Outputs

While research is an important vehicle of transformation of societies and improving the lives of mankind;

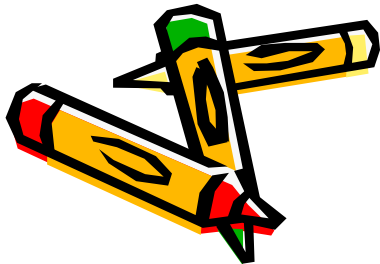
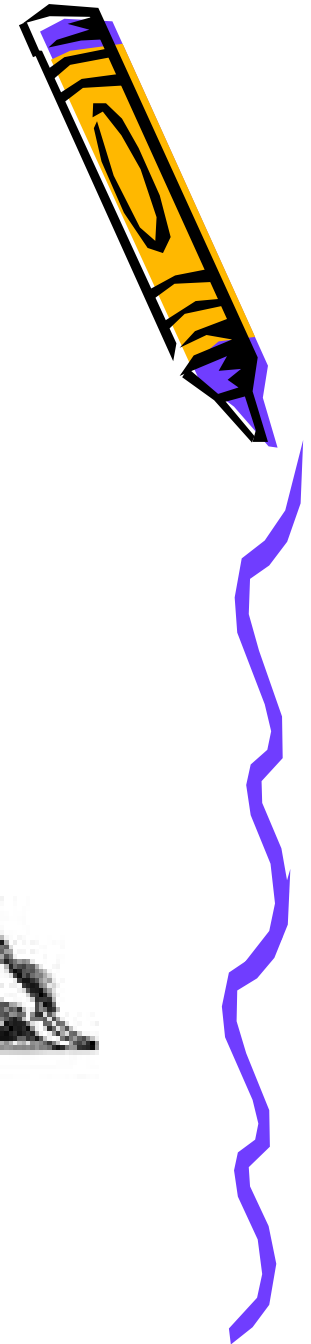
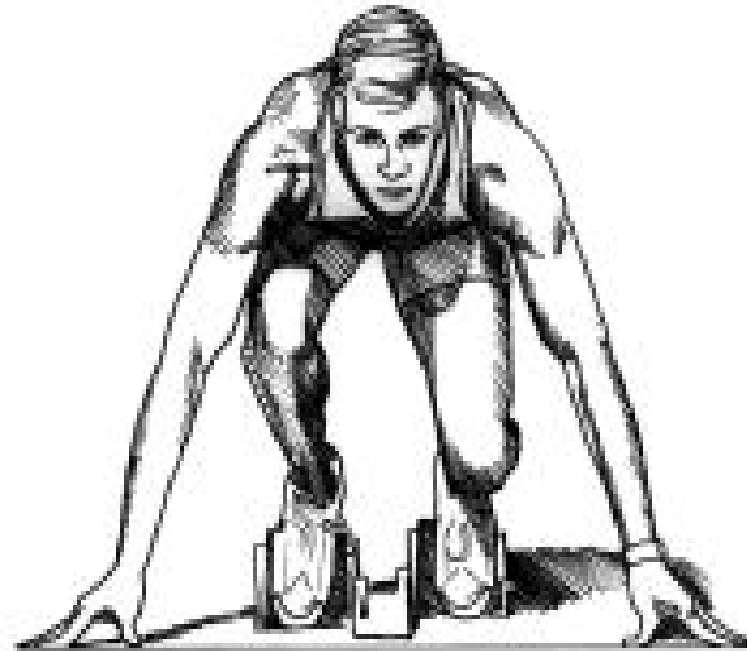
Research is not accorded desirable high priority in African HEIs



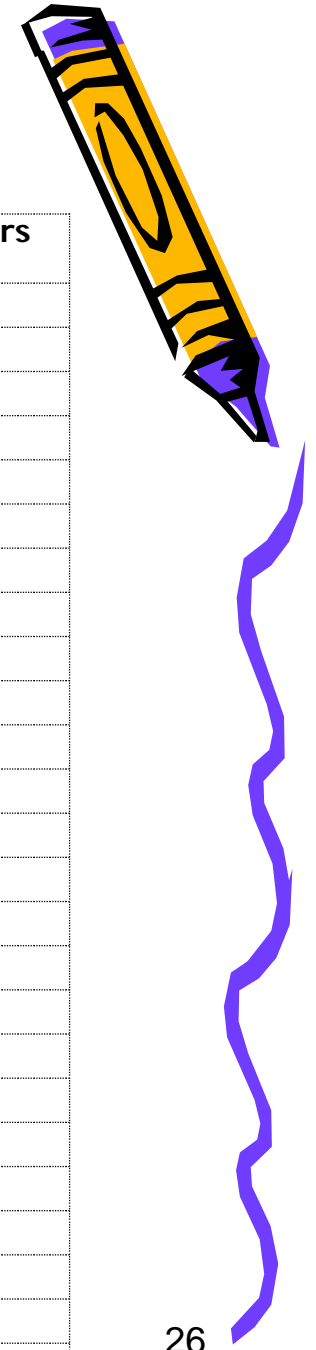
Research Situation in Many African Countries

Research and Knowledge
Leprosy

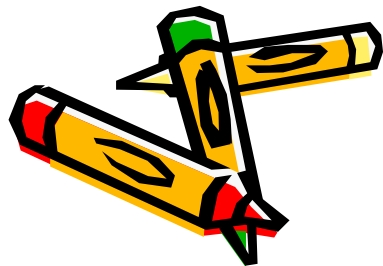
- Poor Funding
- Lack of Research Policy
- Lack of Institutional Governance for Knowledge Mgt.
- Skill deficiencies for Knowledge Mgt, etc



World's top 25 countries, ranked by their share of world's papers in science, medicine and engineering (2006- 2007)

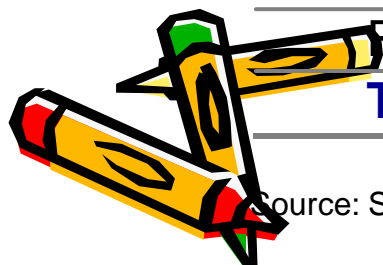


Country/Territory	Share of papers %
USA	28.32%
China	6.60%
Japan	6.23%
Germany	6.15%
United Kingdom	5.80%
France	4.45%
Italy	3.38%
Canada	3.38%
Spain	2.59%
South Korea	2.36%
India	2.23%
Australia	2.11%
Russia	1.98%
Netherlands	1.86%
Brazil	1.50%
Taiwan, China	1.44%
Sweden	1.39%
Switzerland	1.39%
Turkey	1.24%
Poland	1.22%
Belgium	1.05%
Israel	0.84%
Denmark	0.74%
Austria	0.72%
Finland	0.70%



African countries contributing $\geq 0.02\%$ of world share of ISI-listed S&E papers

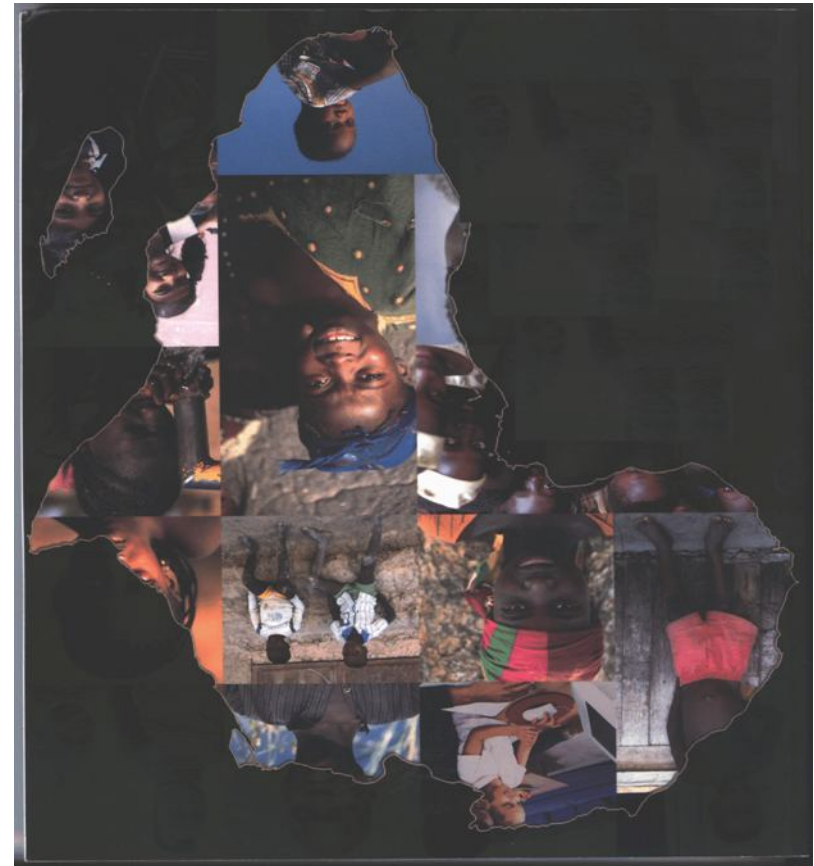
AFRICA	Share of World
1 South Africa	0.37%
2 Egypt	0.26%
3 Tunisia	0.11%
4 Morocco	0.09%
5 Nigeria	0.08%
6 Algeria	0.08%
7 Kenya	0.05%
8 Cameroon	0.03%
9 Tanzania	0.03%
10 Ethiopia	0.03%
11 Uganda	0.02%
12 Ghana	0.02%
13 Senegal	0.02%
14 Zimbabwe	0.02%
Rest of Africa (39 c.)	0.16%
Total Africa	1.37%



Source: SCI, January 2007 (2005 – 2006 Avg) Prof. Olusola Oyewole. Oct 18 2007

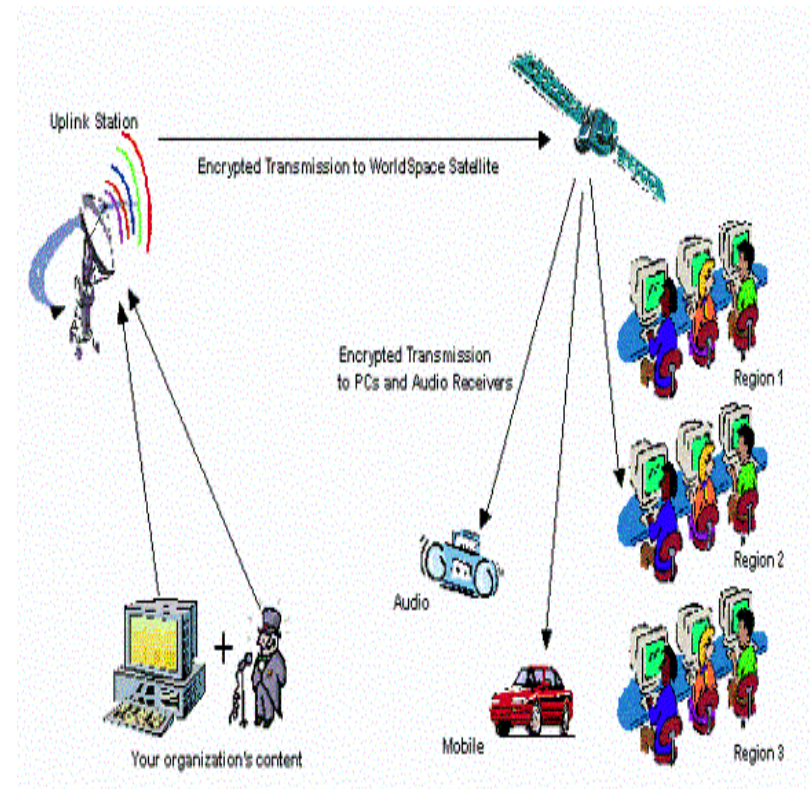
V. Brain Drain

- Btw 1960 to 1989 - 127,000 highly qualified African professionals left the continent;
- Africa loses avd of 20,000 trained professionals every year;
- There are more African scientists and engineers in the USA than in Africa
- Inadequate and poor research facilities; poor governance; insecurity of lives; poor remuneration are part of the factors responsible for the 'brain-drain'



VI. Information and Communication Technology (ICT)

- **Inadequate infrastructures and support systems and pre-requisites for ICT;**
- **High bad-width cost;**
- **Erratic energy**



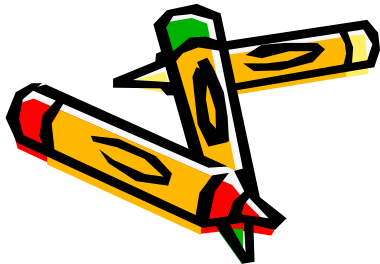
VII Massification

- Ordinarily should not be a challenge, but for the inadequate infrastructures; low ICT facilities, etc
- Massification refers to the massive increases in student enrolments and the shift from elite to mass higher education.
- Globally, massification has numerous consequences for higher education systems,



VII Massification - Consequencies

- causing the quality of education to decline in many countries as resources are stretched increasingly thin;
- Low teacher – student interaction;
- Room for dubious activities



VIII. HIV-AIDS

- AIDS killed 2.3 million Africans in 2001 and 28.1 million more of the continent's population is infected with HIV.
- AIDS in Africa is reversing development and socio-economic gains. Life expectancy is dropping by decades, growth of already fragile economies decreases yearly,
- The HIV epidemic is depriving some children of the benefits of education:
- AIDS is decreasing the number of children who are obtaining a basic education:



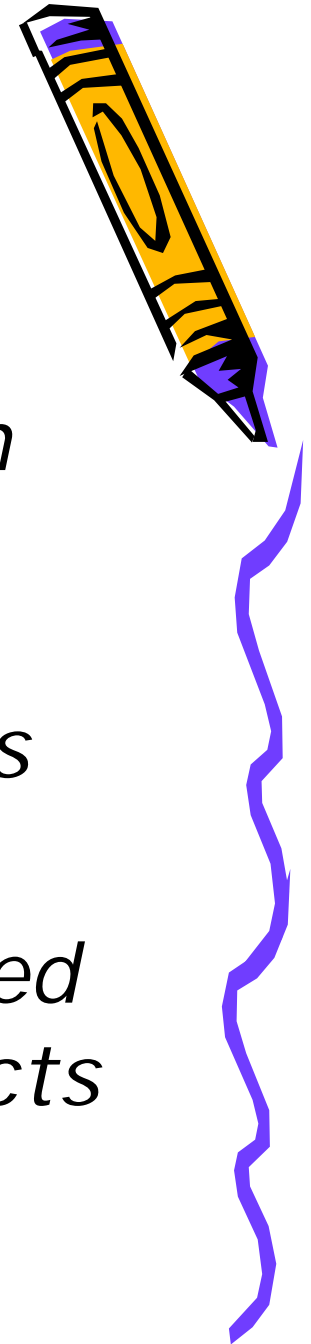
HIV-AIDS

- *Absenteeism and decreased demand for education by children who have become orphans, and those caring for the sick and dying parents, is another by-product of the HIV epidemic.*
- *Africa is specifically experiencing increased mortality rates among teachers and administrators at all levels of education.*
- *AIDS is increasing education sector costs: With the effects of loss of productivity and human capital, as well as the effects of increased dropout rates,*



HIV-AIDS

- *AIDS is creating a special crisis in tertiary level education: Many tertiary institutions report or predict severe HIV infection rates among students and staff.*
- *A loss of large numbers of educated individuals to AIDS severely impacts the economic and intellectual capacity of a country.*



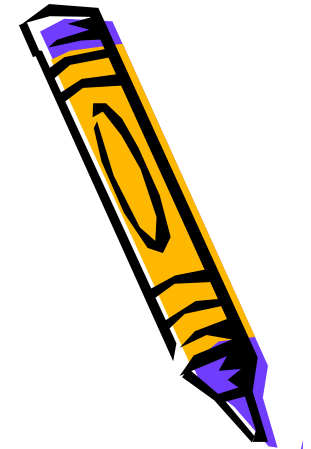
ix. *Globalization*

- Globalization which is defined as the : ***“flow of technology, economy, knowledge, people, values and ideas... across borders”*** is an emerging challenge to higher education in Africa.



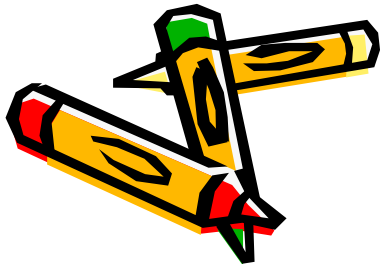
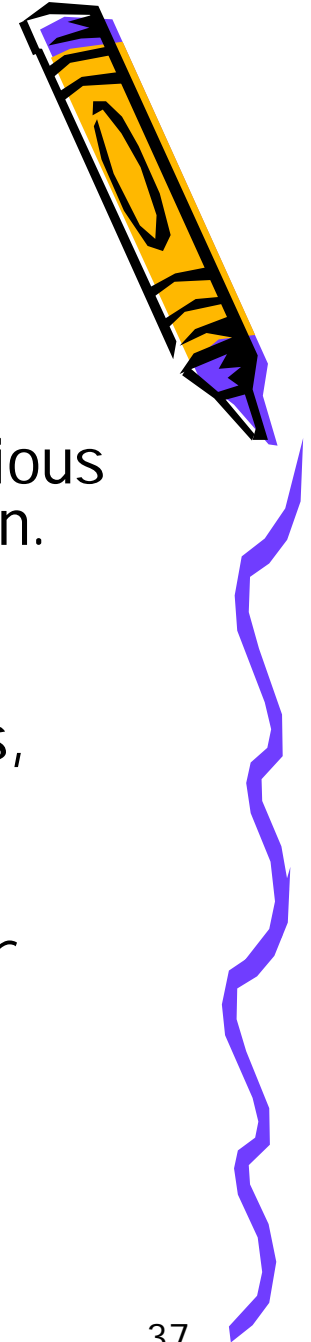
Globalization -Effects and Manifestations

- *the emergence of the 'borderless' higher education market'.*
- new higher education providers and new players / providers
- Changes in the ways by which research is carried out , disseminated and utilized.
- New higher educational services specialised services provided outside the confines of the physical institutions



Challenges of Globalization for Africa:

- The need to provide modalities for the regulation of new providers and the various forms of trans-national higher education.
- the international transferability and recognition of qualifications and credits, including mobility of skilled labour;
- The need to improve the quality of their higher education ; including the input, process and outputs.



x. Lack of recognition of certificates and diplomas (Need for Harmonization)

- Africa has different and multiple systems of education across Africa.
- There is lack of recognition of the different forms of certification in the different nations and regions of Africa
- *Harmonization therefore is a process of mutual recognition of the contents and quality of education programmes, degrees and certificates in different nations and regions, with appreciation of their equivalences or comparability within and outside ones own nation or region.*





X. Lack of recognition of certificates and diplomas (Need for Harmonization)

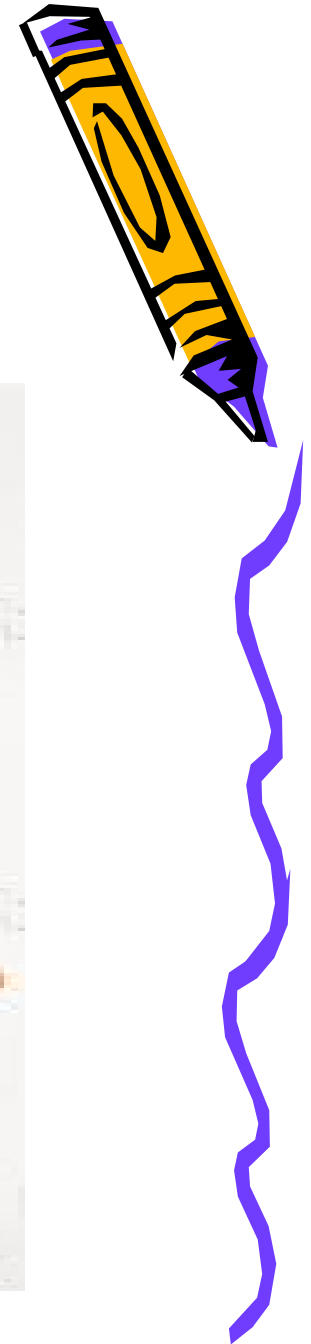
Needed in order to promote greater mobility and free movement of knowledge, expertise, including students, researchers, teachers and academic labour force , without jeopardizing individual country or regional diversity and cultural traditions.



XI. Quality, Quality assurance and Relevance:

- “planned and systematic review process of an institution or programme to determine that acceptable standards of education, scholarship, teaching , administration and infrastructure are being maintained and enhanced,
- “ the process of evaluating the fitness for purpose of an institution or program using appropriate measurements, which examines the effectiveness and efficiency of the inputs, process and output elements of the institutions set purpose and mandates against some standards.
- “process of ensuring that minimum standards (or requirements) are in place, adhered to and improved on a regular basis”.

What should we do ?



Action

- Visionary Leadership
- Attitudinal Change
- Plan Strategically
- Be innovative
- Networking and Collaboration
- Commitment
- Play your own roles



Recent Developments

African Union Revitalization efforts

African Union Revitalization efforts

Second Decade of Education in Africa

- Gender and culture
- Education management information systems
- Teacher development, education and training
- Tertiary education
- Technical and vocational education and training
- Curriculum, and teaching and learning materials
- Quality management.

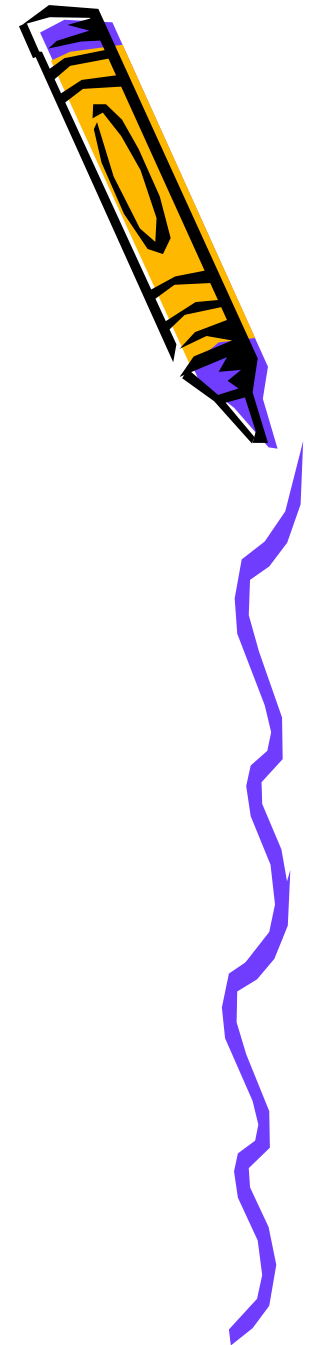
Other Developments - Africa

- Arusha Convention – Revised and going to COMNDAF IV.
- Pan African University Project – Not a new University, but a program of recognition of centres of excellence in African University system.
- Rating Mechanisms – Developed and about to be test run.
- Nyerere Scholarship Scheme.
- African Mobility Scheme –
- Regional Programs – IUCEA Programs (harmonization, Quality Assurance); SARUA

Prospects for North-South Collaboration

A decorative graphic in the top right corner featuring a bar chart with several red bars of varying heights. Above the chart, a large firework bursts in shades of red, orange, and yellow against a black background.

- 1. Collaboration for capacity building in research (E.g. Joint research proposals).
- 2. Collaboration in library resources (e.g. Internet access to virtual educational resources).
- 3. Collaboration to promote internationalization of institutions and cultural exchanges
- 3. Collaboration for sharing of best-practices, in leadership and management of institutions



Thank you.

