

Enhancing Institutional Structures for Innovation.

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- In the last days there will be a tremendous increase and expansion in knowledge.
- Is Africa prepared for this inevitable change or shall we sit, watch and become extinct?



- ❖ Current status of institutional structures and challenges facing them; Kenya situation
- ❖ Approaches to enhancing capacity in S,T & I



i) National based institutions.

- Universities (Public and Private)
- Research institutions (Parastatals ,Private Research organisations, NGO's to a limited extent)
- National Councils of Science and Technology (NCST)
- National Academy of Sciences,
- Private sector e.g. IPs- but there is no significant R&D in Africa.)

ii) Regional based Institutions.

- Collaborative in nature e.g. IUCEA and AAS.



Structure of Universities

- Academic Division (development and implementation of academic programmes.
- Need for Programme repackaging, rationalization and harmonization
- With ICT component of up to 28% in Maseno University.
- Finance, Administration and Planning. (Strategic Planning and Performance contracts; - Is it achievable with Academic staff?)
- Research, Extension, Continuing Education and Outreach (Technology Management and Linkages).



Key Challenges

- Financial (Not an absolute constraint, but is essential ex. Oil-rich countries).
- Trained Human Resource in key scientific and technological disciplines and in Entrepreneurship, Marketing and IPR,
- Political will essential to acceleration of ST & I; however lacking in most African countries.



Approaches to Enhancing Capacity in ST & I

- Visionary leadership in institutions (Recruitment based on merit; without influence! Without political interference! How autonomous can a university be?)
- Sustainable lobby groups at national and International levels (who to fund them?)
- Technology and Management offices in Universities, Legal knowledge and IPR knowledge.
- Prioritizing research on basis of national / regional goals/objectives
- Resource Mobilization (External and Internal but with emphasis on internal. How do we change our people's attitudes to embrace philanthropy and research support?)



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- Training and retention of staff in key disciplines essential to ST & I (can we retain staff without proper remuneration because for most staff at the end of the day what matters is “Does what I do provide food on the table”)



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- Involvement of local communities as stakeholders in provision of IK (MOAs with them).
- Parallel IP collaboration (who to collaborate with in absence of R & D components in most countries?)
Therefore need for ST parks, Innovation and Business Incubation Centres at Universities and Development of Entrepreneurial skills
- Education and S & T government ministries; commitment to funds allocation and holding researchers accountable (No more single line item votes to Universities)
- Continuing Education and Seminars on Role and Importance of ST & I to national development i.e. change of attitudes in ALL



**THANK YOU
AND
MAY GOD BLESS.**

