Physics and Society
Science in Africa-Present and Future

The Role of ICTP

A Terse Overview

Edward Bouchet Abdus Salam Institute (EBASI) of The Abdus Salam International Centre for Theoretical Physics (ICTP)

Milton Dean Slaughter, Florida International University, Miami, FL, USA

6 May 2009. ICTP, Trieste, Italy

ICTP MISSION

- Foster the growth of advanced studies and research in physical and mathematical sciences, especially in support of excellence in developing countries;
- Develop high-level scientific programmes keeping in mind the needs of developing countries, and provide an international forum of scientific contact for scientists from all countries;
- Conduct research at the highest international standards and maintain a conducive environment of scientific inquiry for the entire ICTP community.

AFRICA PROBLEM

Present ICTP Science Advancement in Africa Role Hampered by Insufficient Infrastructure Associated

With:

- Economy and Government Instability
- Healthcare and Epidemiology
- Education
- Science and Technology Development
- Information Dissemination

Above Problems Inextricably Linked

AFRICA PROBLEM
Economy and Government Instability

- Very Regional and Country Specific
  - Difficult to solve
  - Historical precedents set a high bar for solvability
- Global Economy Dependence

AFRICA PROBLEM
Healthcare and Epidemiology

- Very Regional and Country Specific
  - Difficult to solve
  - Historical precedents set a high bar for solvability
- Global Economy Dependence
- Heavy Dependence on External Funding Sources

AFRICA PROBLEM
Education

- Very Regional and Country Specific Implementation
- Heavy Dependence on External Funding Sources
- Heavy Dependence on Extant Problems and Availability of Internal Resources
- Global Economy Dependence

AFRICA PROBLEM
Science and Technology Development

- Very Inconsistent Regional and Country Implementation
- Heavy Dependence on External Funding Sources
- Heavy Dependence on Extant Non-Technology Problems and Availability of Internal Resources on Extant Non-Technology Problems
- Extreme Global Economy Dependence

AFRICA PROBLEM
Information Dissemination

- Very Poor Regional and Country Implementation
- Extreme Dependence on Broadband Internet Access
- Heavy Dependence on Developed Country Help
- Heavy Dependence on Extant Non-Technology Problems and Availability of Internal Resources on Extant Non-Technology Problems
- Global Economy Dependence

Physics and Society
Science in Africa-Present and Future

For Future ICTP Science Advancement in Africa Success:

- ICTP funding agencies must maintain reasonable levels of fiscal support even in the face of global recession. Such support will be critical if the many success of ICTP over many decades in developing world nations is to continue and not suffer irreparable degradation;
- ICTP supported activities should evince stronger and more direct correlations among the purely science and the clearly infrastructure aspects of its projects ;
- Infrastructure–oriented science workshop support in a conference (or other) venue should be increased;
- Collaborative infrastructure-oriented scientific ventures with developed nations philanthropic foundations, governmental units, and other appropriate organizations should be increased.

REFERENCES

- *EBASI*
  - http:// EBASI.org
- *Supporting science in developing countries using open technologies,* Enrique Canessa, Marco Zennaro and Carlo Fonda, Eur. J. Phys. 30 (2009) 651–660.
- *The National Academies (USA)*
  - http:// www.nationalacademies.org/
- *Broadband Internet for Africa,* Calestous Juma and Elisabeth Moyer, Science, 320 (2008) 126.