INTERNATIONAL HIGHER EDUCATION – NUMBER 68 SUMMER 2012 Pages 21-23.

Research, Networking, and Capacity Building in Africa

GOOLAM MOHAMEDBHAI

Goolam Mohamedbhai is former Secretary-General, Association of African Universities. E-mail is: g_t_mobhai@yahoo.co.uk.

To meet the challenges of poverty reduction and earning sustainable human development, Africa does not only need to produce an even greater output of highly qualified professionals. The further necessary duty requires to produce and adapt knowledge relevant to its development, especially in science and technology.

Global research indicators, however, clearly show that Africa fares poorly, compared to other regions. Sub-Saharan Africa's contribution to the world's expenditure on research and development equals no more than 0.6 percent, a significant proportion of which is contributed by just one country—South Africa. Likewise, sub-Saharan Africa has the lowest number of researchers per 1 million of the population: 79 compared to, for example, 442 for Latin America and the Caribbean. It also produced just 1.1 percent of the world's publications and 0.1 percent of global patents. Equally disturbing is that since 2002, while the research indicators in almost all world regions have improved, those of sub-Saharan Africa have remained mostly unchanged.

NETWORKING STRATEGY

Promoting research must, thus, form an essential strategy for African higher education institutions. Yet, these institutions face many constraints and challenges—including a heavy emphasis on teaching, regarding massification, insufficient postgraduate programs, a dearth of research-strong faculty, lack of laboratories and equipment, and scarcity of funds.

In the past, much of the research in individual African universities was carried out in collaboration with universities in the respective former colonizing countries, which not only provided the funding but also managed the research. Thus, research areas were not always in priority areas for Africa. The results hardly ever reached the African stakeholders, and the information was almost never shared with other African universities. Now, however, most donors and funding agencies increasingly favor research initiatives in Africa that involve regional collaboration and networking. This policy has produced the added advantage of sharing the scarce human and physical resources, among the participating institutions, and promoting capacity building.

NETWORKING INITIATIVES

The African Economics and Research Consortium, established in 1988, is a network of 27 universities and 15 national, economic-policy research institutes/centers. It promotes collaborative research and graduate training in economics, to overcome the limited capacity in individual member universities. It has been running a master's program almost since its inception; and from 2002, it launched a collaborative PhD program in four African universities, supporting 21 candidates each year.

The Consortium for Advanced Research Training in Africa, launched in 2010 with funding from the Carnegie Corporation, comprises 9 universities and 4 research institutes in Africa and selected partners in the North. The objective promotes doctoral training, especially in areas related to health and development, and strengthens the research infrastructure and capacity of the African institutions, through fellowships and training seminars.

The Regional Universities Forum for Capacity Building in Agriculture, created in 2004 and based in Uganda, is a consortium of 29 universities in eastern, central, and southern Africa. The main goal undertakes fostering research and innovation in African universities—in response to the demand of farmers through graduate training and research. It runs several collaborative master's degree and PhD programs.

The German Academic Exchange Service has assisted in creating five Centers of Excellence across Africa, in fields that are of direct societal relevance to Africa: health in Ghana, microfinance in Congo, law in Tanzania, criminal justice in South Africa, and logistics in Namibia. All these centers, anchored in the respective countries' flagship universities, aim at promoting graduate studies and research and training the future leaders of Africa. They network among themselves and with relevant institutions in Germany.

The Regional Initiative in Science and Education, funded by the Carnegie Corporation, aims to promote capacity building in sub-Saharan African universities. It runs master's degree and PhD programs for scientists and engineers through university-based research and training networks in selected disciplines. The primary emphasis constitutes preparing new faculty and upgrading the qualifications of existing faculty in African universities.

The New Partnership for Africa's Development has created a Water Centers of Excellence Consortium, which networks institutions and researchers in the field of water sciences and technology, in different regions, for graduate programs and research. The Center in Southern Africa is coordinated by Stellenbosch University, South Africa, and the one in western African by University Cheikh Anta Diop, Senegal.

The Pan African University, launched by the African Union in December 2011, is a major new initiative of continental networking for promoting graduate training and research, in identified priority areas for Africa. This university will comprise five institutes, one in each of the five African regions and each specializing in a different field. Each institute will then network with other institutions in its respective field. The University of Ibadan, Nigeria, will host the Institute in Earth and Life Sciences; the University of Yaoundé II, Cameroon, the one in Governance, Humanities and Social Sciences; and the Jomo Kenyatta University of Agriculture and Technology, Kenya, in Basic Sciences, Technology and Innovation. Algeria will host an Institute in Water and Energy Sciences, and South Africa in Space Science.

CHALLENGES

While regional and continental networking undoubtedly offers many advantages in promoting research—i.e., in helping African institutions to collaborate among themselves, it also gives rise to several challenges. First, networks must take into account the "political" will, at both institutional and country levels. Many successful networks have faltered, when changes in leadership in participating institutions or countries have occurred, and such changes are common in Africa.

Second, networks invariably incur additional communication, staff, and travel costs. Greater use must be made of information and communications technology to reduce these costs. Third, the success of the network is dependent—not only on effective management at the central coordinating unit but equally at the level of the various nodes, which is not always easy to achieve. The staff undertaking the coordination at every node must be carefully selected. Fourth, almost all African networks are heavily financed by donors. It is vital to consider the long-term sustainability of a network, when donor support may run dry. A priority for every network must, therefore, be to plan, right from the start, for raising its own funds from national, regional, and international sources.

Finally, research in Africa can only flourish if there are sufficient African researchers. Steps must be taken by African countries and universities to create a dynamic environment, to attract bright, young Africans to take up research as a career and become the next generation of researchers. Africa can no longer afford to lose them for promoting research in other continents.