has always had to deal with, as will public universities now, if they are to become more efficient and cost-effective. The way most Latin American higher education institutions function—the absence of professional administrators, decisions taken by committees, and the strong presence and influence of labor unions, political parties, and movements—will have to be replaced or combined with a completely different managerial structure and style.

Yet the most difficult challenge for the next century has to do with content. Higher education institutions in Latin America, in the French tradition, were established to provide education and certification in the established professions of law, medicine, and engineering. The new institutions grew by creating mediocre versions of the traditional professional schools. The consequence was increasing frustration, as people found themselves with worthless degrees, while the traditional professions felt threatened by the growing and unqualified competition of the new institutions. In the 1960s and 1970s it was thought that the introduction of American-style graduate education and academic research would be the solution to this situation. As higher education continued to expand, the graduate and research programs of the 1960s and 1970s remained, at best, islands of quality and competence, without extending much beyond their establishments.

Now it is clear that institutional and content diversification is the only hope for the future. There will always be a place for professional education in the traditional mode, and for graduate education and research, but the main question is how to provide a meaningful content and work opportunity for the large majority of new entrants in such an unequal system. Latin American countries have little or no experience in providing technical, vocational, general, and continuous education to students, but it is likely that all these modes of postsecondary education will have to be developed as alternatives to traditional postsecondary progams.

A completely new environment for higher education may emerge in the region from these trends—with less state-sector and more private-sector education; wider use of evaluation and external assessment; introduction of new organizational structures and a more managerial culture; expansion of technical, vocational, and general education; and extending overall access. Some countries and institutions will respond better than others to these changes. Those that succeed will likely be better able to use another feature of globalization in the new century—that is, the easy access to information, communication, technical assistance, and exchange on a truly global scale.

## Note

1. Carmen Garcia Guadilla, Situación y principales dinámicas de transformación de la educación superior en América Latina (Caracas, Venezuela: CRESALC/UNESCO, 1996).

## African Realities and Global Challenges: The 21st Century

## **Jairam Reddy**

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Higher education systems have undergone profound changes during the latter part of this century. Elite systems of higher education have been superceded by mass and universal systems with a more diverse set of students. Central features of these changes are the demand for equity of access, declining state support, notions of accountability and quality, and responsiveness to socioeconomic imperatives. While African higher education has not been immune from these developments, political and economic realities have had grave consequences for its capacity to respond to change and to the needs of its populations.

The tradition of higher education in Africa is indeed a proud one—as exemplified by the universities at Al Azhar in Cairo, Kairouine in Fez, Debre Damo Axum in Ethiopia, and Sankore of Timbuktu in Mali. Fourah Bay College in Sierra Leone was established in Freetown in 1827. It was followed over a hundred years later by the University College of Gold Coast, Ghana in 1947, the University of Ibadan in 1948, University College of Addis Ababa in 1950, and others like Makerere in Uganda in 1946 and later universities throughout the continent. The number of universities increased from 20 in 1960 to 160 by 1996, while the number of students increased from 120,000 to over 2,000,000 during the same period.

The undermining of democratic structures, their replacement by corrupt dictatorships, mismanagement of the economy, and perennial droughts have left a devastating trail of poverty and underdevelopment in much of the continent. Physical facilities in need of maintenance and refurbishment, the lack of technological infrastructure, and poor library resources are widespread features of current African higher education systems. Most devastating of all is the massive brain drain of skilled academic staff. The World Bank estimates that some 23,000 qualified academic staff are emigrating from Africa each year in search of better working conditions.

In South Africa, where material conditions for higher education have been considerably better, the ideology and practice of apartheid resulted in severe distortions of the higher education system: the participation rates of the 18-to-21-year age cohort was over 70 percent for white students but less than 15 percent for black students.

How are African higher education systems to respond to the demands of their impoverished populations and the advent of globalization as we enter the new millennium? Can they possibly be the engines of development? Establishing knowledge and information technology as dominant forces in contemporary society will require a better-educated workforce with flexibility and innovation in the workplace. The following issues are central to the future of African higher education.

Democratic institutions, the establishment of a human rights culture, and a viable economy have to underpin any rejuvenation of higher education systems in Africa. The ongoing intercountry conflicts in Africa with resulting refugee populations are not encouraging signs. These issues are a challenge to the peoples and politicians of the continent as well as to the international community—especially the peace-keeping and development agencies of the United Nations.

In the area of governance, councils and boards of trustees should oversee higher education institutions without government interference; institutional autonomy and academic freedom have to be respected. This does not preclude universities from being accountable to the government and to the community for the manner in which they expend resources and for the range and quality of their program offerings, teaching, and research.

No country can afford a mass, high-quality research university system, let alone the developing countries in much of Africa. The colonial model inherited from the French and British systems has to be fundamentally reshaped into a diverse set of institutions. These will range from certificate, diploma, and associate-degree-awarding institutions that cater for a range of middle-level skills in technical and vocational careers, providing for employability as well as job creation with links to business and industry.

A limited number of well-funded public universities with a sound infrastructure, well-qualified academic staff, and focused research activity should form the basis of human resource development. Responsiveness to the socioeconomic needs of the country should influence the curricula and range of disciplines offered. Improved teaching in science and mathematics and a higher output of graduates in science, engineering, and technology should be a high priority.

The tradition of higher education in Africa is indeed a proud one.

A supportive and minimally regulatory environment should be developed to encourage and facilitate the growth of private universities and colleges to complement the publicly funded universities.

African universities have been overly dependent on the state for their funding. The current levels of reduced fund-

ing are unlikely to change given other basic priority needs such as primary education, job creation, water, sanitation, and so on. The levying of tuition fees, admission of private students, continuing education, contract services to business and industry, the hiring out of university facilities, and donor assistance funding are some of the options available to diversify funding. The high unit costs of education and training due to low staff-student ratios, the provision of free housing, inadequate use of space, and other factors must be brought under control. Funds should be directed predominantly at the provision of core academic activities.

The colonial model inherited from the French and British systems has to be fundamentally reshaped into a diverse set of institutions.

Quality assurance and accountability should be integral to the development of a revitalized African higher education system. At a minimum this should include an institutional audit, program accreditation, and quality improvement.

There is much to be said for regional cooperation in the sharing of expertise, expensive equipment, exchange of staff and students, collaboration in research, and in other ways. Such consortia could be either intracountry or across more than one country.

## The South African Situation

The peaceful democratic transition in South Africa has set the stage for a fundamental transformation of all institutions in the country. The White Paper and Higher Education Act of 1997 will fundamentally transform the higher education system from the fragmented, racially polarized one into a single, coordinated system that will be responsive to the socioeconomic imperatives of the country through cooperative governance and a range of partnerships. A representative Higher Education Council will advise the minister of education on all matters affecting higher education. The further education sector will have to be expanded relative to the higher education sector. Equity of access and quality assurance are important aspects of the transformation strategy. Declining enrollments in the previously historically disadvantaged institutions together with their financial and management problems will necessitate a reassessment of the configuration of institutions established during the apartheid era. The development of regional consortia for a range of cooperative projects, mergers, and the reconfiguration or even closure of institutions are all on the agenda.