

AFRICAN REGIONAL WORKSHOP ON SUSTAINABILITY SCIENCE

Sheraton Hotel and Towers Abuja, Nigeria, November 13-15, 2001

CHAIRMAN'S STATEMENT

The African Regional Workshop held in Abuja, Nigeria on November 13-15, 2001 was the first in the series of regional workshops organised to enable account to be taken of regional priorities in developing the structure, method and content of sustainability science. Consequently, the Workshop set out to consider the core scientific questions, the methodological challenges, the research strategies and the institutional infrastructure for promoting the development of the sustainability science in the region.

The Workshop began with an orientation session which spelt out the present status of development in Africa. It noted the very rapid rate of growth of both population and urbanization on the continent in contrast to its low agricultural productivity. This has made for increasing levels of poverty, resulting also from an inefficient management of material and energy resources, an insensitivity to the rich bio-resources of the continent, a growing water crisis and a crushing health burden especially with from the HIV/AIDS pandemic.

Against this background, the Workshop considered that the core scientific questions identified in Friibergh, whilst relevant for the overall African situation, would need to take account of the need to define criteria and indicators for sustainability in a continent transiting from a subsistence to an industrial economy. This creates a situation in which market incentives are likely to be of less significance in mediating the interactions between nature and society. This is further exacerbated by the pressure on the environment arising from pervasive poverty of the majority of the population. Consequently, there is need to enhance Africa's agricultural productivity as a means of minimizing adverse impact on the environment whilst identifying fragile areas of vulnerable ecosystems where continuous and improved monitoring is likely to be most critical for effective and adaptive management. Monitoring and managing water availability are also regarded as vital issues for sustainability science in Africa given the significant climatic variability over large parts of the continent.

The methodological challenges could not be discussed fully at the Workshop because the commissioned paper for this was not available. Instead, a group of space scientists who had

asked to participate in the Workshop presented relevant aspects of their work which emphasized the very important role of remote sensing and geo-information technology for providing data for predicting trends, enhancing analytical capability, modelling and managing nature-society interactions. The Workshop, however, noted the inability of many African countries to access the benefits of space science for development and the under-utilization of existing space-science resources on the continent. The problem is further compounded by poor funding of agencies concerned with geo-information provisioning, policy instability and general inadequate attention to the important role of science and technology in the development process. This situation was still reflected in the *New Partnership for Development* document, a new initiative by African leaders for the development of the continent in the 21st century.

Discussions on research strategies were some of the liveliest in the Workshop. The lead paper stresses the need for research strategy for sustainability science in Africa to harness and integrate indigenous with modern scientific and technological knowledge. This is particularly important for developing the very rich and diverse bio-resources of the continent. The paper also emphasizes that relevant research strategies must make possible the co-production of knowledge by involving all stakeholders especially those possessing traditional knowledge in the planning, executing and monitoring research activities. Greater interaction must also be developed between researchers, government agencies, private sector enterprises, universities, professional bodies and communities in order to provide effective linkages between research and development. In this connection, the problem of developing the crucial middle-level, technical manpower to facilitate the interaction with indigenous knowledge providers was highlighted. African scientists must also increasingly assist negotiating teams of governments in protecting Africa's intellectual property rights in the World Trade Organization (WTO) and similar bodies in which agreements and conventions are entered into.

On the issue of institutional infrastructure, there was general agreement on the need to strengthen capacity building for much of the research work in sustainability science and promote greater co-ordination among relevant institutions both at national and regional level. The need to introduce sustainability science teaching at lower levels of the educational curriculum was also stressed. Collaborative research on sustainability science with institutions in the more developed countries was seen as a very important strategy for capacity building and regional institutional development.

On the whole, the Workshop provided an opportunity for scientists to confront the challenges of sustainable development in Africa. Unfortunately, for reasons not unconnected with recent incidence of insecurity in Nigeria, many African scientists, who had earlier accepted the invitation, declined to attend the Workshop almost at the last minute. Representatives from only seven African countries eventually participated in the Workshop. There was, therefore, concern with how to get a wider African regional consensus on the various conclusions of the Workshop and to decide on what should be the best way forward for promoting sustainability science on the continent. As a result, a ten-man protem Steering Committee was set up whose terms of reference included planning a more representative Africa regional Workshop to be held either in Nairobi or South Africa some time before the Synthesis Workshop already scheduled for May 2002 and certainly in time to influence Africa's contribution to the World Summit on Sustainable

Development in September 2002 in Johannesburg, South Africa. The Steering Committee was also enjoined to promote the emergence of an African network of research centres and encourage the build up of a dossier of instructive regional case studies in sustainability science. The Workshop concluded with expressing appreciation for the financial assistance and other support from various agencies of the Nigerian government, from various national academies, from the Third World Academy of Sciences, from multilateral organisations such as the UNDP, UNESCO and WMO, but particularly from the David and Lucile Packard Foundation in the United States which funded much of the costs for air travel and conference facilities.