Nanotechnology and Sustainable Development: The Place of Sub Sahara Africa and Policy Considerations

Igbekele A. Ajibefun
Department of Agricultural Economics & Extension
Federal University of Technology, Akure, Nigeria

Abstract

Dramatic breakthroughs and technological changes in the form of nanotechnology have started to occur and will continue to occur in diverse areas such as agriculture, medicine, communications, computing, energy, and robotics. These technological changes will generate large amounts of wealth and force changes in existing markets and institutions. The ultimate purpose of science is social. Its relevance lies in its contribution to the well being of the society. Science performs this role in many ways. In an intellectual sphere, science perhaps embodies a way of life. While the developed countries in the U.S., Europe, Asia, as well some other developing countries are investing heavily in nanotechnology research, the developing countries, especially the Sub Sahara region is doing nothing in terms of funding of nanotechnology research. This will continue to cause technological poverty in this region and widen the development gap between Sub Sahara Africa and other region of the world. There is need for Sub Sahara Africa to design institutional and policy framework that will encourage the region to be an active participant in the nanotechnology revolution. This will not only ensure rapid socioeconomic transformation of the region, it will bring the region out of technological poverty.

Keywords: Nanotechnology, Sustainable Development, Policy, Sub Sahara Africa