

## **Role of Data in Improved and Sustainable Food and Agricultural Productivity in Africa**

Sunita Facknath

Faculty of Agriculture, University of Mauritius, Reduit, Mauritius, e-mail :

[sunif@uom.ac.mu](mailto:sunif@uom.ac.mu)

Economic growth in Africa continues to be one of the most urgent areas of concern in international development. Agriculture has been recognized as the mainstay and key driver of economic growth, food and nutritional security and poverty alleviation in Africa. However, it is among the least performing of the sectors listed in the indicators of human development on the continent. A number of factors have been put forward to explain this low productivity, among which a very important factor is the very low level of scientific effort in most parts of Africa compared to that in other continents, and the consequent paucity of sufficient scientific information and data. Compared to the research effort for temperate crops, research activities on tropical crops is negligible. As a result, until very recently, the agricultural approach in Africa has been to transfer technology developed in the temperate countries for temperate agriculture. This has had severe limitations for tropical agriculture, in terms of the variety/strains of crops/animals farmed, as well as yield and quality of harvest.

This paper reports part of the work of a task group set up by ICSU-RoA on developing proposals for improving food security in Africa through modernising and professionalising agricultural crop and animal production through R & D into new technologies/systems and revalorization of indigenous/traditional knowledge, adaptation of agricultural production systems to climate change, improving post harvest technologies, improving accessibility to food, and ensuring food safety and quality nutrition.

Achieving the above objectives requires concerted scientific and technical efforts, building on the available global fund of scientific and technical knowledge and data. Science and Technology can and must play a decisive role in increasing food production and enhancing food and nutrition security on the continent, through the implementation of a series of participatory innovative science and technology (STI) pilot programs focusing on priority continental farming systems. In all these systems, the starting bloc remains focused on generating and gathering high level quality data and information through prioritised R & D, tailor-made to the unique conditions prevailing in the different regions of the continent.