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“Prosperity and Poverty in a Globalised World—
Challenges for Agricultural Research”

Agricultural Research Priorities That Can Foster Prosperity and Reduce Poverty in Nigeria

MICHAEL ALATISE

Federal University of Technology, Agricultural Engineering, Nigeria

Abstract

The prevailing social conditions in Nigeria present a startling paradox due to their robust endowment in natural and human resources not being matched with the level of poverty of the people. The most difficult challenge facing Nigeria today is poverty reduction to foster sustainable socio-economic growth. Africa remains a rural society, which largely depends upon agriculture and pastoralism and Nigeria exemplifies this assertion in all ramifications. Thus the main objectives of this paper are to **(1)** evaluate the country's land and water resources, the methods of agricultural practice and its past and present agricultural programmes; **(2)** highlight the much desired agricultural research challenges and little efforts made in this area and **(3)** establish long-term partnerships among researchers, practitioners and end-users. Various programmes that set-up to combat poverty were discussed and causes for their failures were identified. The research challenges include the following: (1) data collection, collation, storage and retrieval particularly on (climatological, hydrological, hydro-geological), and crop area survey and machinery; (2) study of crop water requirements and irrigation scheduling to include: (a) evaluation of ET models in different ecological zones of Nigeria and (b) crop yield response to irrigation water management, (3) classifications of soil types in the different ecological zones and (4) design and fabrication of appropriate machines for the various farming operations. Finally, the paper calls for education and enlightenment of the rural community, the creation of an environment where new ideas can find expression, and integration of , land and water resources for agricultural and rural development.

Keywords: Aecological zones, ET models, hydro-data collection, poverty reduction, water resources