

## Problems and Prospects of Agricultural Biotechnology in Nigeria's Developing Economy

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**Abstract :** Science offers opportunities for revolutionizing human activities, enriched by input from scientific research and technology. Biotechnology is a major force for development in developing countries such as Nigeria. It is found to contribute to solving human problems like water and food insecurity that impede national development and threaten peace wherever it is applied. This review identified the problems of agricultural biotechnology in Nigeria. On the part of rural farmers, there is a lack of adequate knowledge or awareness of biotechnology despite the fact that they constitute the bulk of Nigerian farmers. On part of the government, the problems include: lack of adequate implementation of government policy on bio-safety and genetically modified products, inadequate funding of education as well as research and development of products related to biotechnology. Other problems include: inadequate infrastructures (including laboratory), poor funding and lack of national strategies needed for development and running of agricultural biotechnology. In spite of all the challenges associated with agricultural biotechnology, its prospects still remain great if Nigeria is to meet with the food needs of the country's ever increasing population. The introduction of genetically engineered products will lead to the high productivity needed for commercialization and food security. Insect, virus and other related diseases resistant crops and livestock are another viable area of contribution of biotechnology to agricultural production. In conclusion, agricultural biotechnology will not only ensure food security, but, in addition, will ensure that the local farmers utilize appropriate technology needed for large production, leading to the prosperity of the farmers and national economic growth, provided government plays its role of adequate funding and good policy implementation.

**Keywords :** biosafety, biotechnology, food security, genetic engineering, genetic modification

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