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**“CURRENT ISSUES AFFECTING AGRICULTURAL  
BIOTECHNOLOGY  
IN AFRICA: A REVIEW OF LITERATURE”**

Mamane Annou and Spencer Henson

Department of Agricultural Economics and Business,

University of Guelph, Ontario, Canada

- *Mamane Annou is a Research Associate and Spencer Henson is an Associate Professor, both in the Department of Agricultural Economics and Business, University of Guelph.*
- *Author contact. Email: [mannou@uoguelph.ca](mailto:mannou@uoguelph.ca); telephone: (519) 824-4120 ext. 52772.*

**ABSTRACT**

A familiar claim is that biotechnology can assist African nations on the path to agricultural development by reducing the major constraints to sustainable production of food and cash crops. The claim points out that agricultural biotechnology offers the opportunity of lifting people out of poverty, malnutrition and food insecurity while controlling natural resource degradation. Yet, we see one side of Africa rejecting food aid under the suspicion of containing genetically modified seeds, and another part calling for bolder transfer of technology including biotechnology as a solution to the decreasing productivity of agriculture (WST, 2002). It is unclear if this bipolar stance is shared only by policymakers and if it is in line with the opinions of African experts and lay people. The objective of this paper is to provide insights into attitudes regarding biotechnology at the consumer, producer, and policymaker level and to explore the potential conflicts between policies and the populous.

Objections to biotechnology are generally on moral or ethical grounds for the crossing species boundaries, and for fear of an untested science, which in practice promotes alien, unsafe goods at the expense of the local poor. This position concurs with European critics that GM seeds jeopardize trade and harm the diversity of plant and animal life (*NYT, 2002*). In addition, the sovereignty of biotechnology firms over seeds is concomitant to taking away the peasant independence in relation to their own production. The proponents' analysis is that the world cannot ignore the potential of biotechnology for making a safe contribution to better and more food in the most vulnerable regions. Hunger is acute in Africa where food productivity dropped 23 percent in the last 25 years (*SAIS Review, 2003*). Furthermore, the argument goes that increased food productivity is essential to economic development, political stability, and long-term sustainable democracy<sup>1</sup>. This view point is quite close to the United States position.

Recent changes in the industry show biotech firms linking research to production by including some core food crops into their research agenda. This move somehow counters the argument that biotechnology firms have no interest in Africa's staple food crops. In 2003 four biotechnology companies agreed to share knowledge with the newly launched African Agricultural Technology Foundation, a Nairobi based biotechnology research organization. Among them was Monsanto which conducts a potato research program to develop a transgenic, virus resistant variety of sweet potato. In South Africa, biotech cotton and corn are now approved crops for planting on farmland.

Few African countries conduct biotechnology research on their own. However, all have a keen interest in food security and the safeguard of their agricultural comparative advantage. Like the rest of the world, Africa appears to be divided on the issues of biotechnology. Sincere concerns and passions characterize the public debate but incomplete knowledge and information seem to dominate it. Hence, this research is timely to address what seems to be a significant phase in the future of agriculture in Africa.

This paper contributes to shade light on the issues of public acceptance and trade and development. It is important in that it brings together the views from government, experts and lay people. As many African nations move toward a defining moment with respect to biotechnology, the paper will portray how their positions have converged or diverged and what are the possible driving forces behind the changes.

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<sup>1</sup> The Partnership to Cut Hunger and Poverty in Africa co-chaired by presidents from Mali, Uganda, Ghana, and Mozambique seems to support this view.