

Impact of genetic research on women in Africa

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Abstract

The cycle of disease and food scarcity is the main obstacle for Africa's economic development. Genomic revolution undoubtedly has tremendous potential to alleviate infectious and chronic diseases, while improving food security in our continent.

Although the African women will continue to be the major beneficiary of these genetic advances, biotechnology especially when it involves human subjects can only be deemed ethically justifiable when far reaching ethical parameters are defined and considered. Several ethical factors must be carefully weighed such as potential environmental and health impact, altering biodiversity, animal and human welfare, social and religious issues; the potential co-modification and further denigration of attitudes towards women and potentially harming life in order to protect it.

Ultimately, the proportionality of means versus ends concerning genetic modifications requires careful ethical analysis. This paper will examine the progress in genetic research including clinical trials on DNA-based vaccines against malaria and HIV in Kenya. Secondly, we will discuss the uptake of genetically modified foods in Africa while avoiding exploitation of the host communities. Finally, we will explore some policy and safety issues important in genetically modified foods, population genetic screening, including HIV screening, pre-implantation genetic diagnosis, newborn screening; assisted reproduction technology and stem cell therapy in resource-poor African women.