

ABSTRACT

Technological advances have impacted and led to certain improvement in agricultural productivity and food production. In the last two decades, there has been an increase in acreage of GM crops worldwide. Among the countries cultivating GM crops, more than half are the developing countries. The global trade in food products is expanding rapidly with the introduction of GM food in the commercial food chain. Among the developing countries, the production of GM crops and GM food crops is high in China, Latin American countries like Brazil and in few African countries especially South Africa. The analysis of the regulatory mechanism for the introduction of GM food and derivatives through import or domestic production is an important consideration in relation to these countries. Safety has to be ensured not only from the point of manufacturing to market but also from market to consumers, which includes many procedures to be followed to avoid risks to human health and the environment. The present research work analyses the comparative perspectives in relation to the development of policies, laws, regulations, guidelines and standards of food legislation and the development of institutional mechanism in the said countries to deal with the food safety concerns related to GM food and derivatives.

Further, the procedures and guidelines for approval and the components of national food safety system of Brazil, India, China and South Africa such as safety regulation, labeling, monitoring and surveillance, information sharing, and liability have been analysed. The extent of development of liability framework for GM food and derivatives at the international level as well as in selected jurisdictions with a special reference to India was analysed. Regulation related to trade aspects of GM food and derivatives is influenced by other international developments and public policy. The analysis of the broader aspects of international instruments and the trade of GM foods reveal that regulations and institutional mechanism need to be developed. Analysis of the extent of implementation of FSS Act, 2006 indicates elaboration of appropriate procedures and guidelines and the development of institutional mechanism in regulating GM food and derivatives. Finally, it is suggested that the development of norms in food safety components for GM will benefit countries such as India.

Key Words: genetically modified food, GM derivatives, food safety, regulation, food safety regulation, BICS countries, developing countries, liability.