CHAPTER 4
GMOs, FOOD SAFETY, AND
FOODBORNE DISEASE

Recent developments in global food production, processing, distribution, and preparation are catalyzing research in food safety and foodborne disease to provide a safer global food supply.\(^1\) The integration and merging of agricultural and food industries combined with the globalization of the food trade are altering patterns of food production and distribution while providing consumers with a wider variety of safe, accessible, and affordable foodstuffs.\(^2\) Food safety and foodborne disease issues tie together all stages of the global food chain and require a finely balanced interplay between regional and international needs. Requirements for effective protection and management of global food supplies and human health become more complicated and multi-faceted challenge for those charged with the safe and productive integration of GMOs into global commerce. Inclusion of GMOs in regulatory and policy initiatives safeguarding food supplies and minimizing effects from foodborne disease is necessary, for GMOs bring numerous potential agricultural benefits affecting food quality and human health.

No current international instruments exist that restrict or ban the use or movement of GMOs in global commerce. The Biosafety Protocol addresses transboundary movement of GMOs but does not prohibit the use of these products in food development and production. A collection of international organizations, such as The World Health Organization (WHO), the Food and Agriculture Organization (FAO), Codex Alimentarius (Codex), and the Organization for Economic Cooperation and Development (OECD), are addressing international aspects of food safety and foodborne disease and provide a patchwork of advisory perspectives for regulation.


\(^2\) Id. at 6.
The WHO, the public heath arm of the United Nations, and the FAO, the food and agriculture division of the United Nations, both address food safety and foodborne disease concerns but from slightly divergent vantage points. Both the WHO and FAO promote a holistic and all-inclusive evaluation of GMOs that encompass food security, social and ethical aspects, and access and capacity-building, which will be used to form a more systematic, coordinated, multi-organizational and international evaluation for GMOs.\(^3\) A science-based evaluation system also should be implemented to objectively determine the benefits and risks of each GMO on a case-by-case basis, examining potential effects on biodiversity, the environment, and food safety.\(^4\) Domestic experience in regulating GMOs should also be incorporated into the evaluation process.\(^5\) To facilitate a more coordinated, multi-organizational approach, the WHO and FAO foster initiatives organizing a series of expert scientific consultations providing member states with technical and scientific advice.\(^6\) The WHO and FAO also provide technical assistance, information, socio-economic and environmental analyses to member states and contribute to the Secretariat of Codex’s Commission.\(^7\)

A. WORLD HEALTH ORGANIZATION

The WHO recognizes food safety as an “essential public health function” and argues that the “availability of safe food improves the health of people and is a basic human right.”\(^8\)Achieving this objective requires


\(^5\) Id.


\(^7\) FAO Statement on Biotechnology, supra note 4.

\(^8\) “Safe food contributes to health and productivity and provides an effective platform for development and poverty alleviation.” DAVID P. FIDLER, INTERNATIONAL LAW