UGANDA BIOTECHNOLOGY & BIOSAFETY CONSORTIUM

Policies & Laws of Relevance to Regulation of Agricultural Biotechnology in Uganda

Policy Brief No. 3, 2012
B.M. Zawedde, S. Akile, S. Nakabuye, and T. Sengooba

Background

Uganda is conducting a number of research and development (R&D) activities using modern biotechnology tools such as genetic modification (GM) in the agricultural, health, industry and environment management sectors. The use of genetic modification is regulated in many countries that have deployed the technology and Uganda is now at advanced stages of developing an explicit law to guide biotechnology application in national development efforts.

A number of laws in the country have a bearing on biotechnology and biosafety regulation but the extent of which these laws and policies would guide modern biotech use was largely unknown. This study was executed to establish why existing laws and policies would not suffice for biosafety management of modern biotechnology and hence a new law was necessary.

Existing legal frameworks

Any policies and laws related to agricultural research and application, as well as protection of human health and management of the environment are in effect relevant to biotechnology and biosafety. Most policies and laws in this category, in Uganda do not provide for the utilization of modern biotechnology and its regulation probably because these laws were enacted at the time when research and utilization of modern biotechnology were at its infancy or non-existent. In addition, most sectors do not cover biotechnology in their policies, even where it is relevant, probably because of limited knowledge on the relevance of modern biotechnology in their mandate, and on the available options for its regulation.

Highlights

- ***No explicit law provides the required oversight of modern biotech research, product development and use***
- ***A new law under preparation is crucial to promoting prudent use of biotechnology***
- ***Existing laws and court procedures can be used to address some legal requirements in relation to GMO application***

Biotechnology is a subject of National Interest:

The Constitution of the Republic of Uganda, 1995: The Constitution provides for adoption of measures required to protect the environment and natural resources and creates an obligation for the State to stimulate agricultural, industrial, technological and scientific development by adopting appropriate policies and the enactment of enabling legislation. Biotechnology and Biosafety is one of such laws. **The National Development Plan (NDP)** (Republic of Uganda, 2010)also supports biotechnology as one of the science and technology tools that will contribute to national development.

The Uganda National Council of Science and Technology Act Cap 209: This Act provides mandate to formulate policies and strategies for science and technology in all fields of science and technology; and to assist in the rationalization of the use of foreign science and technology. With this mandate, the UNCST led the formulation of Biotechnology and Biosafety Policy that was approved by cabinet in 2008 and the same UNCST is currently spearheading the enactment of the National Biotechnology and Biosafety law.

The National Agricultural Research Act, 2005: The overall goal of the National Agricultural Research Act (2005, No. 9) is to address challenges presented in the Plan for Modernization of Agriculture (PMA) and the National Agricultural Research Policy (NARP). Modern biotechnology being a new research tool with potential to improve agricultural productivity inherently matches with the goal and functions of the Uganda Research System and that of the current Development Strategy and Investment Plan (DSIP). This investment plan supports adoption of various relevant technologies that can contribute to enhancing agricultural production, productivity, and value addition. DSIP further provides for "improving capacity for regulation and enforcement especially in safety standards and quality assurance across crops, livestock and fisheries".

The Agricultural Chemicals (Control) Act, 2006: It is noteworthy this Act can be compared to the proposed Biotechnology and Biosafety law. The Agricultural Chemicals Act provides for control and regulation of the manufacture, storage, distribution and trade in, use, importation and exportation of, agricultural chemicals. The Act establishes an Agricultural Chemical Control Board that ensures chemicals are duly registered and are used in accordance with the regulations provided under the Act. The powers of this board can be equated to that of the National Biosafety Committee, a technical committee at the UNCST that is responsible for biosafety. Agricultural chemicals when well regulated and used properly can result in significant gains for the farmers. In a similar manner GM crops that will have in-built desirable characteristic once approved and used according to the country's regulations will contribute significantly to productivity and value of Agricultural industry.

National Environment Act: The National Environment Act (Cap 153) provides for the principles of environmental management and enforces the constitutional call for a right to a clean and healthy environment. It does this by establishing administrative structures, with the National Environmental Management Authority (NEMA) as the apex Government agency for environmental management in Uganda. The Act charges NEMA with the responsibility of conducting environmental impact assessment (EIA) before any project likely to have an impact on the environment is undertaken. This law mentions aspects of agriculture in environmental management. Biotechnology is a methodology used to increase agricultural production, therefore it is affected by this law.

The Plant Protection Act: This Act provides for the prevention of the introduction and spread, and eradication of pests and diseases destructive to plants. The Act regulates the introduction of exotic plants and microorganisms. The commissioner for agriculture works with inspectors to control

the importation and exportation of articles that can result in the spread of diseases or pests. This Act does not however cover the GMOs and the surrounding issues particularly the need for risk assessment and issues concerning the trans-boundary movements of GMOs. The law does not provide for mechanisms by which GM crop plants could be monitored in the environment or the methods for minimizing gene transfer and other recommendations regarding further research.

The Food and Drug Act: This act provides for offences connected with the preparation and sale of injurious foods and adulterated drugs. The Act also provides for standards for foods and drugs. Because of its age, this law does not cater for biosafety concerns regarding genetically modified foods and drugs. The rapid release of GM products on the market is escalating these concerns and thus the country needs legislation with clear statements on how to handle these concerns. This legislation would address aspects of packaging and documentation for such biotech products.

The National Agricultural Research Act, 2005: The overall goal of this act is to address challenges presented in the Plan for Modernization of Agriculture (PMA) and the National Agricultural Research Policy (NARP). This Act provides for the development of an agricultural research system to improve research service delivery in the country. Section 5 establishes the National Agricultural research Organization (NARO) whose major function is to provide guidance and coordinate all agricultural research activities in Uganda. Modern biotechnology being a new research tool with potential to improve agricultural productivity inherently matches with the goal and functions of NARO and other players in the National Agricultural Research System (NARS). The specific biotech programs to be undertaken have to be consistent with research priorities. It is expected that biotechnology research programmes to be undertaken in Uganda will be qualified and guided by this provision.

The Public Health Act: The Public Health Act (Cap 281) was enacted into law in 1935. It provides for the preservation of public health. It covers standards for sanitation, vaccination and prevention of infectious diseases. The Act also provides for administrative structures for enforcing the standards and requirements provided therein. Probably because of its age, this law does not cater for biotechnological drug therapies, ethical issues of human cloning and human genome studies. It is thus prudent to say that there is need to put in place legal provision to cater for all these mentioned and other biotechnology-related issues.

The Uganda Food and Nutrition Policy (2003): In recognition of the vicious cycle between poverty and malnutrition, a multi-sectoral effort was undertaken to provide a framework for addressing food and nutrition issues in the country. The result was the Uganda Food and Nutrition Policy [UFNP] (Republic of Uganda, 2003) developed within the context of the overall national development policy objective of eradicating poverty as spelt out in the PEAP. The major policy focus is food security, improved nutrition and increased incomes. Government of Uganda, in 1987, established the National Food and Nutrition Council (NFNC) to coordinate activities relating to food security and nutrition. UFNP provided for establishment of the UFNC as a coordinating body for the multi-sectoral implementation of the UFNP.

A more recent and complementary document for this policy is the National Food and Nutrition Strategy (Republic of Uganda, 2005) which was updated in 2010 guided by the NDP. Considering the available evidence showing modern biotechnology and biosafety as relevant for addressing food and nutritional security (WHO, 2005); (FAO, 2009), plus the fact that this strategy was guided by the NDP that recognized biotechnology as a tool that can contribute to national development, it is surprising that this strategy does not provide for application and regulation of biotechnology.

Box 1: Relevant laws

- The Animal Breeding Act, 2001;
- The Animal Disease Act (Cap 38);
- The Plant Protection Act (Cap 31);
- The Agricultural Seeds and Plant Act (Cap 28);
- National Environment Act (Cap 153)
- The Fish Act (Cap 197);
- The National Forest and Tree Planting Act (2003);
- The Food and Drug Act (Cap 278);
- The Pharmacy and Drugs Act (Cap 280);
- The Public Health Act (Cap 281);

Other laws not directly related to biosafety but applicable as need arises include:

- The Patent Act
- Procedural legislations relevant to enforcement of biosafety including:
  - Penal Code Act (Cap 120)
  - Criminal Procedure Code (Cap 116)
  - Civil Procedure Act (Cap 71)
  - The Evidence Act (Cap 6)
  - Trial on Indictment Act (Cap 23)
  - Magistrates courts Act Cap 16.

Conclusion

A number of laws, regulations, and policies have a bearing on biosafety management in Uganda especially as regards GMO use but fail to mention this aspect. Since there was no explicit legal framework that adequately caters for biosafety issues in relation to application of modern biotechnology, a National Biotechnology and Biosafety Bill was called by government and the Bill is currently under discussion in parliament. It is important to note, however this law will not be used in isolation, it will be complemented by a number of existing laws highlighted in this brief.

Procedural laws and court precedence in place can be used to handle omissions or commissions under Uganda's justice system both in criminal and civil court. These laws are applicable to liability and redress issues related to agricultural research and development, as well as application, and these would equally be extendable to modern biotechnology. Once the law is enacted, it will be pertinent to put in place a sound and well coordinated institutional framework that will oversee the administration and enforcement of this law.

Published by Uganda Biotechnology and Biosafety Consortium (UBBC)
c/o Uganda National Council for Science and Technology
Plot 6, Kimera Road, Ntinda P. O. Box 6884, Kampala- Uganda
Tel: +256 714110088 +256 772585211 Email: ubbconsortium@gmail.com