

# The Revised African Model Law on Biosafety and the African Biosafety Strategy

Haidee Swanby, June 2009



## Contents

<b>Introduction</b>	<b>3</b>
<b>Background</b>	<b>4</b>
Biosafety in Africa	4
<b>African Strategy on Biosafety</b>	<b>5</b>
Regional Economic Communities (RECs)	5
<b>Revision of the African Model Law on Biosafety</b>	<b>6</b>
Key changes in the African Model Law on Biosafety	5
<b>Recommendations by delegates</b>	<b>7</b>
<b>Conclusion</b>	<b>8</b>
<b>Annexure 1</b>	<b>9</b>
<b>References</b>	<b>12</b>

Haidee Swanby of the African Centre for Biosafety attended a meeting hosted by the African Union during May 2009 in Arusha, Tanzania on various biosafety initiatives of importance to the continent. In this briefing paper, Haidee discusses the meeting and the issues and challenges lying ahead for the continent.

## Introduction

South Africa threw caution to the wind and commercialised genetically modified (GM) maize in 1997 – 2 years before any national legislation to regulate biosafety came into force. The rest of Africa took a much more cautious stance; it would take 11 years for another African country to commercialise a GM crop, when Burkina Faso commercialised GM cotton in 2008. Other countries in Africa will now follow suit as the international community and agribusiness bully Africa into adopting GM technology in the face of a global food crisis and on the pretext of introducing GM climate crops. At the same time, 45 of the 52 African countries are now Parties to the Cartagena Protocol on Biosafety.<sup>i</sup> These countries are in the process of developing or have completed their domestic legal frameworks to permit and regulate genetically modified organisms (GMOs). The continent is almost ripe for the mass sowing of GM seeds.

It is within this context that the African Union (AU) is revising the African Model Law on Biosafety and developing a 20 year African Biosafety Strategy, with the intention of harmonising biosafety laws and procedures as a clear priority. An industrial agriculture agenda is behind the harmonisation drive, heavily supported and pushed by amongst others, the United States Agency for International Development (USAID) and the World Bank.<sup>ii</sup> The process also has the blessing of the AU and it is envisioned that the Regional Economic Communities (RECs), bodies that facilitate regional trade on the continent, will implement the African Biosafety Strategy. The major thrust of the Strategy is to harmonise laws and procedures for a pan-African biosafety system and to assist in the development of regional “centres of excellence”. The harmonisation of biosafety laws threatens to create a single GMO conveyor belt throughout Africa; a one-stop GMO approval system that bypasses case-by-case risk assessments and decision making on a country-by-country basis.<sup>iii</sup> Although there is strong political will within the AU to protect African biodiversity and society, powerful industry lobbyists are using the harmonisation process to build capacity and facilities for the advancement of GMOs on the continent, thereby paving the way for a corporate-friendly legislative environment.

Several meetings are being organised by the AU and hosted by the RECs in the run up to the next Meeting of the Parties (MOP) to the Biosafety Protocol (MOP 5), to be held in Nagoya, Japan in October 2009. One of those preparatory meetings took place during the period 6-9 May 2009. The focus of the meetings was to present and discuss the African Strategy on Biosafety, the revision of the Model Law on Biosafety and mechanisms for harmonisation of biosafety procedures and legislation for the continent. The ACB was one of the few NGOs attending the meeting.

### Biosafety in Africa

Traditional agriculture forms the backbone that sustains African livelihoods and economies. Adopting GMOs within African agricultural systems means embracing a completely foreign agricultural system while handing over ownership of resources to private, foreign corporations. GMOs pose risks to Africa's rich environment and agricultural heritage, including agricultural biodiversity and indigenous knowledge systems, practises and livelihoods. In addition, Africa is a regular recipient of food aid from the United States, which more often than not, is genetically modified.

To date, there is no scientific agreement about the safety of GM technology. The African Model Law on Safety in Biotechnology (now renamed African Model Law on Biosafety), adopted by the African Union in 2003, was developed to guide the drafting of domestic biosafety frameworks and legislation at the country level in order to robustly regulate GMOs. It embraces the Precautionary Principle and was developed with African perspectives and circumstances in mind. It goes further than the minimum requirements set out by the Cartagena Protocol on Biosafety. African civil society played a proactive role in the development of this law and in lobbying the AU to adopt it.

The Cartagena Protocol came into force the same year as the adoption of the Model Law. Once African governments began ratifying the Protocol, they took on obligations to develop their own domestic biosafety frameworks, which would eventually enable the trade, research and development and environmental release of GMOs. At that time the AU identified the lack of African capacity concerning the regulation of GMOs as a "hindrance to the safe acquisition and application of modern biotechnology".<sup>iv</sup> The AU's Commission on Science and Technology implemented a project on capacity building for an Africa-wide Biosafety system, aided by the German government, to support member states in developing their national biosafety systems. The United Nations Environmental Programme's Global Environmental Facility (UNEP/GEF) rolled out an intensive programme to build capacity and assist African countries to develop and operationalise their biosafety laws. Assistance is also given for technology transfer, installation of laboratories and equipment through bilateral agreements at a country level.<sup>v</sup> (Annex 1 provides a table of biosafety initiatives in Africa.)

The lack of African capacity in the field of biosafety has been a boon for the biotechnology industry. It has scrambled to provide financial and technical support, especially for the development of biosafety legal frameworks and biotechnology research and development. In contrast to the stringent biosafety framework encompassed by the Model Law, many African biosafety frameworks have taken their cue from agribusiness and aid agencies such as USAID.<sup>vi</sup> In the process, these countries have received a boost in funding for research and scientific capacity building initiatives, as a form of quid pro quo for weaker biosafety laws. The disparity between the high biosafety standards set by the Model Law and the legislation passed at the domestic level is an indicator of whether corporate interests or food sovereignty is winning on the African continent.

## African Strategy on Biosafety

When the Model Law was adopted in 2003 the AU agreed to take a common approach to biosafety on the continent<sup>vii</sup> and began developing the African Strategy on Biosafety. This move has been spearheaded by the Science and Technology Secretariat of the New Economic Partnership for African Development (NEPAD), which although a novice and newcomer to the biosafety debate, holds extremely strong positions in favour of GM technology.

The major thrust of the Strategy is to harmonise laws and procedures for a pan-African biosafety system and to assist in the development of regional “centres of excellence”. These RECs are to play an important role in risk assessment, risk management, capacity building, GMO testing and providing biosafety advice”.<sup>viii</sup>

There are several governments, which are in favour of stringent biosafety standards, but which also favour the harmonisation of certain technical issues such as GMO detection labs and common border procedures. The idea for them is to not interfere with decision making, public participation and case-by-case assessment. However, the pro-GM lobby has seized this as a plum opportunity to introduce notions such as ‘sub-regional risk assessments’ and the creation of decision making structures for rapid continent-wide approvals of GMOs. In previous meetings of the AU, RECs were nominated to take on the harmonisation role, but this proposal did not find much support because the RECs have very little or no biosafety capacity.<sup>ix</sup> Indeed, the pro-GM lobby would like to see regional harmonisation structures rushed into place before national structures are developed, but there are currently no regional bodies that have the capacity or mandate to make regional biosafety decisions.

### Regional Economic Communities (RECs)

It is envisioned that the RECs will be the implementing arms of the Strategy on Biosafety. There are 8 Regional Economic Communities that are recognised by the AU, and to which member states of the AU have subscribed. Their purpose is to take care of regional trade interests. Their capacity on biosafety is, at best, rudimentary as biosafety is not their priority area of activity and focus.<sup>x</sup> However, they do have functional secretariats, permanent employees and some infrastructure in place. This can be drawn in to deal with some of the smaller biosafety-related responsibilities.<sup>xi</sup> Placing biosafety in the domain of the RECs affords the pro-GM lobby yet another opportunity to position GMOs as agents of development rather than serious threats to biosafety, cultural and socio-economic well-being.

Three of the RECs deserve mention, having been proactive to date in their work on biosafety:

#### **The Common Market for East and South Africa (COMESA):**

COMESA has no biosafety capacity in-house and therefore relies heavily on the USAID funded Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA) to implement their biosafety projects and provide advice. COMESA and ASARECA have developed a memorandum of understanding on biosafety.<sup>xii</sup>

### **Southern African Development Community (SADC)**

The SADC Food, Agriculture and Natural Resources (FANR) Ministers has established the Southern Africa Advisory Committee on Biotechnology and Biosafety (SABBAC). SABBAC develops guidelines that would contribute to “safeguarding SADC Member States against potential risks of Genetically Modified Organisms<sup>xiii</sup>” as well as assisting SADC Member States to develop their capacity to test, detect and monitor GMOs. It has also prepared a regional policy and strategy to guide Member States to enact appropriate legislation on biotechnology and biosafety, and has developed sub-regional model legislation that would take into account the Cartagena Protocol and the African Model Law.

A food aid crisis in 2002, where GM food aid was a difficult problem for member states, prompted SADC to develop guidelines for member states and take action to bring expertise into the REC on biosafety. The extent to which these have been used is not clear.

### **Community of West Africa (ECOWAS)**

The Community of West Africa (ECOWAS) is currently one of the more proactive RECs on biosafety, with several of their member countries (Burkina Faso, Mali, Benin and Chad) having had focussed support from USAID. The focus here has been particularly on GM cotton and food aid.<sup>xiv</sup>

Another key player in the strategy is the Forum for Agricultural Research in Africa (**FARA**), a network of African agricultural research institutions and a partner of the World Bank. FARA is thus well placed to advance the interests of the biotechnology industry. Not only will they lead the development of regional centres of excellence, but they are also the lead implementing body for agricultural research within the Comprehensive African Agriculture Development Programme (CAADP), which aims to improve agricultural research and systems in order to disseminate appropriate new technologies.<sup>xv</sup>

## **Revision of the African Model Law on Biosafety**

The African Strategy makes a strong call to AU members to mobilise member states to put their national biosafety policies and laws in place. The AU commissioned the revision of the Model Law to implement this proposal. The Model Law is now being revised to accommodate new experiences and political pressures. The new model law retains its cautionary and uniquely African orientation, but now also acknowledges that science and technology are central to solving Africa’s hunger problems and achieving the Millennium Development Goals. It now contains new provisions to include collaboration, co-operation and capacity building, arguably, with the private sector. The Model Law is not binding on member countries of the African Union, while policies developed by RECS could conceivably be binding on them.

### **Key changes in the African Model Law on Biosafety**

The preamble now acknowledges that “the Extraordinary Conference of the African Ministerial Council on Science and Technology (AMCOST) reaffirmed that science and technology are key to attaining the Millennium Development Goals”. It appears as if the constant assertion from the pro-GM lobby that hi-tech is the way to end hunger has been

accepted. Despite this, the Revised Model Law remains deeply cautious of GMOs and this is reflected in the preamble.

The Revised Model Law calls for mandatory labeling of GM produce, but does not go further than this broad provision. It sets the threshold for adventitious presence of GMOs at 0.9% or less, dependant on detection capacity at country level. The absence of well equipped laboratories for testing is a concern of many countries and this is where industry has a strong hand in offering funding and technical development, in return for setting research agendas and ensuring industry friendly legislation.

Another key addition to the previous version relates to public participation in decision making and therefore awareness raising and education.

In terms of risk assessment, socio-economic considerations must be taken into account, and this also includes the impact on culture and indigenous knowledge.

In terms of liability and redress, the Model Law states that liability must be borne by the applicants and developers of GMOs and costs against those seeking redress will not be awarded even if they are not successful litigants.

## Recommendations by delegates

Delegates of the meeting agreed to a number of priorities for the AU to focus on in terms of harmonisation. These include the following:

### **Harmonisation of risk assessment and risk communication procedures:**

There was discussion around harmonizing food safety and environmental risk assessment procedures, with a position taken that a set of standardized scientific procedures be put in place that can generate the same kind of data from country to country, but that decisions on that data must be taken at a country level taking into account specific environments, socio-economic and cultural conditions. The USAID-trained experts would prefer to see a system that enables blanket approvals at regional level, based on European Union and American data. This would fast track decision making and the proliferation of GMOs on the continent. This remains a major site of struggle, but the political will is currently to maintain rigorous biosafety procedures and industry has the problem of situating their proposal with regional bodies that have the necessary mandate and capacity.

### **Regional Centres of Excellence:**

These were seen as a priority and they would also advance the ability to harmonise risk assessment procedures. It was acknowledged that FARA would continue to lead the way with the creation of these centres. The need for GMO detection laboratories was highlighted as crucial and currently lacking. It was noted that many African countries already have excellent scientific facilities for the medical sector that could be used for basic biosafety work, and that these should be identified and used where possible.

**Public awareness:**

Without public awareness it is impossible for the public to participate in decision making on GMOs, and it is widely recognised that the vast majority of Africans have no idea what biotechnology or GMOs are. It was suggested that the AU develop awareness raising tools for its members and that NGOs play a key role in assisting in this regard.

There was a persistent push to ensure wording that public awareness should create **acceptance** of the benefits of GMOs. This is likely to be another area that the biotechnology industry invests in heavily in the near future. Having clearly won the minds of African leaders, the next task will be to win the hearts of Africa's farmers and consumers. There is also a clear obligation under the Cartagena Protocol for countries to ensure that their citizens are well educated on the issue. Determining what kind of information will finally get to the public, promises to be a key site of struggle.

## Conclusion

The mass commercialisation of GMOs on the African continent is imminent due to the convergence of legislative readiness, increasing scientific capacity on the continent and both political and industry pressure in the face of the food and climate crises. NEPAD's Science and Technology has grabbed the political space afforded by the AU's capacity building process for the continent and has effectively moved the thinking around GMOs from the deep concern of its impacts on society, to a welcome opportunity for scientific advancement and trade at any price. Placing the implementation of the Biosafety Strategy into the hands of the RECs – bodies with no history of biosafety capacity and a strong focus on trade – has cemented this move. The power afforded to FARA, in the development of scientific expertise and centres of excellence in Africa, also ensures that scientific capacity will focus more on research and development than on biosafety.

The African Model Law on Biosafety has been slated by industry as restrictive with the potential to hold back African agricultural development and competitiveness<sup>xvi</sup> and the revised Model Law is seen as even more so. Industry asks African leaders to sell Africa's soul in return for massive financial support to develop scientific capacity and become players on the world market. While the African Model Law is coming under pressure it remains a document that takes as its point of departure, rigorous biosafety regulation rather than profit and scientific advance at all costs.

There is political will to protect African biodiversity and society in the face of powerful industry interests. The development of strong national laws focusing on biosafety is vital in this phase. National laws need to ensure biosafety assessments and decision making on a case-by-case basis, taking into account local environments, cultural and socio-economic concerns and promoting strong public participation. It is up to African civil society to be informed and actively engage with their governments as they draft their National Biosafety Frameworks to ensure that African food sovereignty and security remain at the top of the agenda.



## Annexure 1: Biosafety initiatives in Africa (focussing on Issues)

Name of Capacity building Project	Name of Supporting agency	Countries Covered	Issues of focus
ASARECA Biotechnology and Biosafety programme	ASARECA	Eastern and Central African countries	Human Resource development (HRD) and training, Institutional building, Risk Assessment and Management, Technology Transfer, Scientific, Technical and Institutional collaboration
Danish Assistance to capacity building in Biosafety- BioSafe Train	Danish Government		HRD and Training, Institutional building, Scientific, Technical and Institutional collaboration, Risk Assessment, Awareness, education and participation
Strengthening National capacities in formulation and implementation of legal instruments on GMOs in Swaziland	UN- Food and Agriculture Organisation		HRD and Training, Institutional building, Information exchange and management and use of the BCH, Technology Transfer
Capacity building of Regulatory Agencies for handling GM Crops , products and Processed foods in Kenya	UN- Food and Agriculture Organisation		HRD and Training, Institutional building, Scientific, Technical and Institutional collaboration, Information exchange and management and use of the BCH
African Union Biosafety Capacity Building Programme and Project on civil society participation in Algeria's Biosafety	German government- Federal Ministry of Economic cooperation and Development (BMZ) & GTZ	All African Union Member states	HRD and Training, Awareness, education and participation, Information exchange and management and use of the BCH process
ICGEB African Resource and Training Regional Centre for Biosafety and Protection of Biodiversity	ICGEB International Centre for Genetic Engineering and Biotechnology		HRD & Training, Scientific, Technical and Institutional collaboration, Risk Assessment, Awareness, education and participation, Information exchange and management and use of the BCH, Technology Transfer

<b>Name of Capacity building Project</b>	<b>Name of Supporting agency</b>	<b>Countries Covered</b>	<b>Issues of focus</b>
BIONET-Africa: Network for Capacity building in Biotechnology and Biosafety for African Universities	ICIPPE – International Centre for Insect Physiology & Ecology		HRD and Training, Institutional building, Scientific, Technical and Institutional collaboration, Information exchange and management and use of the BCH
USAID-funded Programme for Biosafety Systems (PBS)	IFPRI – International Food Policy Research Institute	Kenya, Uganda, Tanzania, Ethiopia, Malawi, Mozambique, Zambia, Ghana, Mali, Nigeria	HRD and Training, Institutional building, Scientific, Technical and Institutional collaboration, Risk Assessment, Awareness, education and participation, Technology Transfer, Risk Management
Environnement et Développement durable: les enjeux de la biosécurité – Réseau Interdisciplinaire Biosecurité (Biosafety Interdisciplinary Research Network)	IUED- Institut Universitaire d' Études du Développement, University of Geneva		HRD and Training, Scientific, Technical and Institutional collaboration, Risk Assessment
Norwegian Institute of Gene Ecology (GenØk) Biosafety Capacity building Programme	Norwegian Government – NORAD and Direktoratet for Nature		Conservation Human Resource development and training, Scientific, Technical and Institutional collaboration Institutional building, Risk Assessment
Support to Zambia's Biosafety System and GMO Detection Facility	Norwegian Government – NORAD and Direktoratet for Nature Conservation Human Resource		Development and training, Scientific, Technical and Institutional collaboration, Institutional building, Risk Assessment, Information exchange and management and use of the BCH, Technology Transfer
Support for Capacity building in Agricultural Biotechnology and Biosafety	Rockefeller Foundation		Human Resource development and training, Institutional building, Risk Assessment, Awareness, education and participation
East African Regional Programme and Research Network for Biotechnology, Biosafety and Biotechnology Policy Development (BIOEARN)	Swedish Government (Stockholm Environment Institute, SEI)	Ethiopia, Kenya, Tanzania and Uganda	Human Resource development and training, Institutional building, Risk Assessment, Awareness, education and participation

<b>Name of Capacity building Project</b>	<b>Name of Supporting agency</b>	<b>Countries Covered</b>	<b>Issues of focus</b>
GMO Guidelines Project for Kenya	Swiss Government		Kenya HRD and Training, Institutional building, Scientific, Technical and Institutional collaboration,
Rockefeller-funded Project on Assessment of International Initiatives for building capacity in the field of biosafety and biotechnology in S.E Asia and sub-Saharan Africa	UNU- United Nations University		HRD and Training, Institutional building, Awareness, education and participation
USAID Regional Biotechnology and Biosafety Programme in East/Central Africa	United States Government		HRD & Training, Institutional building, Information exchange and management and use of the BCH

Source: African Strategy on Biosafety, Directorate of Human Resources, Science and Technology, November 2006, [www. Africa-union.org](http://www.Africa-union.org)

## References

- i. This protocol falls under the United Nations Convention on Biological Diversity, was signed into being in January 2000 and has been ratified by 156 countries to date, 45 of them African.
- ii. GRAIN. April 2005. **USAID: Making the world hungry for GM crops.**
- iii. S. Moola and V. Munnik. 2007. **GMOs in Africa: food and agriculture. Status report 2007.** African Centre for Biosafety.
- iv. African Union. November 2006. Directorate of Human Resources, Science and Technology. **African Strategy on Biosafety.** [www.Africa-union.org](http://www.Africa-union.org) (accessed 9th June 2009).
- v. *ibid*
- vi. USAID's Program for Biosafety Systems put \$14.8 million forward to assist African and Asian countries to develop biosafety systems and assist in biosafety decision making. M.Mayet. April 2005. **GM crops for Africa? No Thanks!** African Centre for Biosafety. [www.biosafetyafrica.org.za](http://www.biosafetyafrica.org.za)  
See also African Centre for Biosafety. 2005. **Biosafety in Africa – A complex Web of Interests.** <http://www.biosafetyafrica.org.za/images/stories/dmdocuments/BiosafetyInAfrica-WebofInterests.pdf> (accessed 9th June 2009).
- vii. African Union. Decision EX.CL/Dec.26(III) 2003
- viii. African Union. November 2006. Directorate of Human Resources, Science and Technology. **African Strategy on Biosafety.** [www.Africa-union.org](http://www.Africa-union.org) (accessed 12th June 2009)
- ix. Department of Human Resources, Science and Technology Biosafety Unit. African Union Commission. 2007 **Case study on the African Union Commission-German Federal Ministry for Economic Cooperation and Development (AUC-BMZ) Africa-wide Biosafety Capacity-Building Project** Presented at The Third Coordination Meeting for Governments and Organizations Implementing or Funding Biosafety Capacity-building Activities. 26-28 February 2007 Lusaka, Zambia.
- x. African Union. November 2006. Directorate of Human Resources, Science and Technology. **African Strategy on Biosafety.** [www.Africa-union.org](http://www.Africa-union.org) (accessed 12th June 2009)
- xi. *ibid*
- xii. *ibid*
- xiii. *ibid*
- xiv. African Centre for Biosafety. 2005. **Biosafety in Africa – A complex Web of Interests.** <http://www.biosafetyafrica.org.za/images/stories/dmdocuments/BiosafetyInAfrica-WebofInterests.pdf> (accessed 9th June 2009).
- xv. For more information on CAADP Pillar 4: Agricultural research, see <http://www.caadp.net/pillar-4.php> (accessed 9th June 2009).
- xvi. Africabio quoted in proceedings of Experts meeting on the Revised African Model Law on Safety in Biotechnology. 20-23 August 2007. Addis Ababa, Ethiopia.