



The RABESA Project 2004-2012: Achievements and Future Prospects

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About ISAAA

The International Service for the Acquisition of Agri-biotech Applications (ISAAA) is a non-profit making international network founded in 1990 to facilitate the acquisition and transfer of agricultural biotechnology applications and knowledge-sharing for the benefit of resource-poor farmers in the developing world.

ISAAA has three network Centres: AfriCenter in Nairobi, Kenya, the South East Asia Center in Los Banos, the Philippines and AmeriCenter in Cornell University, Ithaca, New York.

<http://africenter.isaaa.org>

About ASARECA

The Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA) is a non-political organization of the National Agricultural Research Institutes (NARIs) of Burundi, D. R. Congo, Eritrea, Ethiopia, Kenya, Madagascar, Rwanda, Sudan, Tanzania and Uganda. It aims at increasing the efficiency of agricultural research in the region so as to facilitate economic growth, food security and export competitiveness through productive and sustainable agriculture.

www.asareca.org

About PBS

The Program for Biosafety Systems (PBS) is managed by the International Food Policy Research Institute and supports partner countries in Africa and Asia in the responsible development and safe use of agricultural biotechnology. PBS is funded by the U.S. Agency for International Development.

www.ifpri.org/pbs/pbs.asp

About ACTESA

ACTESA was established by the Heads of State of COMESA in 2009 as a Specialized Agency to integrate small farmers into national, regional and international markets. The main goal of ACTESA is to increase farmer productivity and incomes in the Eastern and Southern Africa region through trade in strategic agricultural commodities.

Website: www.actesacomesa.org

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This policy brief highlights the progress made in implementing the project “Regional Approach to Biotechnology and Biosafety Policy in Eastern and Southern Africa” (RABESA). It describes briefly the achievements realized towards the harmonization of biosafety policies in the Member States of the Common Market for Eastern and Southern Africa (COMESA) from the start of the project in 2004 to 2012 .

The Case for Regional Collaboration on Biotechnology and Biosafety Issues

Biosafety issues transcend national boundaries. As such, regional cooperation in biotechnology and biosafety is a sound option for countries wishing to access and gradually build their capacity to effectively implement biotechnology- and biosafety-related international agreements. Regional collaboration also permits cost-efficiency, through the sharing of knowledge, expertise, experiences and resources.

Article 14 of the Cartagena Protocol on Biosafety (CPB)² states that countries may enter into “bilateral, regional and multilateral agreements and arrangements regarding intentional transboundary movements of living modified organisms... provided that such agreements and arrangements do not result in a lower level of protection than that provided for by the Protocol.” Furthermore, the African Union (AU) has stated the need for regional cooperation on biotechnology and biosafety issues. A High-Level African Panel on Modern Biotechnology convened by AU Heads of State observed that “... regional economic integration in Africa should embody the building and accumulation of capacities to harness and govern modern biotechnology. [Such] integration can be an institutional vehicle for mobilizing, sharing and using existing scientific and technology capacities, including human and financial resources as well as physical infrastructure for biotechnology, R&D and innovation” (African Union, 2007)³.

2. The RABESA project

The RABESA project was conceived as a regional initiative to support COMESA-wide cooperation in biotechnology and biosafety issues. At a meeting held in Kampala in 2001, COMESA Ministers of Agriculture resolved that the 19 COMESA Member States⁴ should look into mechanisms for addressing biosafety issues at the regional level, as a means to mitigate any potential adverse impacts of genetically modified (GM) crops on trade and food security in the region. The ministers endorsed the implementation of RABESA, a multilateral initiative, in 2003. The project’s implementation commenced in 2004 with financial support from the United States Agency for International Development (USAID). The project continues to be supported by USAID.

In implementing RABESA, the COMESA Secretariat has partnered with the Policy Analysis and Advocacy Programme (PAAP) of the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA); the African Centre for Technology Studies (ACTS); the Program for Biosafety Systems (PBS); and the International Service for the Acquisition of Agri-biotech Applications (ISAAA AfriCenter).

3. RABESA Achievements

(a) Policy Studies

During the first phase of the RABESA project (2004–2007), policy studies were commissioned in three areas: (i) potential farm-income gains from the adoption of GM crops; (ii) the magnitude of commercial export risks associated with GM crops; and (iii) the delivery of emergency food aid with GM content in the COMESA region. The study on farm-income gains projected that COMESA-member countries could harness substantial benefits from the adoption of genetically modified insect-resistant varieties of cotton and maize. That on commercial export risks revealed that inter-regional export losses associated with the adoption of GM crops in the COMESA region were negligible; although COMESA countries depend heavily on the export of agricultural products to earn foreign exchange, the major exports being coffee, tea, sugar, horticulture, banana and pyrethrum, none has been commercialized anywhere in GM form, meaning there is currently little or no GMO-associated risk to agricultural export incomes..

The food aid policy study revealed that sub-Saharan Africa (SSA) is the largest recipient of emergency food aid globally, and COMESA countries receive 85% of all emergency food aid to SSA. About 50% of the food aid arrives as in-kind donations from countries that are leading producers of GM crops, including USA and Canada. These findings were disseminated and discussed at national consultative meetings held in Egypt, Ethiopia, Kenya, Tanzania, Uganda and Zambia. The process culminated in a regional workshop held in Nairobi, Kenya on 30–31 May 2006. The workshop brought together key stakeholders from biosafety competent authorities, research institutions, the civil society, the private sector and ministries responsible for agriculture, trade and the environment in the COMESA region. Recommendations from the regional workshop, on priority areas of harmonization, were presented at the 4th meeting of COMESA Ministers of Agriculture held in Khartoum, Sudan, in March 2007. Phase II of RABESA started the same year. The Khartoum Ministerial Meeting advised that regional biosafety policies and guidelines on the commercial planting of GMOs, trade in GM products and delivery of emergency food aid with GM content be developed based on the analysis presented in Table 1.

Table 1. COMESA ministerial meeting recommended priority focus areas for harmonization

Areas of focus	Appropriate option /recommendation	Advantages
Commercial planting of GM crops	Centralized regional assessment; national-level decision making	<ul style="list-style-type: none">• Standardized and more transparent• Cost effective• Sharing of resources, information and expertise
Commercial trade in GM produce	Advice/information from a central regional clearing house; national-level decision making	<ul style="list-style-type: none">• Cost effectiveness of regional-level assessment• Cooperation in assessing trade issues• Sharing of information and capacities
Emergency food aid	Guidelines developed at regional level; national -level decision-making on a case-by-case basis	<ul style="list-style-type: none">• Facilitates transit of food aid• Facilitates provision of relief food• Timely humanitarian response

The Ministerial Meeting also recommended the formation of a Panel of Biotechnology and Biosafety Experts (PoE) to serve as an advisory body of COMESA. The Panel was appointed through a rigorous search regionally and formally inaugurated in December 2008. Following a formal competitive process, a drafting team of experts from different African countries was also constituted.

(b) Drafting of Regional Policies and Guidelines, Biosafety Roadmap and Communications Strategy

In March 2009, the COMESA Secretariat and the PoE initiated the drafting of COMESA Regional Biosafety Policies and Guidelines in the three priority areas: commercial planting of GMOs; trade in GM products; and handling of emergency food aid with GM content. A Biosafety Roadmap and a Communication Strategy and were also drafted.

Biosafety Roadmap. Most COMESA member countries have ratified the Cartagena Protocol on Biosafety⁵ and are therefore committed to implementing specific minimum standards regarding procedures for biosafety decision making on the transboundary movement of living modified organisms (LMOs). Many COMESA countries have therefore worked towards establishing their National Biosafety Frameworks (NBFs). However, progress has been very uneven; a few countries (e.g. Egypt, Kenya and Uganda) have progressed to more advanced stages in developing a functional biosafety framework, but the majority are still at early stages. Since COMESA has started a process towards the development of common guidelines for the production of and trade in GM crops, it will be essential for member countries to have functional national biosafety frameworks in order to fully benefit from regional guidance and support, aimed at facilitating trade among and beyond COMESA region..

Therefore, the need exists for information and guidance to help countries move forward in establishing and implementing their national biosafety systems in a stepwise and systematic manner. The practical roadmap is expected to encourage and guide the implementation of national biosafety frameworks by more countries in the COMESA region, and ensure that countries are striving to achieve common goals. Countries with functional frameworks can share their experiences and decisions, benefiting the region as a whole and, in particular, countries with less exposure and capacity.

The Biosafety Roadmap covers in detail the following areas:

1. basic biosafety considerations;
2. components of a national biosafety system;
3. key issues in setting up a regulatory system;
4. international agreements and standards;
5. characteristics of a functional national biosafety system, and
6. rationale for collaboration among COMESA countries.

Communications and Advocacy Strategy: Evolution and growth of agricultural biotechnology, including its applications has been characterized by controversy, divergent views and polarized positions on perceived risks and real benefits. The communication strategy is thus an important cross-cutting instrument for bridging the knowledge and information gaps about the technology and articulating the benefits of a harmonized approach in development of biotechnology and biosafety policies and legislative frameworks.

The core functions of the strategy are to:

- support and facilitate COMESA's harmonization agenda of biotech policies and biosafety frameworks;
- create awareness on the benefits associated with harmonized regional approaches;
- encourage countries' subscription to and domestication of regional guidelines on biotech and biosafety regimes, and
- promote the use of the Biosafety Roadmap in the development and/or completion of functional national biosafety systems.

The Strategy recognizes the need for different communication channels to reach diverse audiences, key among them being governments, regional blocs, researchers, industry, the media, consumers, and community-based organizations. At the national level, the implementation team will liaise with the designated competent authorities who will provide the necessary guidance in domestication of the regional guidelines. The Strategy also recognizes that different categories of stakeholders have different information needs and will require different approaches/ packaging of information, thus the need to undertake a comprehensive stakeholder analysis and mapping in each country.

The Policies and Guidelines, Roadmap and Communications Strategy drafts were subjected to several rounds of technical review, following which their revised versions were discussed and reviewed by the PoE at a meeting hosted by the COMESA Secretariat in July 2009 in Lusaka, Zambia.

The Second Joint Meeting of the Technical Committee on Agriculture, Environment and Natural Resources and respective Ministers thereafter held in Victoria Falls, Zimbabwe, 31 August–2 September 2009, reviewed the implementation of the regional agricultural, environmental and natural resources development programmes in COMESA. At this meeting, project partners presented progress made in implementing Phase II of the RABESA initiative.

Key achievements presented included:

1. The drafting of **Regional Biosafety Policies and Guidelines** on commercial planting of GM crops, commercial trade policy in GM products and access to emergency food aid with GM content. These documents seek to inform science-based decision-making among member States;
2. Identification of a **Panel of Biotechnology and Biosafety Experts** through consultation with member countries to guide the implementation of the RABESA outputs, in particular the recommended regional risk assessment procedures;
3. Development of a **Biosafety Roadmap** to assist countries put in place functional biosafety systems.
4. Development of a **Communication Strategy for Advocacy and Outreach**, intended, in particular, to inform discussion among member countries regarding the harmonization of biotechnology policies and biosafety frameworks; and to broadly provide educational services on all aspects biotechnology and biosafety.

The Ministers recommended that COMESA:

1. Support the operations of the Panel of Experts;
2. Operationalise a Biotechnology and Biosafety Unit in the Secretariat to serve as the regional reference point on biotech-related issues; and
3. Organize a regional meeting to review for endorsement the set of draft Regional Biotechnology and Biosafety Policies and Guidelines; the Communication and Advocacy Strategy; and the Biosafety Road Map. The meeting, organized in collaboration with ASARECA, was to take into account work undertaken on biotechnology by other sub-regional trading blocs such as the Southern African Development Community (SADC), and have a balance of expertise between researchers and regulators,
4. Institute Phase III of RABESA, to support capacity building and the implementation of identified activities.

Following up on the recommendations, the RABESA team organized a regional workshop for COMESA Member States in Nairobi, Kenya, on 19-20 April 2010. The goal of the workshop was to obtain broad stakeholder input into the proposed Regional Biosafety Policies and Guidelines, the Biosafety Roadmap and the Communication Strategy. Thirteen COMESA-member countries were represented at the workshop, with the 61 participants drawn from ministries of agriculture and trade; National Biosafety Focal Points; the private sector; farmer organizations; public research institutions involved in biotechnology research; development partners; and the media. Through a Communiqué developed at conclusion of workshop, the participants acknowledged the importance of the harmonization agenda for the region.

4. Creation of ACTESA

In 2009, the COMESA Council of Ministers and Heads of State created the Alliance for commodity Trade in Eastern and Southern Africa (ACTESA), as Specialized Agency of COMESA. Recognizing the potential of biotechnology in enhancing crop productivity and quality, a biotechnology and biosafety unit has been created within ACTESA, which is now responsible for spearheading the biotechnology agenda of COMESA.

5. Guidance from COMESA Ministerial Meetings

Guidance regarding the future of RABESA was provided during the Third and Fourth Joint Meetings of the COMESA Ministers of Agriculture, Environment and Natural Resources. The third meeting held on 15 July 2010, in Lusaka, Zambia arrived at the following decisions:

- a) Member States should complete national consultations on the three draft harmonized Regional Biosafety Policies and Guidelines [on commercial planting of GM crops, trade and access to emergency food aid with GM content] with a view to presenting them for consideration and adoption at the next joint meeting of Ministers of Agriculture, Environment and Natural Resources; and
- b) ACTESA should develop a long-term comprehensive program on biotechnology and biosafety for consideration and adoption by Ministers at their next meeting.

The Fourth meeting was held in Swaziland in July 2011. The Ministers further recommended that:

- a) The COMESA Secretariat should facilitate intensive national consultations and assist with promoting consensus at the national level involving all stakeholders and complete the national consultations in the remaining five Member States;
- b) COMESA Secretariat should commission a comprehensive analysis of the status of GM Crops and regulatory frameworks in Member States and;
- c) COMESA Secretariat should organize a regional workshop to consider the feedback from national consultations and build consensus before the next Ministerial meeting in 2012.

In response to the directives of the aforementioned COMESA Ministerial meetings, 18 national consultative meetings have been held (from Sept 2010 to Feb 2012) to discuss and obtain feedback the proposed regional biosafety policies and guidelines. In principal, all the COMESA countries have supported and expressed commitment towards the overall concept of harmonizing biosafety policies and guidelines at the regional level. They acknowledge the porous nature of borders and interdependency among countries which offers enormous opportunities in terms of fostering cooperation, synergy and efficiency. However, they were categorical to state that regional cooperation should complement but not override national biosafety systems. During this period, a study analyzing economic benefits of a common framework was commissioned to support informed and evidence-based decision making by member states.

6. Lessons Learnt

Important lessons have been learnt during the implementation of the RABESA project over the past 8 years. Key among these are as follows:

- a) National sovereignty concerns have to be handled carefully to dispel fears that the regional process may infringe on national interests;
- b) Awareness and outreach efforts need to be stepped up in order for countries to appreciate the benefits of a harmonized approach in biosafety decision making;
- c) The process of harmonization can be accelerated if driven by a product that demonstrates the benefits of a regionally harmonized biosafety system;
- d) Regional harmonization of biosafety policies is both a technical and political process that requires strong political will and commitment at various levels within member states.

7. Conclusion

The RABESA initiative has been implemented in a participatory, consultative and inclusive manner in accordance with the directives of the COMESA Ministers of Agriculture, Environment and Natural Resources. Deliberations on the project's activities and outputs have taken place in 24 national workshops, 3 regional workshops and 5 COMESA Ministerial meetings in a span of over 8 years. Given the global trends in the development of biotech crops, the contribution of RABESA to COMESA's efforts in the area of regional integration has been significant. The progress made in implementing RABESA is attributed to the concerted efforts and dedication of COMESA Member States, RABESA implementing institutions, the Panel of Experts, the COMESA Secretariat and the recently created ACTESA.

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Footnotes

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2. The Cartagena Protocol on Biosafety (CPB), an instrument of the Convention for Biological Diversity (CBD), is an international agreement which aims to ensure the safe handling, transport and use of living modified organisms (LMOs) resulting from modern biotechnology that may have adverse effects on biological diversity, taking also into account risks to human health and, specifically focusing on transboundary movements.
3. Juma, C. and Serageldin, I. (Lead Authors) 'Freedom to Innovate: Biotechnology in Africa's Development'. A report of the High Level African Panel on Modern Biotechnology. African Union (AU) and the New Partnership for Africa's Development (NEPAD), Addis Ababa and Pretoria.
4. Burundi, Comoros, Democratic Republic of Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia and Zimbabwe.
5. At the time of writing this report, 163 countries had ratified, or acceded to the Cartagena Protocol on Biosafety. For details on the Protocol: <http://www.cbd.int/biosafety/about.shtml>.