Africa - the new frontier for the GE industry

As a result of difficulties in penetrating the European market because of growing consumer awareness and rejection, biotech corporations and the governments that back them have turned to the developing world, particularly Africa.

By Mariam Mayet

THE genetic engineering (GE) industry is facing a shrinking global market as more and more countries adopt biosafety laws and GE labelling regulations. Moreover, as a result of widespread and mounting consumer rejection and the difficulties experienced by Monsanto in obtaining regulatory approval of its GE wheat, it has decided to pull out of the European cereal market.

Africa and Asia are the new frontiers for exploitation by the agro-chemical, seed and GE corporations. The potential for US agri-business to profit from hunger in Africa through, ostensibly, the provision of food aid, technical assistance, capital investment, agricultural research and the funding of biosafety initiatives, is enormous.

The United States Agency for International Development (USAID) appears to be at the forefront of a US marketing campaign to introduce GE food into the developing world. It has made it clear that it sees its role as having to 'integrate biotechnology into local food systems and spread the technology through regions in Africa'.[1] Through USAID, in collaboration with the GE industry and several groups involved in GE research in the developed world, the US government is funding various initiatives aimed at biosafety regulation and decision-making in Africa, which, if successful, may put in place weak biosafety regulation and oversight procedures. USAID is also heavily involved in funding various GE research projects in a bid to take control of African agricultural research.[2]

Biosafety under threat

The Cartagena Protocol on Biosafety finally came into force, after years of negotiation, on 11 September 2003. This binding international environmental agreement is specifically designed to protect human health, the environment and biodiversity from the risks posed by genetically modified organisms (GMOs). It was countries from the South, and the African group in particular, that consistently championed biosafety and reaffirmed the right of importing countries to ban or severely restrict imports of GMOs in the face of scientific uncertainty, based on the precautionary principle.

To date, 65 countries have ratified the Protocol, with many more ratifications expected before the first Meeting of the Parties to the Protocol takes place February 2004, in Kuala Lumpur, Malaysia[3]. Only 18 countries in Africa have so far ratified the Protocol[4] but many more could be persuaded to do so, in order for them to qualify for

one or another of the numerous biosafety capacity-building initiatives taking place on the continent.

However, the hard-earned victories won under the Biosafety Protocol may be under serious threat from these GE 'biosafety' initiatives. There is an ever-present danger that African countries will be overwhelmed by the volley of technical experts they are peppered with by USAID and GE industry money and expertise, that they will succumb, despite their valid concerns, to these formidable forces.

The fad is the drafting of 'national biosafety frameworks'. With their failure to prevent the Biosafety Protocol from coming into existence, the opportunity to exploit the implementation of the Protocol to promote weak and ineffective biosafety legal regimes and redirect capacity-building towards GE rather than biosafety, has been seized in an attempt to garner much-needed support for this dangerous technology.

Examples of USAID's biosafety initiatives in Africa

USAID through the Association to Strengthen Agricultural Research in East and Central Africa (ASARECA) facilitates collaborative research between their 10 member countries[5], US public and private sectors and international agricultural research centres. It has developed a model for regional technical reviews within these member countries in close collaboration with national biosafety focal points.[6] The concern is that this initiative may well be used as a launching pad to foster regional acceptance of GE through weak biosafety regulations, and thereby promote technology transfer and private sector investment in GE in Africa.

USAID's Agricultural Biotechnology Support Project (ABSP) has established a partnership with seven Southern African Development Community (SADC) countries - Malawi, Mauritius, Mozambique, Namibia, South Africa, Zambia and Zimbabwe - to similarly provide technical training in biosafety regulatory implementation. Its ostensible goal is to promote conformity with the science-based standards of the World Trade Organisation's Sanitary and Phyotosanitary Agreement and the Biosafety Protocol.[7] Needless to say, taking into account the US's WTO challenge of the European Union's de facto moratorium on GMOs, it is anticipated that every attempt will be made to ensure that biosafety regulations are consistent with the US interpretation of the WTO rules, rather than the Biosafety Protocol.

USAID has awarded the Program for Biosafety Systems (PBS), a consortium, $14.8 million to assist developing countries to enhance biosafety policy, research, and capacity.[8] Included in this list of developing countries are a number of countries in East and West Africa. The International Service for National Agricultural Research (ISNAR) heads the consortium. The consortium is reported as having amongst its goals, the rendering of assistance 'to governments in making science-based decisions about the effects on biodiversity of introducing GMOs into the environment' and assisting such countries in regulating and conducting experimental field trials. If this is

the case, then these goals are preposterous as they are unashamedly aimed at usurping decision-making powers of countries and their sovereign rights to perform regulatory functions.

It is extremely ironic that the US, which is still not a Party to the Convention on Biological Diversity and cannot therefore ratify the Biosafety Protocol (and will not do so in the foreseeable future), should want to promote biosafety in Africa and the implementation of the Biosafety Protocol. It appears that the US and the GE industry are pursuing a well-orchestrated strategy in Africa to lower resistance to GE and gain acceptance of this extremely controversial technology. These initiatives may be given considerable impetus by the New Partnership for Africa's Development (NEPAD) plan to establish a high-level advisory panel aimed at 'facilitating trade in GM products between African countries by harmonising biosafety regulations'.[9] However, this panel has yet to be established and its terms of reference made public. The direction that such a panel would take will reveal itself in the future.

It is worthwhile also to mention that the United Nations Environment Programme (UNEP), with funding from the Global Environment Facility (GEF), is conducting a worldwide capacity building project involving more than 100 developing countries, several from Africa.[10] The main objective of this project is 'the preparation of National Biosafety Frameworks in accordance with the relevant provisions of the Biosafety Protocol'.[11] Its overall efficacy in capacitating African countries to establish sound biosafety frameworks remains to be seen. Crucially, the nature of its linkages with the USAID/GE industry biosafety projects, if any, will also become apparent with the passage of time.

Finally, what remains to be seen is the extent to which South Africa's biosafety law will be used as a basis to harmonise biosafety laws on the continent. Zimbabwe, the only other African country aside from South Africa to have biosafety laws, has already followed South Africa's example. South Africa's Genetically Modified Organisms Act is a poor example of biosafety regulation.[12] It is in effect merely a permitting system designed to expedite GM imports into the country and releases into the environment. It specifically mandates that biosafety risk assessment involve no more than a paper audit, which entails a review of the 'safety' information generated by the corporations during product development.

Africa's redeeming assets

While on the surface, this picture appears bleak, there is a groundswell of NGOs, consumers, farmers, government officials, parliamentarians and scientists opposing GE in Africa. Benin, for example, has imposed a moratorium on the import and cultivation of GMOs.

Last year, several countries in Southern Africa resisted and seriously questioned the donation by the US, through USAID, of GE food aid. Zambia refused to accept the

food aid and effectively took a decision to ban the distribution of food aid within its borders. Malawi, Mozambique and Zimbabwe requested that all US-imported GE maize be milled prior to distribution in order to prevent its inadvertent use as seed. Lesotho and Swaziland authorised the distribution of non-milled GE aid but not before it warned the public that the grain should be used strictly for consumption and not cultivation. This saga played an important role in heightening the debate within Africa on the health, social, economic and environmental impacts of GE crops.

An offshoot of this is the publication by the SADC Advisory Committee on Biotechnology and Biosafety of their recommendations regarding GE food aid. These are significant because a key recommendation is that donors of GE food aid should comply with Prior Informed Consent principles and the notification requirements of the Biosafety Protocol. This is extremely important, given that the World Food Programme has admitted that it has since 1996 been delivering food aid that included GE food products, without warning the recipient countries.[13] It also calls for the African region to develop harmonised policy and regulatory systems based on the OAU African Model Law on Safety in Biotechnology (Model Law), and the Biosafety Protocol.

The Model Law is a set of holistic and stringent biosafety rules drafted by a number of African biosafety experts and crafted specifically to protect Africa's biodiversity, environment and the health of its people from the risks posed by GMOs. The African Union Summit held in Maputo in July 2003 pointedly encouraged African countries to use the Model Law as a basis for biosafety regulation.[14] The adoption of the Model Law in Africa will give countries leverage to resist attempts by the powerful GE industry to use Africa as experimental and dumping grounds for their products. Africa's biodiversity and the health of its people can only be protected from the risks posed by GMOs if Africa as a whole subscribes to common and uniform biosafety standards based on the precautionary principle.

These gems are important contributions towards maximising Africa's chances to limit the risks posed by GE. It is clear, however, that much needs to be done. One of the key challenges for African civil society in particular is to embark on strategies and initiatives directed at influencing and shaping policy, legislative and procedural frameworks on the continent and engage national and regional bodies such as SADC and NEPAD.

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Endnotes

1 USAID Announces International Biotech Collaboration. US Department of State, June 2002 http://www. Usinfo.state.gov/topical/glocal/develop/02021202.htm
2 For instance, USAID funds the African Agricultural Technology Foundation (AATF), which is also supported by the Rockefeller Foundation, OECD, Monsanto, Dow Chemicals, Dupont and Syngenta. This passes off as an 'African initiative' because its headquarters is in Sierra Leone. The serious concern is that the AATF may be a

vehicle to use poverty and the urgent need for food security strategies in Africa to push for the opening of markets by sharing patents and seeds by taking control of African agricultural research. Take note also that because the initial predictions of the GE industry have not materialised, huge amounts of money are now being invested in the so-called 'second generation' of crops. The Nigeria-based International Institute for Tropical Agriculture and its parent body the Consultative Group for International Agricultural Research (CGIAR) recently announced its 'Harvest Plus Plan' to embark on resources for second-generation GE crops (maize, cassava, and sweet potatoes). The Plan has received a cash injection of US$100 million, $25 million of which will come from the Bill and Melinda Gates Foundation. These are but two examples.

3 See further, http://www.biodiv.org/biosafety.aspx?sts_rtf&ord=dt

4 Ethiopia, Senegal, Kenya, South Africa, Burkina Faso, Nigeria, Ghana, Tanzania, Cameroon, Tunisia, Mozambique, Mali, Botswana, Mauritius, Djibouti, Liberia, Uganda and Lesotho.

5 ASARECA supports research in Burundi, Democratic Republic of Congo, Eritrea, Ethiopia, Kenya, Madagascar, Rwanda, Sudan, Tanzania and Uganda.

6 Morris, J and Koch, M. Biosafety of genetically modified crops - an African perspective. AgbiotechNet 2002, Vol.4 December, ABN 102.

7 USAID launches Biotechnology Initiatives with Africa: programs foster improved regulation, research, development. 2 March 2001. http://www.biotech-info.net/USAID.html.

8 Consortium to support biosafety in developing countries. 9 June 2003 http//:www. Futureharvest.org/pdf/Biosafety_Final1.pdf.

9 African biotech advisory panel in the pipeline. 24 July 2003. http://www.scidev.net/NEWS/indec.cfm?fuseaction=read=926& lanaguage=1

10 These countries include: Algeria, Benin, Botswana, Burkina Faso, Central African Republic, Comoros, Congo, Cote d'Ivoire, Djibouti, Gambia, Ghana, Guinea Bissau, Ethiopia, Lesotho, Liberia, Libya, Madagascar, Mali, Morocco, Mozambique, Niger, Nigeria, Rwanda, Senegal, Seychelles, Sierra Leone, Sudan, Swaziland, Tanzania, Togo and Zimbabwe.

11 Information on the project and future plans is available at http://www.unep.ch/biosafety.

12 See further, Mayet, M. Critical Review of Existing Legislative Framework for Genetic Engineering in South Africa Biowatch South Africa, August 1999; and Mayet, M. Scrutinising the Legalities of Genetic Modification in South Africa: Food Safety, Public Participation and the Conservation and Sustainable Use of Biological Diversity. Biowatch South Africa, February 2000. Found at http://www.biowatch.org.za.

13 Pearce, F. 'UN is slipping modified food into aid' New Scientist,19 September 2002.

14 See further, Mayet, M. Why Africa should adopt the OAU Model Law on Safety in Biotechnology http://www.biowatch.org.za/oau_modllaw.htm.