



**Safe Food Coalition** 



RESPONSE TO OPEN INVITATION BY CSIR FOR THE DEVELOPMENT OF GUIDELINES TO IMPLEMENT THE PROVISIONS OF SECTION 78 OF THE BIODIVERSITY ACT

Additionally supported by:

Farmers Legal Action Group, South Africa TWIG, South Africa Ekogaia Foundation

8 March 2006

These comments are submitted in 2 parts. The first deals with our general comments, and the second, with the rationale for the development of comprehensive Ecological Risk Assessment Regulations.

## GENERAL

We thank the CSIR for the open invitation extended to members of the public to comment on the development of guidelines for section 78 of the National Environmental Management Biodiversity Act (NEMBA, "Biodiversity Act").

We state at the outset, that we are extremely concerned at both the extremely short time frame allocated for this project as well as the stated purpose of the guidelines, namely, "the Guidelines are intended to be as simple as possible and a practical aid to decision-making and flexible enough to accommodate changing circumstances and new technologies." It is our respectful submission that the CSIR and the drivers for this project, the Department of Environmental Affairs and Tourism (DEAT) are heading in the wrong direction, fast.

- It is our view that what is required is the development of a set of comprehensive Ecological Risk Assessment (ERA) Regulations for South Africa. The ERA must be subject to peer review and must serve as a basis for decision-making in terms of both the Genetically Modified Organisms Act and the Biodiversity Act, prior to any approval being given for an environmental release;
- 2. We believe that what is necessary is a 'science document' produced by a small but competent team of independent scientists who are able to outline the risks posed by GMOs in a South African context, taking into account our unique biodiversity, climate and ecology. Such a document must also describe the research and monitoring necessary to evaluate, avoid and restrict such risks.
- 3. Such an ERA must develop an appropriate monitoring and reporting component and in doing so, prioritise the risks that require immediate

attention, taking into account the long history of GMO releases in South Africa and indeed, the numerous GM events/varieties being grown all around the country;

- 4. We are of the view that socio-economic impacts must be an inextricable component of the ERA and note the provisions of Article 26 of the Biosafety Protocol and the principles of the National Environmental Management Act (NEMA), in this regard. It is our view that the full implications of the release of GMOs on small-resource poor farmers and women have been completely ignored to date and believe that the ERA must devote a component to the development of appropriate criteria for assessment and monitoring of socio-economic impacts;
- 5. Further, we are of the view that the ERA must be promulgated in terms of Regulations under the Biodiversity Act. We are thus, opposed to the drafting of mere "Guidelines" which will have not have the force of law behind it; and
- 6. We are extremely concerned at the short period of time allocated. We believe that whilst the scientific capacity exists in our country to be able to do this work, the process should not be rushed and a period of at least six months must be given for the development of the comprehensive ERA Regulations that are required for South Africa, and should not be rushed.

In the interim, and until such time as an adequate ERA has been put in place, we call for an immediate moratorium to be placed on all environmental releases.

## **RATIONALE/MOTIVATION**

South Africa is one of the countries in the world with the fastest rate of adoption of genetically modified crop plants in food and agriculture. Several GM crops have already been released into the environment since 1989 and to date, approximately, 500 000 ha is planted to GM crops.

- To date the benefits of GM crops have been assumed and not independently verified;
- Genetically modified crops are associated with significant environmental risks;
- South Africa is accepting old GM technologies that have been banned in many countries in the North (the European Union, Norway etc.);
- There is an extreme paucity of ecological research conducted in South Africa on GMOs (no peer review research exists);
- No discreet, appropriate and comprehensive tools have been developed for the assessment of (a) pre-release ecological risks; (c) socio-economic impacts; and (c) research priorities for post-release monitoring; and
- Socio-economic impacts have been ignored.

Currently, our knowledge and understanding of the ecological impacts of GM crops is inadequate. It is widely acknowledged that more, scientifically rigorous ecological research on the environmental risks of GMOs is critical. There is severe imbalance in the speed at which the technology has been adopted versus the rate at which research has been conducted to investigate risk, globally, South Africa included.

South Africa has put in place discreet national legislation to regulate GMOs, namely, the Genetically Modified Organisms Act (GMO Act). South Africa is also a Party to the Cartagena Protocol on Biosafety and is in the process of implementing various provisions by way of legislative and institutional reformmeasures. Additionally, the National Environmental Management Biodiversity Act (NEMBA, "Biodiversity Act" deals specifically with environmental impact of GMOs. Nevertheless, these measures require the tools to assess the potential significant environmental and sociological risks in order to avoid environmental risks and socio economic consequences. It is also commonly accepted that the public have not been adequately considered in decisionmaking and that indeed, the lack of public participation mechanisms are no longer defensible in terms of the Biosafety Protocol and legislation such as

the Promotion to Access to Justice Act (PAJA), particularly, in the face of increasing public pressure.

The current lack of information and understanding of the environmental risks of GM crops has a number of potential consequences. These range from serious environmental damage and reversion to intense chemical control measures in the event of pest resistance developing. The environmental risks associated with GM crops include:

- Detrimental effects on non-target insects;
- Gene flow to wild relatives or non-transgenic varieties;
- Development of weediness;
- Development of resistance or tolerance;
- Production of novel toxins;
- Recombination of bacteria or viruses to produce new pathogens;
- Impacts on changes in agricultural management practices on biodiversity;
- Loss of crop genetic diversity; and
- Unanticipated consequences.

Similarly, there is very little if any, independent, peer reviewed studies, that investigate in a comprehensive manner, the medium to long-term socioeconomic impacts, particularly concerning resource poor farmers. Comprehensive studies are lacking that address issues concerning the high price of GM seeds, the impacts of patents which make it illegal for farmers to propagate their own planting material – a common practice resource poor farmers in Africa cannot survive without. The full implications of the technology agreements on small-resource poor farmers and women have not been adequately addressed to date and should be urgently investigated.