



THE FREE MARKET FOUNDATION

of Southern Africa

progress through freedom

Comment on the Genetically Modified Organisms Amendment Bill [B34-2005]

1. Introduction

The Free Market Foundation (FMF) is an independent policy research and educational organisation founded in 1975 to promote and foster an open society, the rule of law, personal liberty and economic freedom in Southern Africa. It is a non-profit organisation, financed by membership subscriptions, sponsorships, donations and income from its consultancy company. The Foundation conducts research, produces a wide range of electronic and other publications, and lobbies for a legal, monetary and fiscal environment conducive to high economic growth and rapid development.

2. Creating a high growth economic environment in South Africa

2.1 Doubling GDP every 10 years

We are in full agreement with the government that the only lasting solution to poverty in South Africa is high economic growth, at least 6% but higher if possible. A growth rate averaging 7.2% per annum would double the country's GDP every 10 years. South Korea demonstrated that such a growth rate is possible and sustainable by growing its economy at 7.4% per annum for the period 1980 to 1995.

An important factor in that growth was that over the two decades to 1995 South Korea's total government expenditure (for all levels of government) averaged about 21% of GDP). Critics who allege that the high growth rate resulted from massive state intervention in the economy are totally wrong – it is not possible for a government to intervene excessively if all levels of government limit consumption to 21% of GDP. Naturally, if the economy is doubling every ten years and the percentage of government expenditure remains constant against GDP, government expenditure also doubles every ten years. However, if the percentage remains at a relatively low level, it does not displace and consume private investment funds.

2.2 The role of economic freedom

According to the *Economic Freedom of the World 2005 Annual Report*, South Africa advanced from joint 44th (in 2002) to joint 38th (in 2003) on the list of economically free countries of the world. Closer inspection shows that this gain resulted from a 0.1 improvement in rating, from 6.8 to 6.9, a rating and ranking that is shared with Cyprus, France, Greece, Jamaica and Peru.

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The report shows that a high economic freedom rating of a country converts into considerable benefits for its citizens. The most economically free countries have higher per capita incomes, higher economic growth rates, higher investment per capita, less unemployment and their people live longer. The poorest members of the population have higher incomes than the poor in other countries, there is greater adult literacy, less infant mortality and these countries have greater “human development” as measured by the United Nations Human Development Index. Some commentators continue to contend, on purely ideological grounds, that government command economies are better for the people but all the facts are stacked against them.

It is true that most of the other countries with similar levels of economic freedom as South Africa have much higher per capita incomes than South Africa. Peru’s is much lower than ours and Jamaica’s is about the same. Without fail, research will show that the countries with low per capita incomes have, as South Africa has done, been doing the wrong things for a long time. Apartheid shackled the majority of our citizens for many years and caused the economy to shrink for more than a quarter of a century. Since 1994, the government has done many of the right things and must keep doing them for the benefit of the people.

2.3 South Africa’s economic policy and GMO’s

Developing countries, such as South Africa, are being urged to adopt policies that are not in the best interests of their people. They are being asked to forego the benefit of new technologies that will help them feed their people, to utilise costly “cleaner” technologies instead of the ‘dirty’ technologies that the rich countries used when they were poor with the stated purpose of reducing pollution of the atmosphere, and to refrain from using pesticides such as DDT and allow their people to rather risk death from malaria. The people asking the governments of developing countries to impose these costs on their people are invariably from rich countries that can afford the luxury of the additional cost, or are themselves in comfortable circumstances and will not be unduly affected by the consequences of adopting the costly policies.

In some cases the fundamental reason for attempts to persuade developing countries to adopt what for them are counter-productive policies, has more to do with reducing their competitiveness than with concern for their people. Wealthy countries often refuse to allow imports from developing countries for spurious reasons, or alternatively, either levy high import duties or impose quotas to keep out imports from low-cost countries, or heavily subsidise their own producers to the point where they can export to low-cost countries at prices well below their cost of production. Governments of developing countries, including South Africa, therefore need to take great care to ensure that they place the interests of their own citizens above the interests of “planet earth”, especially when no evidence can be produced to substantiate the claims of people propagating precautionary policies aimed at preventing South Africans from utilising technologies with the potential for highly desirable outcomes.

South Africa’s Members of Parliament should be constantly aware of the conflict of interest between the “developed” and “developing” world. They should also consider that the decisions and policy proposals emanating from world bodies are not necessarily benign, and often motivated by people with vested interests and ulterior motives.

Every piece of legislation adopted in Parliament has cost implications for the economy. If regulation is increased, government costs rise by the cost of implementation, administration and policing. People affected by the legislation bear the cost of complying. These costs are generally recognised even though the quantum is not always appreciated. However, another

cost that is not usually given any recognition by legislators is what economists call “opportunity cost”. This cost relates to the economic activity that never takes place, the improvements or innovations that do not occur, and the wealth that is not produced.

3. Regulatory Impact Assessment

The Bill makes provision for environmental impact assessments to be provided “where required” to “conduct activities related to genetically modified organisms”. One can assume that such an environmental impact assessment will cost the applicant a considerable amount of money, consuming executive and technical time and delaying the progress of the “activity” in which the applicant wishes to engage. Such a requirement is also likely to severely limit SMME activities in this field. But how much money, how much delay, and who will it exclude? Do the drafters of the Bill have any idea? Will they be told what the cost implications are for the government and the economy?

Legislators need to know the answers to these questions before approving legislation of this nature. Genetic modification has implications that range from the innocuous to the profound. These gradations need to be disaggregated so that the innocuous (extremely safe) activities can be conducted without hindrance, while the activities that have profound implications are treated with due care.

A regulatory impact assessment needs to be done (if it has not yet been carried out) and the various aspects need to be evaluated according to their implications. However, the bias in the assessments should be towards allowing as much activity as possible free of close regulatory oversight in order to reduce costs as much as possible for the applicant.

4. Environmental Impact Assessment

Provision should be made in the Bill for total exemption of activities that environmental impact assessments show to represent no danger to the environment. There is no sense whatsoever in requiring repeated assessments of the same activity when it has been clearly shown to be environmentally neutral. In addition, if it is determined that a particular type of activity is environmentally safe if carried out under specific conditions, researchers should be entitled to carry out that type of activity under those conditions without having to apply for a permit. The object should be to reduce costs as far as possible in order to encourage research and stimulate economic activity in the country.

5. Risk reduction

One of biotechnology’s great advantages is that it became available almost immediately to those outside the industrialised countries. Since it builds on traditional agriculture and microbiology to help improve regionally important crops, biotechnology has proved to be an important element in increasing food production in South Africa.

It is important to note at the outset that the objective of biosafety is to minimise the potential risks and to manage such risks. The objective of biosafety is for all intents and purposes not meant to avoid risks entirely. Biotechnology oversight should create an enabling environment that fosters new technologies and one that does not deter research and development. Biotechnology has the ability to improve the lives of millions of individuals. However, the major purpose of the amendments to the act are to substantially increase the amount of red tape involved in the regulation of biotechnology in South Africa. One of the major additions to the act is the incorporation of the Cartagena Protocol of the Convention on Biological Diversity. Whilst many of the goals of the Protocol seem unobjectionable on the surface, further inspection reveals that they are heavily focused on centralised planning and implementation, making them cumbersome and inflexible.

6. The Cartagena Protocol

The Cartagena Protocol came into force in South Africa on 12 December 2003. The Protocol addresses a broad spectrum of issues related to the protection of biological diversity. Its stated intention, 'the conservation of habitats in developing nations' is admirable, and the agreement's specific objective is crafted to sound unobjectionable:

In accordance with the precautionary approach contained in Principle 15 of the Rio Declaration on Environment and Development, the objective of this Protocol is to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on trans-boundary movements.

However, one must consider that the precautionary principle requires action to be taken to avoid a risk even when there is incomplete scientific evidence as to its magnitude and potential impact. In practice, it has been interpreted to mean that a technology should not be used unless and until it has been shown to be absolutely safe. This means that the usual burden of proof is reversed: new technologies are assumed to be guilty until their innocence can be proven to a standard demanded by their critics, which is not possible.

Doctor Elizabeth M. Whelan, the president of the American Council on Science and Health, notes objections to the precautionary principle:

First, it always assumes worst-case scenarios. Second, it distracts consumers and policy makers alike from the known and proven threats to human health. Third, it assumes no health detriment from the proposed regulations and restrictions. By that I mean that the precautionary principle overlooks the possibility that real public health risks can be associated with expending resources on eliminating miniscule hypothetical risks.

(Whelan, 1996)

Focusing mainly on the possibility that new products may pose theoretical risks, the precautionary principle applied to agricultural and food biotechnology ignores very real existing risks that could be mitigated or eliminated by those products. If the precautionary principle had been applied decades ago to innovations like polio vaccines and antibiotics, regulators might have prevented occasionally serious, and sometimes fatal, side effects by delaying or denying approval of those products, but that precaution would have come at the expense of millions of lives lost to infectious diseases.

These regulations severely compromise the potential for new technology. By acceding to the protocol South Africa has risked deterring large multinational biotechnology companies. The ramification of this action is that millions of poor South Africans lose out on the potential benefits of biotechnology research that does not take place. Furthermore, the country could potentially lose out on major investment that could provide jobs and reduce poverty in South Africa. Without such investments highly skilled South African scientists may choose to leave the country in order to pursue their occupations elsewhere. The amendments are likely to increase the amount of paper work and costs of field-testing plant varieties created with biotechnology and will thus become a potent disincentive to research and development in South Africa.

Miller and Conko (2000:87) note, "The Biosafety Protocol has become the UN's Trojan horse, surreptitiously delivering ruinous biotechnology-averse regulatory policies to the developing world".

7. South African agriculture

Although genetic modification has many applications, one of the most important at this juncture is the extent to which the technology can enhance the lives of the poorest South Africans. Small-scale farmers and their families can be among the greatest beneficiaries.

Increasing numbers of small-scale farmers in South Africa are benefiting from genetically modified organisms. Since the introduction of GMO technologies they have seen their crop yields greatly increase and their workloads substantially reduced. As a result, they have been able to produce more than what they consume, affording them the opportunity to sell their excess product, substantially increasing their general welfare.

Free Market Foundation researchers had occasion to visit some of these farmers to observe for themselves how small farmers are embracing the new technology.

Consider the case of Rabbie Mtungwa. In the heart of KwaZulu-Natal in the area of Mlondozi, Rabbie has a farm of approximately 5 hectares. Previously Rabbie planted conventional maize seed and struggled to produce enough on his land to feed himself, his wife and his 8 children. However, a few years ago he was introduced to biotech (bt) maize seed, the no-till planting system, and an effective weed killer. Four months ago he harvested his fourth successful crop of bt maize. In this short time, Rabbie has been able to greatly improve his and his family's well being. As a result of the bt maize Rabbie's maize yields have almost trebled. He has bought a tractor and a bakkie, the no-till system has reduced his workload, he has been able to buy clothes for his family and send all his children to school.

The benefits of no tillage are that Rabbie does not lose valuable topsoil as a consequence of the damage that tilling does to his land. The benefits of reduced soil erosion not only benefit Rabbie but the wider environment as well. Rabbie is also able to save far more time by not having to constantly weed his farm. Rabbie says that this is one of the greatest benefits since he is now able to spend more time with his family. He is increasing the area he has under production and has no intention of going back to the old methods and seeds.

By increasing the efficiency of agriculture and food production, genetically modified seed can significantly increase the availability and nutritional value of foods and reduce their cost. However, the application of the precautionary principle will stall progress and perpetuate the situation in which many South Africans currently find themselves, empty stomachs and unable to afford high and rising food prices. Furthermore, biotech products offer environmental benefits, such as plants with greater yields, requiring less agricultural chemicals because of biological alternatives to chemical pesticides.

8. Conclusion

The purpose of this submission is to focus attention on:

- The economic consequences of the increased regulation contained in the current Bill, which is being added to the requirements contained in the existing legislation, and especially its possible retarding effect on potential economic growth;
- The need for scepticism about the objectives of those who advocate the precautionary principle;
- The value that can be gained from subjecting this Bill (including its permit requirements and possible Environmental Impact Assessment) to a Regulatory Impact Assessment; and

- The economic and welfare gains that can be achieved from allowing as much innovation as possible so as to increase the efficiency of the agricultural production of both small and large farming enterprises in South Africa.

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