Gene Technology (New South Wales) Bill

Gene Technology (GM Crop Moratorium) Bill

Second Reading

The Hon. IAN MACDONALD (Minister for Agriculture and Fisheries): I move:

That these bills be now read a second time.

Gene technology is powerful new technology that is developing at a rapid rate. Gene technology is now broadly acceptable as a vital scientific procedure in human medicine providing methodologies for tackling a vast range of afflictions impacting on humans. Gene technology involves the modification of living organisms by incorporating or deleting one or more genes to introduce or modify specific characteristics of the organisms. Potential benefits from the use of the technology may include improved health, a safer and more secure food supply, new food products and a more sustainable environment. While the development and use of some genetically modified organisms [GMOs] and genetically modified [GM] products have been regulated by a variety of Commonwealth, State and Territory laws and administrative bodies, there have been gaps in the regulatory scheme.

The States, Territories and the Commonwealth have been working together over a number of years to establish a co-operative and nationally consistent regulatory scheme for gene technology that is not already regulated. In this respect we have signed an intergovernmental agreement with the Commonwealth and all other States and Territories to pass complementary legislation to the Commonwealth Gene Technology Act 2000. The new regulatory scheme is a national scheme, not a Commonwealth scheme. It involves the adoption and application of the Commonwealth gene technology laws by the States and Territories. The Commonwealth Gene Technology Act 2000 and the Gene Technology (Licence Charges) Act 2000 commenced on 21 June 2001.

The Gene Technology (New South Wales) Bill, which is before the House, provides the New South Wales component of the new nationally consistent regulatory scheme. It applies the Commonwealth gene technology laws as laws of New South Wales. The passage of the bill will ensure that the national regulator of gene technology established by the Commonwealth Gene Technology Act 2000 has the power to act in all circumstances in this State wherever gene technology is used. The new regulatory scheme is designed to protect public health and safety and to protect the environment. Section 56 of the Commonwealth Gene Technology Act 2001 requires that:

… the Regulator must not issue the licence unless the Regulator is satisfied that any risks posed by the dealings proposed to be authorised by the licence are able to be managed in such a way as to protect:

(a) the health and safety of people; and

(b) the environment.

To reiterate: The two key elements of gene technology impacts are a Commonwealth responsibility. The scheme provides for independent, legally enforceable auditing and monitoring compliance and it provides for community consultation and transparency in decision making. A Gene Technology Ministerial Council has been established. It consists of Ministers from the Commonwealth and each participating State and Territory. The council will oversee the operation of the gene technology regulator and issue policy principles, policy guidelines and codes of practice. Policy principles may be issued by the ministerial council to deal with ethical issues; to recognise areas for genetically modified crops or non-genetically modified crops, being areas designated under State laws for marketing purposes, such as is proposed under the Gene Technology (GM Crop Moratorium) Bill 2003; and for other purposes that may be specified by regulation.

The legislation uses a range of regulatory tools to control activities with genetically modified organisms based on the level of risk posed by the proposed activity. All activities with genetically

modified organisms are prohibited unless the activity is an exempt dealing, a notifiable low-risk dealing or licensed by the regulator. The Commonwealth gene technology laws provide for the establishment of the Office of the Gene Technology Regulator [OGTR]. This is a statutory position, the holder of which reports directly to the Commonwealth Parliament. The Office of the Gene Technology Regulator is an independent decision maker on licence applications. Nevertheless, the Office of the Gene Technology Regulator may not issue a genetically modified organism licence where this would be inconsistent with a policy principle issued by the ministerial council.

In considering licence applications, the Office of the Gene Technology Regulator will undertake scientific risk assessments of the risk that each application may pose to human health and the environment and consult with the statutory advisory committees, governments and the public. All applications for genetically modified organisms to be released into the environment and all decisions by the regulator are made available to the public. They will also be forwarded to each State and Territory government for advice and comment. The regulator may also undertake or commission research on risks posed by genetically modified organisms. The Office of the Gene Technology Regulator is also responsible for monitoring activities involving genetically modified organisms.

The OGTR has a broad range of enforcement powers, including the ability to issue directions, cancel or suspend licences and seek injunctions. Stringent penalties are provided for breaches of the legislation. The OGTR maintains a GMO record for the assistance of the public. This is a centralised database recording of all licences of genetically modified organisms and genetically modified products approved in Australia. The OGTR also reports annually to the Federal Parliament, with copies of reports provided to the States and Territories for reporting to their parliaments. The gene technology legislation establishes three key advisory groups to assist the Ministerial Council on Gene Technology and the OGTR.

The principal functions of these committees are as follows: the Gene Technology Technical Advisory Committee will provide scientific and technical advice to the Office of the Gene Technology Regulator on each licence application; the Gene Technology Community Consultative Committee will provide community views; and the Gene Technology Ethics Committee will provide advice on the ethics of gene technology, appropriate ethics guidelines and any necessary prohibitions. Queensland, Victoria, Tasmania and South Australia have already passed legislation for their participation in the national scheme regulating gene technology. Western Australia introduced similar legislation in its Parliament in 2001. It has passed through the Legislative Assembly and was introduced in the Legislative Council on 26 June 2002. This Government believes the proposed national scheme has significant advantages over each State and Territory establishing its own regulatory system.

The Gene Technology (New South Wales) Bill 2003 will ensure that New South Wales is a part of the co-operative national regulatory scheme. It will ensure consistency of decision making across Australia, resulting in increased protection of public health and safety and the environment. Other regulatory bodies also have a role in this area, including Food Standards Australia New Zealand in the labelling of food products; the Australian Pesticides and Veterinary Medicines Authority in the registration and conditions of use of pesticides where the GM crop involves a new-use pattern for a pesticide; and the Therapeutic Goods Administration where the GM involves medical use. However, it is important to appreciate that the OGTR has statutory authority over the human health and environmental implications of dealings with GMOs. It cannot consider the marketing implications of the commercial release of GM food crops. This is where the second bill that I have introduced comes into the picture.

The Gene Technology (GM Crop Moratorium) Bill is intended to implement the Premier's announcement on 3 March 2003 that the Government would ban the commercial production of certain genetically modified crops in New South Wales for three years. This was to provide the community with time to evaluate the impacts of the introduction of GM crops on the marketing of non-GM crops. As I indicated earlier, the application of biotechnology to genetic modification of plants and other organisms has tremendous potential for the improvement of human health, the environment and commercial agriculture. Already we have the situation where all the insulin required for diabetics in Australia is produced by a GM micro-organism. This has resulted in a purer, safer and cheaper product for diabetics.

In Tasmania genetic modification is being used to improve the value and use of the opium poppy for

human medication. Many medical diagnostic tests these days depend on a reagent produced by GM technology. In agriculture the development of cotton genetically modified to produce a toxin active against its main insect pests has led to a reduction of up to 50 per cent in the application of insecticides—which would clearly benefit people in towns such as Gunnedah. It will benefit the environment, and hence the community. There is a great deal of research world wide directed at the development of GM plants that produce pharmaceuticals or other products with considerable advantages for human health.

For example, rice with a higher level of iron and vitamins has been developed for people who depend heavily on rice for their nutrition. Products are also under development that will produce new or modified products and lead to new food products such as oilseeds with modified fatty acid composition for health or feedstock for industrial products such as biodegradable plastics. It is also realistic to hope for plants that will either cope with environmental stresses such as soil and water salinity or even improve the environment in terms of competing better with severe environmental weeds or the bioremediation of contaminated land. In the medical area, the potential for biotechnology and genetic modification to cure diseases or to address the health problems of both affluence and poverty are enormous.

So the potential for the betterment of humankind and the environment from the application of this exciting new technology is so large that we cannot afford to miss out. However, we must make every effort to ensure that this potential is achieved with absolute minimum adverse impact. While the potential benefit is enormous, there are risks if the technology is not contained and managed appropriately. I indicated earlier the strength and transparency of the regulatory regime implemented by the Office of the Gene Technology Regulator. However, despite this there remains public concern about the use of gene technology. Most concerns in the community are based on the practical issue of this technology and its impact on, first, human health; secondly, the environment; and, thirdly, the marketing of agricultural products, especially non-GM products.

Second Reading

[*Debate resumed.*]

The Hon. IAN MACDONALD: As I said, the potential impact of particular GM plants or animals on human health and the environment is the responsibility of the OGTR. It is clearly in the national framework. It has the legislative power and the resources to address those areas of concern, and the New South Wales Government is confident in the mechanisms and processes it has developed to ensure that any research for commercial release of GMOs will not adversely impact on human health or the environment. For honourable members who are interested, I have a copy of the document that was released in relation to canola. It is one of the most thorough documents I have ever read. It deals with the issues that people have raised in relation to the health and safety aspects of GMOs. At an appropriate point in the debate, possibly in my reply, I will cite certain sections from it to show the thoroughness of the research done by the OGTR.

In terms of the impact on agriculture, a great deal of effort has gone into identifying and addressing the impact that the introduction of GM canola would have on farming production systems in New South Wales and Australia. That is because GM canola is the next GM crop likely to be approved by the OGTR for commercial release and because canola is an important component of the cropping rotations of New South Wales. Honourable members would be aware that 26 May is the closing date for submissions to the Office of the Gene Technology Regulator, and I anticipate that the OGTR will release a report soon after that.

Mr Ian Cohen: How soon?

The Hon. IAN MACDONALD: I have no idea; it is up to the OGTR. It could be the very next day. It should be recognised that GM cotton has been produced commercially in Australia for some years. Another GM plant that has been released for commercial production is GM carnation. Protocols have been developed to address on-farm management issues such as the development of so-called super weeds through crossing the GM canola with related weed species and the potential for the development of resistance in other weed species due to excessive reliance on the one herbicide for

weed control. These protocols are also intended to address the final area of concern, which is that of marketing of non-GM canola. This concern arises from the potential for crossing between GM canola and nearby non-GM crops, and hence the introduction of the GM gene into the non-GM crop, or through physical contamination during seed production, commercial production, handling, transport and processing chain.

However, these supply chain protocols are untested and there is some controversy over whether they can achieve the intended outcome of separate and segregated production and handling chains for GM and non-GM canola. It is these concerns that have led to uncertainty about the impact of GM canola on the marketing of the New South Wales non-GM canola crop, and hence the need for this legislation. However, there should be no doubt that such protocols can work. For example, we imported red wheat from the United States of America and Canada during the drought in the mid-1990s and the protocols that were developed at that time ensured that there was no contamination or introduction of disease with these importations. Further, Graincorp currently segregates 10 to 12 different categories of wheat each season for marketing purposes. They manage this routinely and very well, so there is no doubt that protocols can work.

This legislation is being introduced to allow more time for the New South Wales farming community and the broader community to be assured that the introduction of GM canola, or any other crop primarily for food, will not adversely impact on the marketing domestically and, more importantly, overseas of non-GM canola and other non-GM crops. NSW Agriculture will continue to participate in the development of robust protocols for identity preservation by the Gene Technology Grains Committee and its various working parties. The New South Wales Government will use the three-year moratorium to collate and analyse all available data in order to make a considered judgment on the costs and benefits associated with the adoption of GM crops. This will include looking at further information in relation to international markets for GM produce and the likely impacts of the adoption of GM crops in Australia.

The Government is proposing that under this bill the Minister for Agriculture and Fisheries will have the power to impose an order prohibiting the cultivation of certain genetically modified crops intended primarily for human consumption until 3 March 2006. I give the House a clear and unequivocal undertaking that I will make an order creating a moratorium on GM canola as soon as practicable after the Governor has passed this bill into law. It is the role of the OGTR to determine whether a crop is safe for human consumption, and I do not intend to duplicate the role of the OGTR, a Federal body that, in the main, is federally funded. The community consultative committee has a broad range of expert advice, including scientists and community groups who either support or oppose it.

Honourable members should remember that by national regulation that body deals specifically with the health and safety and environmental aspects of any potential release of GM plant product. Under this bill the Minister will have power to grant exemptions from prohibition, such as exemptions for research trials, after seeking advice from the advisory council. It is clearly inappropriate to attempt to incorporate into legislation complex details concerning the design of research and trials. To try to incorporate all the different types of research trials into legislation in the Parliament is clearly unprecedented and would never be able to meet the differences in situations. For example, trial design depends on the sort of trial and will vary with climate, soil type, varieties and topography. This is clearly the role of experts and the advisory council is the best source of advice for the Minister on those issues.

Such exemptions will be critical to enable important research into GM products to continue. The exemption power allows the Minister to impose conditions on an exemption. This will allow the Minister to consider detailed conditions for each individual case on its merits, on the advice of the advisory council. Such conditions could include the size of buffer zones, requiring the agreement of neighbours, public notification, what must happen to the harvested grain or oilseed, and the monitoring of the site in the seasons following harvest. The conditions are likely to mirror the licence conditions which have been imposed by the OGTR for the conduct of field trials. The Minister would rely on the updated and ongoing advice of the advisory council on these matters. Again, I reiterate that it will be debated by the advisory council when I refer specific proposals to it.

The Premier announced a three-year moratorium. The science is moving so fast, as is the world situation in regard to the importation of GM crops and food products, and food labelling regimes, that

three years is an adequate time to stop and take stock. A moratorium lasting any longer would pose a substantial risk of New South Wales farmers and consumers potentially missing out on the economic and other benefits promised by this technology. The bill also gives the Minister power to look for and investigate possible breaches of the legislation and for courts to impose penalties where a breach has been proved. The bill contains appropriate enforcement and penalty provisions for offences where there is a failure to comply with an order, including but not limited to, powers of entry and inspection, powers of seizure and destruction, powers to order testing, and power to place a restriction or prohibit the use of the land.

Heavy penalties are proposed to apply for offences under the Act including fines of up to $55,000 and/or two years imprisonment. Fines for corporations will be up to $137,000. In addition, this bill proposes that a person convicted of an offence is to be liable to pay the costs of any clean-up necessitated by a breach of the Act. To assist the Minister in keeping abreast of the current situation in regard to GM crops, I will be establishing a stakeholder advisory council, to which I have referred, to advise me on GM developments and issues as they relate to agriculture. The GM Agriculture advisory council will investigate such matters as affect the management of the GM moratorium on food crops, as are referred to it by the Minister for investigation.

The council will report on advances in science that may affect the management and use of GM technology that may affect agriculture and related industries. And it will provide advice on marketing issues for genetically modified crops approved for release by the Gene Technology Regulator and on GM food crop trials. For example, the council may advise on matters relating to buffer requirements around genetically modified research trial sites—an issue that many honourable members have raised with me and others over recent weeks. The council will consist of members appointed by the Minister, including an independent chair and representatives from the New South Wales Farmers Association, the Network of Concerned Farmers, Grain Corp, the Australian Wheat Board, NSW Agriculture, the CSIRO, the Grains Research and Development Corporation, a biotechnology industry representative, and the Nature Conservation Council.

Gene technology is a contentious issue, with lots of public debate, characterised by considerable misunderstandings and some suspicion. Our approach provides a very sensible way forward to allow informed public debate and discussion, while not committing the farming or the broader community to commercial production of genetically modified crops that are primarily used for food consumption. I repeat, the Government is desirous that the bill be passed by both Houses of Parliament, preferably this week but certainly prior to 26 May, the cut-off point for submissions. We want the legislation disposed of by 26 May so that I can impose a statewide moratorium on the Bayer crop sciences proposal for InVigor canola. I remind honourable members that the moratorium proposal in the bill is the strongest moratorium proposal in this country. I commend the bill to the House.