

# Gene Ethics

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## Submission to the National Biodiversity Strategy Review 2010-2020

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## Gene Ethics

### Our Vision

Gene Ethics envisages a safer, more equitable and more sustainable GM-free society.

### Our Mission Statement

Gene Ethics is a non-profit educational network of citizens and kindred groups. We want the precautionary principle, scientific evidence and the law rigorously applied to all proposed uses of genetic manipulation (GM) technologies and their products.

Gene Ethics generates and distributes accurate information and analysis on the ethical, environmental, social and economic impacts of GM. Our education programs critically assess GM for the public, policy-makers and interest groups.

## Submission

### Introduction

NBS dramatically understates the threats posed by Genetically Manipulated Organisms (GMOs),<sup>1</sup> to biodiversity, the environment and human health. This is inconsistent with international standards set by the Convention on Biological Diversity, from which the NBS derives. The draft NBS's sole mention of GMO threats is in Annex 9, on invasive species. But the international community, especially Parties to the CBD and the Cartagena Biosafety Protocol, recognise that many other threats are posed by GMOs. These substantial threats should be fully acknowledged and responded to in the NBS. Australian notification, assessment, regulation, licensing and monitoring systems on GMO threats to biodiversity, the environment and human health are inadequate. The Commonwealth EPBC Act and the Gene Technology Act 2000 (as amended) should be reviewed and amended to fully protect biodiversity.

### Recommendations

Gene Ethics recommends that the draft National Biodiversity Strategy be amended to take full account of the following recommendations. The NBS 2010-2020 should:

**1. give a more detailed account of the threats to biodiversity posed by Genetic Manipulation techniques and GMOs<sup>1</sup> and propose policies and actions to minimise these threats, consistent with CBD Article 8(g), Article 14.1(b) and Article 28 of the Convention and the Cartagena Biosafety Protocol.**

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<sup>1</sup> GMOs (Genetically Manipulated Organisms) and LMOs (Living Modified Organisms) are used here interchangeably, as they were during negotiation of the Cartagena Biosafety Protocol. However, the final text of the Protocol exclusively uses the term LMO.

Annex 9 of the draft NBS makes the only reference in the document to the threats that GMOs pose to biodiversity, the environment, human health and centres of origin of genetic diversity. This sole reference is entirely inadequate, since it deals only with the threat posed by GMOs as invasive species. The draft NBS mention of GMOs in Annex 9, as potentially invasive species, is inconsistent with the well supported and generally agreed international assessments of GMO threats made by all Parties to the Convention on Biological Diversity, including the Australian government and its regulatory authorities – OGTR, FSANZ, APVMA, etc. Gene Ethics therefore recommends that NBS 2010-2020 give much fuller consideration to the threats posed by GMOs and the growing GM industry. This would be consistent with the Convention on Biological Diversity, particularly our obligations under Article 8(g), Article 14.1(b) and Article 28, as a Party to the CBD.

**2. recommend that the EPBC Act be amended so proposals for the commercial release of GMOs into the Australian environment, including its territorial waters, be a trigger for review by the Minister for the Environment, to minimise threats to biodiversity posed by GMOs**

The Commonwealth Gene Technology Act 2000 (as amended) makes no reference at all to the protection of Biodiversity. While the Office of Gene Technology Regulator considers the impact of GMOs on the environment, the scope of the assessment does not embrace negative GMO imports of the biodiversity of the natural and modified environments.

**3. recommend that Australia sign and ratify the Cartagena Protocol on Biosafety and give due recognition to the Protocol, as the first international treaty negotiated by Parties to the CBD.**

A significant omission from the draft NBS is its failure to even mention the Cartagena Biosafety Protocol, the first Protocol to the Convention on Biological Diversity. The NBS 2010-2020 should, as a minimum, recognise the existence of the Cartagena Protocol on Biosafety and acknowledge its importance. One hundred and fifty six Parties to the CBD – the vast majority of members - have signed and/or ratified the Protocol, now an integral part of the CBD. Australia also has an obligation under Article 28 of the CBD, as a full Party to the convention, to move towards adoption of the convention's protocols. Article 28, says: *“ADOPTION OF PROTOCOLS, 1. The Contracting Parties shall cooperate in the formulation and adoption of protocols to this Convention.”*

**4. acknowledge and affirm that the international negotiations on liability and redress under the Cartagena Biosafety Protocol are being conducted now and are due for completion by 2010.**

As a party to the Convention (but not the Protocol), Australia also has a responsibility under Article 3 of the Convention, to act on threats to biodiversity that originate within our national boundaries - where they may cause damage in areas beyond our national jurisdiction - and

to cooperate with other countries to achieve this goal. The release of GMOs may pose such threats.

Negotiations for an international liability and redress regime for damage caused by GMOs are due to be concluded by Parties to the Protocol before the next COP/MOP in Nagoya, Japan in 2010. These international laws will establish international norms to govern liability and redress where GMOs may have caused damage. NBS 2010-2020 should acknowledge that the Australian government must observe and be bound by these international legal norms, whether or not Australia is a party to the Protocol, noting also the Protocol Article 14 on Non Parties.

**5. endorse the CBD's de facto moratorium on Gene Use Restriction Technologies (GURTs).**

Australia has an obligation under Article 15 of the Convention not to impose restrictions on access to genetic resources for environmentally sound purposes that run counter to the three principal objectives of the Convention. GURTs would impose such restrictions. Gene Ethics therefore recommends that Australia uphold and not undermine the de facto moratorium on the commercial release of GMOs containing Genetic Use Restriction Technologies and advocate the negotiation of a permanent ban on GURTs.

**6. acknowledge the international debate on the ethics and threshold criteria for grants of Life Patents and note the relevance of article 27.3b of the WTO TRIPS agreement.**

Australia and the NBS 2010-2020 should acknowledge that there is significant global debate and disagreement concerning the international patent regimes acceptance of life patents. Controversy particularly surrounds Article 27.3b of the WTO TRIPS Agreement that enables the patenting of living organisms and life processes. Gene Ethics takes the view that living organisms do not comply with the criteria of novelty, utility and replicability – living organisms are discoveries, not inventions. Moreover, gene manipulation techniques are so crude and inexact that even experts in the art cannot reproduce gene transformation events. We also assert that the granting of life patents is unethical and inconsistent with the three principal objectives of the Convention.

**7. include the third principal objective of the Convention on Biological Diversity, the: 'fair and equitable sharing of benefits arising out of utilisation of genetic resources' in the NBS 2010-2020 sections: 'visions and principles' and 'priorities for change'.**

As a Party to the UN CBD, Australia has an obligation to include 'fair and equitable sharing of the benefits arising out of the utilization of genetic resources' in the NBS 2010-2020. The full relevant text of the CBD says:

*“The objectives of this Convention, to be pursued in accordance with its relevant provisions, are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding.”<sup>2</sup>*

As noted in the draft NBS Annex, Australia made an additional commitment in 2002, as a Party to the CBD: ‘to achieve by 2010 a significant reduction of the rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on earth.’ To fulfil this commitment, Gene Ethics recommends that NBS 2010-2020 include the: ‘fair and equitable sharing of benefits arising out of the utilisation of genetic resources’, in NBS 2010-2020 ‘visions and principles’ and/or ‘priorities for change’, by developing strategies consistent with all three principal objectives of the CBD.

#### **8. strengthen Australian support for the in situ conservation of all biological resources - including crop cultivars, animals and microbes - and by addressing the threats to the centres of origin of natural and agricultural genetic diversity.**

Gene Ethics recommends that the NBS strengthen Australia’s contribution to the *in situ* conservation of global biodiversity, including cultivated species important to humanity. The NBS 2010-2020 should therefore make a high priority of reducing threats to centres of origin of genetic and biological diversity. The landraces maintained there are essential to meeting human food, fibre, fuel and health requirements, now and for future generations.

The protection of centres of origin of genetic diversity and landraces are crucial to the continued development of cultivable species, important for human survival especially in the face of global climate change. Even genetic engineers must draw on the raw genetic materials in Nature for the materials needed to perform their transformations. It is therefore particularly important that the draft NBS aim to meet the goal of **sustainable use**: ‘of components of biodiversity in a way and at a rate that does not lead to the long-term decline of biodiversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations’. The NBS should also aim to advance the Convention’s goals of **in situ conservation**: ‘the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties’, set down in Article 2 of the Convention.

#### **9. strengthen and inform Australia’s support for the UN FAO’s International Treaty on Plant Genetic Resources for Food and Agriculture.**

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<sup>2</sup> Convention on Biological Diversity Article 1, Objectives. <http://www.cbd.int/>

Gene Ethics advocates that the NBS recommend provisions for the strengthening and guidance of Australia's support for the UN FAO International Treaty on Plant Genetic Resources for Food and Agriculture.

**10. lend weight to the 2008 report by the UN Committee on Economic, Cultural and Social Rights, that the promotion of GM seeds to poor farmers is unjust and that farmer dependency on multinational corporations for inputs be reduced.<sup>3</sup>**

The relevant sections of their report are:

“29. The Committee is deeply concerned that the extreme hardship being experienced by farmers has led to an increasing incidence of suicides by farmers over the past decade. The Committee is particularly concerned that the extreme poverty among small-hold farmers caused by the lack of land, access to credit and adequate rural infrastructures, has been exacerbated by the introduction of genetically modified seeds by multinational corporations and the ensuing escalation of prices of seeds, fertilisers and pesticides, particularly in the cotton industry.” And:

“69. The Committee urges the State party, in addition to the full implementation of the planned farmer debt waiver programme, to take all necessary measures to address the extreme poverty among small-holding farmers and to increase agricultural productivity as a matter of priority, by inter alia: developing the rural infrastructure including irrigation as part of the Bharat Nirman programme; providing financial and other forms of assistance to families of suicide victims; ensuring that the existing agricultural insurance schemes, including the Crop Insurance Scheme and the Calamity Relief Fund, are fully implement and are accessible to all farmers; providing state subsidies to enable farmers to purchase generic seeds which they are able to re-use, with a view to eliminating their dependency on multinational corporations. The Committee also recommends the State Party to review the Seed Bill (2004) in the light of its obligations under the Covenant and draw the attention of the State party to para. 19 of the Committee's General Comment No.12 on the right to adequate food (1999).” UN Committee on Economic Cultural and Social Rights 2008.

**11. include comment on the UN Environment Program's Green Customs Initiative.**

The NBS 2010-2020 should recommend to government that Australia should join the UNEP Green Customs Initiative, which includes as partner organisations the Cartagena Protocol on Biosafety as well as other multilateral environmental agreements.

## **Annex I**

### **UNEP GREEN CUSTOMS INITIATIVE**

#### **Environmental Crime – a growing problem**

Environmental crime is a significant and increasingly lucrative business. National and international crime syndicates worldwide earn an estimated US\$20-30 billion dollars annually from hazardous waste dumping, smuggling proscribed hazardous materials, and exploiting and trafficking protected natural resources. Illegal international trade in “environmentally-sensitive” commodities such as ozone depleting substances (ODS), toxic chemicals, hazardous wastes, endangered species and living modified organisms is an international problem with serious consequences. It directly threatens human health and the environment; contributes to species loss; results in revenue loss for governments; and undermines the success of international environmental agreements by circumventing agreed rules and procedures.

#### **The need for action**

Customs and border protection officers constitute the front line of every country's defence against trans-boundary illegal trade. They are the first link in the “compliance and enforcement chain”, and without adequate capacity to prevent or detect illegal trade, the rest of the chain will be considerably less effective. Building the capacity of these officers is therefore vital. Training is a key component of capacity building, but can be time-consuming and expensive when delivered separately for the wide range of issues customs officers must cover. An effective solution is coordinated training – and this is where Green Customs comes in...

#### **Helping to address the problem - the Green Customs Initiative**

The Green Customs Initiative is an unprecedented partnership of international organisations cooperating to prevent the illegal trade in environmentally-sensitive commodities and facilitation of the legal trade in these. Its objective is to enhance the capacity of customs and other relevant enforcement personnel to monitor and facilitate the legal trade and to detect and prevent illegal trade in environmentally-sensitive commodities covered by the relevant conventions and multilateral environmental agreements (MEAs). These include ozone depleting substances (ODS), toxic chemical products, hazardous wastes, endangered species and living-modified organisms. This is achieved through awareness-raising on all the relevant international agreements as well as provision of assistance and tools to the enforcement community. Green Customs is designed to complement and enhance existing customs training efforts under the respective agreements.

UNEP's Governing Council expressed concern over the increasing environmental damage caused by illegal traffic in endangered species and dangerous and harmful substances and products. It also recognised that continuous efforts must be undertaken by all countries and relevant organisations and agencies concerned with ensuring compliance and enforcement of relevant international agreements. The Green Customs Initiative is a partnership actively addressing these concerns.

(Council Decision 21/27 on Compliance with and enforcement of multilateral environment agreements, February 2001)

### Green Customs Partners

The partners of the Green Customs Initiative comprise the secretariats of the relevant multilateral environmental agreements (Basel, Cartagena, CITES, Montreal, Rotterdam Stockholm), Interpol, the Organisation for the Prohibition of Chemical Weapons, UNEP and the World Customs Organization. The Green Customs Initiative also works closely with a number of other regional and international organisations.

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For more information on the Partner organisations please follow the relevant links below:



Basel Convention on the Transboundary Movements of Hazardous Wastes and their Disposal  
[www.basel.int](http://www.basel.int)



CBD

Cartagena Protocol on Biosafety (Convention on Biological Diversity)  
[www.biodiv.org](http://www.biodiv.org)



Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES),  
[www.cites.org](http://www.cites.org)



Interpol  
[www.interpol.int](http://www.interpol.int)



Montreal Protocol on Substances that Deplete the Ozone Layer  
[www.unep.org/ozone](http://www.unep.org/ozone)

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Organization for the Prohibition of Chemical Weapons (OPCW) –  
Chemical Weapons Convention  
[www.opcw.org](http://www.opcw.org)

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Rotterdam Convention on the Prior Informed Consent (PIC)  
Procedure for Certain Hazardous Chemicals and pesticides in  
International Trade,  
[www.pic.int](http://www.pic.int)

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Stockholm Convention on Persistent Organic Pollutants (POPs)  
[www.pops.int](http://www.pops.int)

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UNEP Division of Environmental Law and Conventions  
[www.unep.org/delc](http://www.unep.org/delc)  
UNEP Division of Regional Coordination (DRC) and UNEP  
regional offices  
[www.unep.org/DRC](http://www.unep.org/DRC)  
UNEP Division of Technology, Industry and Economics (DTIE)  
[www.unep.fr/ozonaction/partnerships/greencustoms.htm](http://www.unep.fr/ozonaction/partnerships/greencustoms.htm)

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World Customs Organization  
[www.wcoomd.org](http://www.wcoomd.org)

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## Benefits of Green Customs

### For Customs Officers:

- Increased knowledge about environmental issues, particularly those related to MEAs
- Enhanced skills required to enforce national environmental commitments

- Better recognition of the role of customs officers in environmental protection

### **For Countries:**

- Increased detection of smugglers and illegally-traded commodities by national customs officers, and facilitation of legal trade
- Strengthened capacity for national compliance and enforcement of MEAs through monitoring of trade
- Increased opportunity for dialogue with regional trade partner countries on illegal trade issues  
Sustained capacity building through integration of Green Customs into national customs training curricula
- Prevention of loss of revenue from tax and duty avoidance associated with smuggling  
Increased integration of environment into the security agenda

### **For Partners:**

- Increased opportunity for synergies in implementation between MEAs
- Shared training infrastructure and experience developed by the Secretariats

### **For Global environment:**

- Decrease in environmental crime, control of toxic chemicals and waste, better species protection– leading to a less polluted and more sustainable environment

### **Green Customs Tools:**

#### **Green Customs Guide**

A guidebook for trainees and trainers to be used as a core element during the training courses and as a post-course reference document

#### **Workshops to train customs officers**

Many Green Customs training workshops have been held all around the world. These have ranged from regional workshops to sub-regional and national workshops.

#### **Green Customs website and materials**

Information and more details on the Initiative can be found on this website, including links to training materials and information on partner organisations.

For further information please contact

The Green Customs Initiative Secretariat, UNEP DTIE OzoneAction Branch

15 rue de Milan 75441 Paris Cedex 09 France, [ozonaction@unep.fr](mailto:ozonaction@unep.fr)

Or see the Green Customs Initiative website [www.greencustoms.org](http://www.greencustoms.org)

## Annex II

### Biosafety Assessment Tool

The Biosafety Assessment Tool (BAT) is an online resource for those identifying potential hazards and evaluating the risks of Genetically Modified/Engineered Organisms (GMOs/GEOs). The text and figures of the BAT are free for public use.



#### ***Why use the Biosafety Assessment Tool?***

The BAT can be used to assist you evaluating the scientific documents that should accompany an application for development or release of any GMO, including Living Modified Organisms (LMOs) as required under the Cartagena Protocol on Biosafety. Comprehensive science-based evaluations are required for GMOs in food, feed, agriculture or in the environment.

#### ***Who the BAT is for***

The BAT has been developed for a broad range of users that are interested in assessing the safety data on GMOs, reporting on the safety of GMOs, or have official policy or decision maker roles in approving GMOs for use in food, feed or the environment.

It is intended to be accessible to specialists and non-specialists alike, and to assist users to identify relevant risk issues, evaluate technical information and develop responses to applications for formal governmental approval of GMOs.

The BAT was developed to simplify and accelerate the review of often highly technical information provided by developers seeking approvals and the large body of research in the specialist literature that is relevant to sound scientific decision-making. Citizens, scientists, media professionals and regulators are under considerable time stress to return opinions. The BAT was designed to help our audience make the best use of their time.

**INBI** - Centre for Integrated Research in Biosafety

- **GenØk** - Centre for Biosafety
- **TWN** - Third World Network
- **Biosafety Information Centre**

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**<http://www.inbi.canterbury.ac.nz/BAT.shtml>**