

8 Liability Issues

8.1 Summary

This section addresses the issue of liability for harm that might be caused by GMOs. It asks whether the existing liability regime is sufficient to deal with harm that might be caused by GMOs, and goes on to identify options that may be considered if it is determined that the current regime is not adequate.

It must be clearly emphasised that, unlike other sections of this document, the Government is not at this point proposing any changes in relation to liability in respect of GMOs. This section simply sets out the issues and options to be considered and invites comments on these.

Liability issues were considered by the Royal Commission, which took the view that the current liability regime is adequate and recommended that, for the time being, there was no need to change existing liability rules. It was not persuaded that from a legal liability perspective there is anything so radically different in GM as to require new or special remedies. The Commission recognised, however, that liability issues raise difficult questions and suggested that the Government might wish to refer them to the Law Commission for more intensive study. The Law Commission's examination of liability issues was set out in its study paper, *Liability for Loss Resulting from the Development, Supply or Use of Genetically Modified Organisms*.

The Law Commission identified a number of reasons why existing liability rules may not always operate effectively in the context of harm that might be caused by GMOs. It also noted that existing liability rules will not ensure that all harm that could potentially be caused by GMOs will be compensated, and that it is unlikely that any liability regime could guarantee this. Some commentators have suggested that difficulties in applying existing liability rules should be addressed by introducing new liability rules. Others consider that the issues identified by the Law Commission will arise in relation to any liability regime, and that there is little or no benefit in adopting new liability rules. It has also been suggested that regulatory responses – such as providing for conditional releases, where ERMA specifies the precautions that must be taken, and monitors compliance (as discussed in section 4 above) – may be more effective in encouraging users of GMOs to take appropriate precautions to prevent harm.

As recognised by the Law Commission, a preliminary and fundamental question is whether the issues and risks associated with GMOs are so different from those associated with other activities or technologies that GMOs should be treated differently for liability purposes.

This section briefly discusses:

- whether there are liability issues unique to GMOs
- the functions of civil liability rules
- the existing liability rules that might apply where harm is caused by GMOs
- the difficulties that have been identified in applying these rules
- the broad range of options for responding to the liability issues raised by GMOs spanning no change to the status quo, modifications to the existing liability regime and a generic liability regime.

Submissions are sought on whether there are liability issues that are unique to GMOs, the adequacy of existing liability rules, and, if they are not adequate, the range of options for reform.

8.2 Why are liability rules relevant?

Most of the work outlined in this discussion paper is about whether the regulatory system in New Zealand is strong enough to support the government's basic policy direction of proceeding with caution while preserving opportunities in this area. The primary focus is the HSNO Act, which regulates dangerous substances and new organisms to ensure that only things that are judged safe are authorised to enter New Zealand. The current work to review that regime is designed to ensure that it is robust enough for GMOs.

There is another body of law, which sits behind any regulatory regime, that is relevant to these goals. Tort law sets out rules on when someone is liable to another for harm that they have caused. Tort law has traditionally had two main purposes: encouraging safe behaviour, and compensating for loss. It works to encourage safe behaviour because it creates liability for the consequences of harm that can be foreseen. A reasonable person can therefore be expected to work to minimise their potential liability by taking steps to prevent foreseeable harm. The law does not usually require you to compensate a person, through tort, for harm that could not have been foreseen.

The liability rules in tort are therefore relevant to the current policy exercise, because they are another tool in the legal framework for promoting safe behaviour. They already support that goal through the ordinary rules of negligence, nuisance and so forth. But it is worth considering whether there is merit in adapting them in some way to further buttress the regulatory regime.

It is also important to understand the relationship with the ordinary tort rules from the point of view of compensation. Internationally, there has been considerable thought given in recent years to the development of general regimes for environmental damage, and GM issues are a part of that larger picture. If New Zealand were to start to tackle those questions, the work would need to be aligned with the overall direction of the regulatory regimes such as HSNO, to ensure that the effect of any liability rules did not cut across the basic goals of the overall regime. In particular, it would clearly be counter-productive to design liability rules that provided full compensation in all eventualities, if the practical consequence was that the costs and risks of engaging in the activity were prohibitive. Liability rules must fit with the basic goal of preserving opportunities.

8.3 Are there liability issues unique to GMOs?

It is a fundamental premise of our legal system that like should be treated with like. In its study paper, the Law Commission identified special features of GMOs that may pose difficulties for a liability regime, but noted that these features may not be unique to GMOs. It is therefore important to determine whether GMOs are uniquely different from other organisms, and whether the potential environmental or other harmful effects of GMOs are different from those of other organisms or activities. For example, are there relevant differences between the risks and potential harm associated with GMOs compared with other new organisms introduced to New Zealand? Or between potential harm caused by GMOs and products created by other breeding techniques, such as mutagenesis?

There are three main kinds of damage that might be caused by a GMO: personal injury, property and environmental damage, and financial or economic loss. Examples could include a potential allergic reaction, invasiveness in the environment, or loss of organic certification by contamination by GM crops, respectively. In each case parallels exist for other products or activities. For example, unknown peanut traces cause allergic reactions in some people, shipments of conventional crops can be infested with weeds, and organic certification could be at risk from pesticide spray drift from a neighbouring farm.

Unlike many other products or human activities, before a GMO can be imported, developed or released in New Zealand it must first undergo a safety assessment by the Environmental Risk Management Authority (ERMA). A GMO that is a food will also require a safety assessment by Food Standards Australia New Zealand (FSANZ), and will need to be approved by the Australia and New Zealand Food Regulation Ministerial Council. Products produced by other breeding techniques (e.g. selective breeding, cell fusions or mutagenesis) are not subject to such an assessment process. The fact that GMOs will be rigorously assessed before being approved for use is an important consideration when looking at liability issues, given that other products do not undergo such an assessment.

GMOs are defined in the HSNO Act as organisms that have had their genes or other genetic material modified by *in vitro* techniques. There are specific exclusions from this broad definition for organisms created by certain techniques. This approach is consistent with that taken in other jurisdictions.

There is a spectrum of techniques available to manipulate the genetic material of plants, animals and micro-organisms. The point on the spectrum at which an organism is, or is not, a GMO is not always clear. It is sometimes possible to create identical organisms using different techniques, with one falling within the definition of a GMO and the other outside the definition. It is also appropriate to compare the potential harmful effects of GMOs with those of other organisms that arrive here from other places, some of which may become established and have harmful effects.

It may create anomalies to draw a distinction between these types of organisms and GMOs if the nature of the potential harm caused is similar. For example, herbicide-resistant canola can be made by genetic modification techniques and also by natural genetic selection processes. Thus, one herbicide-resistant canola would be regulated as a GMO, and the other, with exactly the same traits, would not.

Once the issue of whether and, if so, to what extent GMOs may be different from other activities or technologies for liability purposes is decided, consideration needs to be given to whether the existing liability regime is adequate, and if not, what changes are needed to this regime.

- 8a For the purposes of considering liability issues, are GMOs and their effects significantly different from other activities or technologies?**
- 8b Where a GMO has been approved for release and the conditions for release have been complied with, how much weight do you think should be placed on this in considering whether the existing liability rules are adequate?**

Please explain your views.

8.4 The functions of liability rules

Liability rules perform two principal functions. They can:

- encourage firms and individuals to take appropriate precaution to prevent or reduce harm
- provide compensation to persons who suffer harm.

As mentioned in section 1.3, the Government agrees that New Zealand should take a precautionary approach on how to proceed with GM, and in that context supports the Royal Commission's overall strategy of preserving opportunities. The Government also agrees that New Zealand should proceed carefully and implement GM selectively and cautiously, minimising and managing risks. The liability rules that apply to GMOs should be consistent with these objectives.

It is important to consider the effectiveness of liability rules in relation to GMOs in the context of other aspects of the regulatory regime that applies to GMOs, as these can also encourage precaution or provide for compensation. These include the approval process for a trial or experiment, and criminal sanctions for breaches of statutory rules. The regulatory regime that applies to GMOs is discussed in previous sections of this paper. It includes the HSNO Act, the Resource Management Act 1991 and the Biosecurity Act 1993. If provisions of the HSNO Act (including those proposed elsewhere in this discussion paper) or other statutes are likely to ensure that users of GMOs take appropriate precaution, for example, the importance of liability rules for achieving this goal is reduced.

8.5 Existing liability rules

If a person were to suffer harm caused by a GMO, they may be able to bring a tort claim to recover the loss they have suffered. Claims could potentially be brought in reliance on the following common law torts.

- *Negligence* – where a defendant owes a duty of care to the person harmed, and fails to take reasonable care, they are liable for the resulting harm. A duty of care will normally arise where harm to the claimant was foreseeable if the defendant acted negligently. A regulatory body such as ERMA may be liable if approval for a trial or experiment is given negligently and the trial or experiment subsequently causes harm to a third party.
- *Nuisance* – where a defendant uses his or her land to carry out an activity that causes something harmful or offensive to affect the land of a neighbour, the defendant is liable for the harmful effects on the neighbour's land (and on the neighbour's use of that land). The activity may cause actual damage to the neighbouring land or it may interfere with the enjoyment of the land without physically damaging it. The interference must be unreasonable, but proof of negligence is not required.
- *The rule in Rylands v Fletcher* – where a person brings on his or her land and collects and keeps there anything likely to do harm if it escapes, and that amounts to a 'non-natural' use of the land, that person is liable for all harm caused if that thing escapes from his or her land.
- *Breach of statutory duty* – where a statute imposes an obligation on a person, and that person fails to comply with the obligation, that person will, in certain circumstances, be liable to others who suffer harm as a result of their breach.

If the harm suffered is personal injury, rather than harm to property or to economic interests, the ACC regime will apply in certain circumstances specified in the Injury Prevention, Rehabilitation and Compensation Act 2001. In particular, the ACC regime is likely to apply if personal injury is caused by ingestion on a specific occasion of a genetically modified organism or product (other than a virus, bacterium, protozoan or fungus), or by a medical mishap or medical error arising out of use of GMOs or GM products, or by a work-related disease arising out of exposure to GM activities. Compensation could be sought from ACC, and no tort claim could be brought to recover compensation in respect of that harm.

The existing liability rules and the ACC regime are explained in more detail in Chapter 12 of the Royal Commission report, and in a paper prepared for the Commission by Professor Stephen Todd. For a copy of this paper, please visit:

[www.gmcommission.govt.nz/inquiry/responses/Professor Stephen Todd.pdf](http://www.gmcommission.govt.nz/inquiry/responses/Professor%20Stephen%20Todd.pdf).

There are a number of reasons why existing liability rules may not be effective in encouraging precaution or providing compensation in relation to harm that may be caused by GMOs, including:

- the potential for harm to a large number of people, or to the environment generally, rather than to a limited number of identifiable plaintiffs
- difficulties in identifying the person responsible for the harm
- difficulties in showing that harm to the plaintiff was reasonably foreseeable
- difficulties in showing that the plaintiff's loss was caused by the relevant GMO

- difficulties in quantifying losses
- the potential for significant time lags between release of a GMO, and harm caused by it
- the likely cost and complexity of litigating GMO liability issues.

8c Do you consider that existing liability rules will be effective in encouraging precaution in relation to harm that might be caused by GMOs?

8d Do you consider that existing liability rules will be effective in providing compensation in relation to harm that might be caused by GMOs?

Please explain your views.

8.6 Mechanisms for encouraging precaution

The HSNO Act already provides a range of regulatory mechanisms which are intended to ensure that appropriate precaution is taken in relation to GMOs, in particular by requiring consents at various stages, and imposing criminal penalties if those requirements are breached. Previous sections in this discussion paper identify additional mechanisms that could be introduced, such as conditional releases where ERMA would identify the precautions that should be taken in connection with the release of a GMO, and would impose relevant conditions on any release.

However, if existing liability rules coupled with the broader regulatory regime are not considered adequate to encourage appropriate precaution in relation to GMOs, some further options for encouraging precaution include:

- extended liability rules, and/or
- additional regulatory mechanisms (e.g. further approval requirements, or licensing and inspection regimes with criminal sanctions for breach, and statutory powers to require compliance).

Liability rules could be extended in the following ways.

- The negligence regime could be altered to provide for various presumptions. For example, legislation could provide for a presumption of liability where, if crop contamination occurs and the plaintiff establishes that one of several defendants must be responsible for contamination, the burden of proof shifts to each of the defendants to show that they are not responsible.
- Statutory civil liability could be imposed by the HSNO Act for harm caused by non-compliance with specified requirements in that Act (e.g. breaching conditions relating to containment of GMOs or their conditional release).
- Strict liability (i.e. civil liability regardless of fault) could be imposed in relation to harm that might be caused by GMOs, unless the defendant can establish specified defences. Possible defences might include that the cause of the harm was outside their control, that all reasonable steps had been taken to avoid the harm, or that the harm was caused by a deliberate act of a third party.
- Absolute liability (i.e. civil liability regardless of fault) could be imposed in relation to harm that might be caused by GMOs, with no defences available to the defendant.

- Bonds could be required from persons supplying or using GMOs. This might involve depositing a sum of money, which would be forfeited if there was a breach of any conditions relating to the use of GMOs, or to cover the cost of any harm caused by the use of GMOs.
- Compulsory liability insurance could be required for persons supplying or using GMOs, or ERMA could have a discretion to require insurance as a condition of granting a particular application for release of a GMO.

Liability could be imposed on the person seeking consent for release of a GMO, on any person using GMOs, and/or on the directors and responsible executives of companies releasing or using GMOs.

In some contexts liability rules are effective to encourage an appropriate degree of precaution. In other contexts, regulatory mechanisms are more effective. In particular, regulatory mechanisms can have advantages over liability rules in encouraging an appropriate degree of precaution where:

- regulators have better information than potential injurers and victims (or their insurers) about risks and appropriate precaution
- regulators are better placed than insurers to monitor relevant forms of precaution
- probabilities of harm are very small
- the amount of loss that may be caused is large relative to injurers' wealth
- insurance is not readily available
- the activity generates a public benefit, so that imposing the full cost of the resultant harm on the person carrying out the activity may be inconsistent with the broader public interest in having the activity continue
- the activity may cause diffuse harm to large numbers of victims
- the difficulties and cost associated with claims mean that liability rules will not be effective in imposing the full costs on the injurer (e.g. because of problems with identifying victims, identifying injurers, causation, quantifying loss, time lags between action and harm, and between harm and payment of compensation, cost of bringing claims relative to the value of claims, harm to non-economic interests)
- liability rules will be expensive to implement, compared with the likely value of claims
- the standard of care that will be set by a court (if a fault-based rule is adopted) is uncertain, and difficult to predict in advance.

Any move to a more onerous liability regime may have negative impacts. Depending on the strength and design of the regime, it may create a disincentive for investment in GM and GM-based innovation. This disincentive may be particularly acute for those technologies at the 'cutting-edge' end of the spectrum, as there is less information on risks and ways to manage these risks. The economic costs are also increased where there is less certainty in a liability regime, or where the appropriate standard of care is unclear or likely to change over time (e.g. where liability is applied irrespective of whether decisions were made on the best scientific knowledge available at the time). A more onerous liability regime may also disadvantage investors in GM technology compared to those investing in equally risky non-GM technology, leading to inefficient investment decisions.

There can also be negative impacts from adopting a tighter regulatory regime, either in place of, or as a substitute for, more onerous liability rules. Regulation can distort investment decisions by artificially increasing the costs of some technologies and not others. The extent of these costs depends on the design and scope of the regime, particularly whether regulations are outcome based or prescriptive. Complying with regulations can also impose significant costs on businesses, which, at the margin, may have an effect on investment decisions.

8e Are the factors that limit the effectiveness of liability regimes significant in relation to GMOs?

8f In the context of GMOs, is an appropriate level of precaution most likely to be achieved through:

- the current mix of regulation under HSNO and existing liability rules?
- extended liability rules?
- new regulatory mechanisms?
- some combination of these approaches?

8g What are the costs and benefits of any extension of the liability rules or regulatory regime to achieve the appropriate level of precaution?

8h If you consider that extended liability rules are desirable, what liability rules should apply and who should be liable?

8i If you consider that further regulatory mechanisms are desirable, what should they include and how would they be enforced?

8j Should any extended liability rules or regulatory mechanisms only apply in certain situations, such as:

- where a GMO has not been approved for release?
- where it has been approved for release but the conditions have not been complied with?
- where the operator has been negligent?

8k Should those extended liability rules or regulatory mechanisms apply where the harm is caused by the actions of a third party?

8l In relation to questions 8j and 8k, what would be the risks, costs and benefits of these approaches?

Please explain your answers.

8.7 Mechanisms for providing compensation

Liability rules are most effective in providing compensation to victims where:

- there is an easily identifiable injurer
- the amount of the loss that may be caused is likely to be within the means of most injurers to pay, or most injurers insure their full liability
- insurance is readily available
- the activity is only likely to cause harm to a limited number of identifiable individuals
- it is relatively easy to demonstrate causation and to quantify loss
- claims can be resolved and compensation obtained with relative ease, speed and modest cost.

However, in some contexts liability rules only provide compensation to a small subset of persons who suffer harm, and involve considerable cost and delay. The poor performance of liability rules in providing compensation to personal injury victims was one of the reasons for introducing the ACC system in New Zealand.

The Law Commission's inquiry suggested that the existing liability rules will not ensure that all harm that could potentially be caused by GMOs will be compensated. However, it considered it unlikely that any liability regime could guarantee this.

This outcome is not unique to GMOs. New Zealand law does not seek to ensure that all harms will be compensated. These uncompensated losses are borne by the persons who suffer them – or by their insurers if the victims have insurance. The losses are 'socialised' – that is, borne by the members of society on whom they happen to fall.

Thus the question is not simply whether some GMO-related harms will not be compensated, but rather whether *appropriate* compensation is available in respect of GMO-related harms under the existing law – and if not, how this should be remedied.

If existing liability rules would not achieve an *appropriate* level of compensation for harm caused by GMOs, alternative mechanisms for providing compensation to persons harmed by GMOs might include:

- extended liability rules along the lines described in section 8.6 above
- compulsory insurance for those who may suffer harm (e.g. earthquake insurance provided by EQC)
- a statutory compensation fund, funded out of general taxation (such as the non-earners' ACC account)
- extended ACC coverage for personal injury caused by GMOs that does not fall within the current ACC scheme.

The alternative compensation mechanisms identified above would be likely to ensure that, if there were victims of GMO-related harm, more would receive compensation. However the funding of that compensation, and the costs associated with providing it, vary significantly between the different options.

Compulsory insurance for those who suffer harm does not seem likely to be a useful or practicable approach in relation to harm that might be caused by GMOs. The very few situations where compulsory insurance is required by law for those who may suffer harm tend to involve an identifiable class of potential victims (e.g. homeowners in relation to earthquake insurance), whereas harm that might be caused by GMOs could affect any person. It would be impractical to require all New Zealanders to insure against GMO-related harm.

The options of compulsory insurance or a statutory compensation scheme also highlight the question of whether GMO-related harm is sufficiently different from other kinds of harm to justify using these mechanisms (see section 8.3 above).

An issue that is closely related to compensation for harm that might be caused by GMOs is remediation, or the putting right of that harm. One argument sometimes advanced in favour of liability rules is that they will enable victims to meet the costs of remedying harm that might be caused by GMOs, or prevent or contain the spread of such harm. On the other hand, it has been pointed out that remedial action must usually be taken promptly to be effective, while claims for compensation can often take many months or even years to resolve. Where the harm is suffered by a large number of victims, or affects the environment rather than identifiable individuals, a claim for compensation to fund remedial action may be impossible or impracticable.

Where remedial action is required urgently, to prevent harm to the environment or to large numbers of individuals, it is most likely to be taken by a government agency. The costs of this action will be borne by taxpayers, unless the law specifically provides for those costs to be recovered from a person who caused the harm, or from a specified class of persons such as all users of GMOs.

Any decision to impose more onerous liability rules or regulations may have negative economic consequences. These are more fully explained in section 8.6.

8m Are existing liability rules likely to result in an appropriate level of compensation for harm that might be caused by GMOs?

If not:

8n What is an appropriate level of compensation in this context?

8o Are extended liability rules likely to be an effective mechanism for achieving an appropriate level of compensation?

8p Are other compensation mechanisms likely to be more effective in achieving an appropriate level of compensation?

8q How effective will liability rules or other compensation mechanisms be in ensuring funding for action to remedy or contain GMO-related harm?

8r Where action is taken by a government agency to remedy or contain GMO-related harm, should the costs of that action be recoverable by the government from persons who caused the harm, and/or from a levy on a specified class of persons such as users of GMOs?

8s What do you see as the costs and benefits of any extension of the liability regime to achieve the appropriate level of compensation?

Please explain your answers.

8.8 Insurance of GMO liability

The availability of insurance, and the terms on which it is available, will have an important influence on the effectiveness of any liability regime. For example:

- if insurance is not readily available, liability rules will be less effective in providing compensation to victims
- it would be inconsistent with the basic policy decision to proceed with caution to introduce mandatory requirements to obtain insurance of a kind that could not be obtained in practice.

Requiring liability insurance for those supplying or using GMOs is one of the options mentioned in section 8.6.

8t To what extent is insurance for GMO-related liabilities currently available in New Zealand or overseas? On what terms?

8u How is the market for such insurance likely to evolve over the next five to 10 years?

8.9 Overview – the options

In summary, there are four basic options for addressing the liability issues raised by GMOs (and possibly a wider range of activities).

- **Option 1:** Rely on the status quo; that is, the existing liability rules and existing regulatory regime (modified as proposed in the other sections of this paper).
- **Option 2:** Extend the existing liability rules.
- **Option 3:** Introduce new regulatory mechanisms to encourage precaution and/or provide compensation.
- **Option 4:** Introduce a mix of new liability rules and new regulatory mechanisms.

Another option, but longer term, might be to consider liability issues in the context of a wider regime for environmental harm covering a broader range of technologies and activities, including GMOs.

8v Which, if any, of these options do you think should be adopted?

8w Should any of these options *not* be adopted?

8x Are there any other options you think should be considered?

Please explain your answers.