

Oral Submission to the Royal Commission on Genetic Modification

Presented on 22nd Feb 2001. Made by Peter W. Harrison, 32B Batt Street, Palmerston North Ph/fax (06) 3582023

As witness for The Quaker Spiritual Ecology Group This oral submission is not so much an expansion of my written submission as a collection of observations prompted by information gathered during the course of this hearing. The essence of my submission is that ethical considerations must take precedence over all other aspects. No temporary national advantage should be tolerated if it involves having part in a scheme of things that seriously threatens the complex web of life on the planet. The fast pace of science and technology has outstripped ethics in a way that is endangering all of life. This is the context in which the matters before the Commission must be considered.

I will not attempt to bring scientific or other expert evidence. The Commission will have heard sufficient of this. I regard what mankind is doing in endangering the entire fabric of life on this planet, as perhaps the most serious challenge which humans as a species face. If we fail to collectively address our priorities, then it is likely we humans will rapidly join that vast array of species whose extinction we have already caused. This, I believe, is a view held by a significant number of leading scientists and philosophers of the modern era.

This hearing was set up to make recommendations to the government of this country, but it has potential to affect in some degree all future generations world-wide. We might not have wished for this responsibility, but I believe it exists, and it requires wisdom to face it.

The Drivers

I wish to focus on the commercial greed that is driving the GM gold rush and on the associated disregard of basic ethics. What is at stake is not just commercial advantage or hunger or health but the future of our planet and a future for our children's children. I say this not only because of the unknown risks and adverse outcomes from GM but also because of the enormous surge of corporate power which GM adds to a world already torn and wracked by obsessive competition for control. The power I speak of is not that of governments but of corporations vying for control of the world's resources, in food, in fuel and minerals, fresh water, armaments and human resources and now in genetic diversity. These systems are driven ultimately not by the objective of improved welfare but by the relentless pressure of competition.

In the past century we have witnessed what in cosmic terms is a sudden and possibly catastrophic imbalance. We are experiencing an explosion of human population, massive extinction, destruction of forests, poisoning of the environment, and global warming. These demonstrate the recklessness of human ingenuity. Into this scene we add GM. This global crisis is totally relevant to the enquiry. What is the point in competing in a race that is likely to end in widespread disaster? Ethical questions relating to this situation must override all

short-term economic or political considerations.

We should learn from the pattern of mistakes of our own country. New Zealand became a brave leader in think big projects, privatisation and world free trade politics. The promises were efficiency, reduced costs, and trickle down benefits. The result is increased national debt, foreign control, increased wealth for the top ten percent and financial struggles for the rest of us. Our universities, our media, our government are all more or less in the hands of global power brokers. (in books by authors Tim Hazeldine, Jane Kelsey, Bruce Jesson.)

In the global scene it is well known that there is enough food for all, but the Trans National Corporations (T.N.C.s) are instrumental in destroying local cultures, exploiting food production and mineral resources, and leaving countries with less food, unmanageable debt and subservient to foreign masters. The Commission has heard evidence that GM gives more power to the powerful and exacerbates the helplessness of the underprivileged.

My concern is not directed against scientific research, or against all technology; it is against the headlong rush to apply bio-technology for commercial gain. Claims of benefits for humanity have often shown up to be brazen window dressing. The driving power in all this is not attributable to any single person or any group, but rather to systems collectively created by the Western world. T.N.Cs are more powerful than any government or any individual. They are driven by the least admirable of human traits: power, control, and domination. It is relevant to this enquiry that these are the systems competing in the GM gold rush. The most powerful nation on earth today is not able to stop for fear of losing its supremacy. Global power today has higher priority than the fate of the planet.

Research as to the dangers of GM are under funded. The privately funded proponents of GM do not want this research and it is far beyond the resources of government or private research. Big business has previously seen to it that Universities are goal orientated and have inadequate funding for such research. There is never enough funding for adequate research into possible dangers – and I suggest that T.N.Cs are in some way behind that shortage of funding – after all, it is economic theorists who have advocated the business model for all such institutions.

Benefits and Risks

I wish to speak about benefits and risks. I submit that GM has a level of risk and unpredictability which is far greater than is acknowledged by those in favour of this technology, and that there exists a campaign to influence authorities and public opinion in favour of accepting GM, by downplaying and by trivialising and by discrediting the risks. People like Dr. Pusztai who are qualified and motivated, and free to express accredited concern, are an endangered species.

I don't have a problem with intelligent life striving to understand the building blocks of their own existence – it is just that this has come about at a time when humanity is swamped in a dominant culture of commerce and greed. The combination is proving to be toxic if not

lethal to life. If you want facts then this is the basic fact which we ignore at our peril. This fact is substantial if rather difficult to quantify. It is undeniable that within this mindset, humanity has, along with the acclaimed benefits, destroyed 50% of the earth's topsoil, fuelled global warming, caused an appalling level of extinction, and created perilous biosphere imbalance.

Scientists of high repute have challenged that opposition to GM is not based on fact. I wish to spend a little time on this question of fact and proof.

It is characteristic of new developments such as GM that benefits are readily identified. We have all heard of the increased yields, reduced pesticide demand, increased vitamins, longer shelf life, medicinal prospects, and deliverance from hereditary scourges. All of which, taken on their own, seem to make the restriction of GM a crime against humanity.

The case for precaution is by its very nature much more difficult to prove because it rests to a large extent on what is as yet unknown, on hunches, on intuition, on parallels, on forecasts, on what is yet to show up, but also on significant instances of worrying scientific reports.

While it is possible to imagine a wide range of benefits from biotech, it is also possible to imagine adverse outcomes that far outweigh any conceivable benefit. What protection is there against such outcomes? The greatest danger in GM lies in the determination of its proponents to aggressively dismiss evidence which calls for caution or which threatens their objective. Therefore, the Commission would be failing in its duty if it restricted its interest to what can be proven.

GM is being touted as solving many of the problems extant in civilization, but can we trust the system which created the problem, to find the solution? To do so is to further strengthen the system – that is just what it thrives on. I put the case that we do not have a warrant to look for deliverance toward the system which has enslaved us. Science as a profession has lost the independence and objectivity which in the past could be more or less relied on for the welfare and protection of humanity.

One most significant fact to emerge from this inquiry is the unreliability of so called scientific fact.

I submit to this Commission that risk assessment in the area of GM is so undeveloped, so untested as to be valueless. There is no way in which risks which will exist in perpetuity, however 'minimal', can be reliably balanced against perceived immediate gains.

While on the topic of risks, I wish to mention that I have attended public meetings (Palmerston North Science Centre, PN Wesley Methodist, Quaker Settlement Wanganui) where respected scientists have campaigned that GM is substantially equivalent to traditional breeding with the advantage of being more precise. The audience seemed to be persuaded. Scientific evidence received later indicates that this claim is a misleading

simplification. Natural selection has inbuilt safeguards whereas GM has a potential for gross disturbance which may emerge in future generations.

One lesson from this is that partially informed public opinion is not something which can be relied on in the matter of GM. I wish at this point to make a recommendation – that reliable sampling of public opinion could only be trusted in a situation where a representative sample of the public were selected to hear all the available facts before being asked for a judgement; something equivalent to a jury system. I invite the Commission to consider this and to make a recommendation to the government along these lines in the event that the government wish to appeal to public opinion.

Human Health

I wish to speak about GM and human health and well-being. Human health is not something that exists in isolation. It is intimately connected to our environment; "Good Health Comes from the Soil".

Our dominating and disrespectful attitude toward nature, towards the earth, is the cause of a whole catalogue of illnesses peculiar to our day. Yes, we have conquered some major scourges through technology but the swing to dependence on technology is creating new scourges, the worst of which are predicted to emerge. But commercially driven 'health providers' find much higher profits in providing cures for ill health than in addressing its causes. In this lies a rather insidious pattern where technology generates dependence on its systems at the same time alienating us from our four billion years of heritage. This is unethical – unsafe – unnecessary.

Every technological solution prizes us away from our earth ground base. In doing so it creates new problems (eg. antibiotic resistant pathogens) for which technology is only too willing to provide ever more sophisticated remedies and so on. It usually takes a generation or more to see the full range of effects. Pessimism? No! Realism. A discerning look at the facts show that optimism based on scientific hopes have not been fulfilled, due to a failure to acknowledge the affront to nature on the one hand, and the significance of perversity on the other.

Power systems are hijacking society away from a true future in which we rediscover what it means to be human, to be earthlings – that enormous potential from which we have been deceptively diverted. Instead we are racing down uncharted territory of increasing dependence on human technology along with alienation from and abuse of that which has nurtured us until now. A pattern of power over rather than power with.

The dismissive attitude on the part of pro GM agencies towards concerns expressed as to risks should be a red light to the Commission. If the experimental results as to Dr Pusztai's research are as yet inconclusive – for reasons made clear to this Commission – the steam hammer reaction from the heavies sends an unambiguous message.

Ethics

I wish to speak specifically as to ethics. Ethics is firmly based on the understanding that one's own happiness can never be at the expense of someone else's. Such happiness is not genuine, nor can it be long lived. (J T L B p147) It is the transgression of this basic concept which is destroying the world, empowering the greedy, and driving the GM gold rush, making GM unsafe. Way back in 1947, C.S. Lewis, in 'The Abolition of Man', wrote "Man's power over nature turns out to be power exercised by some men over other men, with nature as its instrument – each new power won by man is power over man as well." I suggest that this is exemplified today in GM technology.

Some aspects we must face are: GM objectifies all life forms. It is the beginning of a new level of control over nature. Can we imagine where this will lead? All of life is susceptible to manipulation! Who will define the limits? Does GM have any potential for biochemical warfare? If so, then can we be assured it will not be eventually used in that way? GM is not an issue of freedom of choice since all of humanity are affected by the outcomes of the choices of a very small group. The whole scientific focus and in particular the gene scene would be very different today if there were not enormous power and profits at stake. We are talking about systems where ruthlessness is a treasured quality. No one in their right mind would advocate on the basis of benefit to humanity, a herbicide resistant Canola, knowing that it would become a serious weed and pass on its herbicide resistance to related species. However, it seems somehow acceptable for this to be done on the basis of commercial rights. To my mind this is a crime. One wonders whether there has been a deliberate strategy to infiltrate field experiments with GM crops in all parts of the globe so that no country can claim to be GM free. "Science must be freed from the imperatives of corporate profit." (CTB 195.8) until that happens we must act drastically for our collective salvation (safety). The concept of "agreed relinquishment" might govern the world until ethics recovers its leading role.

Plea for Sanity

I wish to make a plea for sanity. The pace of development in GM is frenetic and headlong. There is something reckless, and frightening about the intensity, the behaviour, the persuasiveness, which calls for a red alert, for drastic action. Some country needs to nail its colours to the mast on this issue. Commercial and political issues must take second place in a situation where nations combine on a reckless course which has a powerful potential for unimaginable global disaster. Our responsibility, our challenge, is to do this within a populace already numbed by a feeling of helplessness, in a world only a hair trigger away from nuclear holocaust, biological genocide, or ecological collapse. A response by this Commission and this government to act responsibly on the side of caution, has potential to instil a new hope and vitality into this nation and into a debilitated world. We are being ushered into a world which if we were given the opportunity, we never would have chosen. This Commission has a rare opportunity under the heading of Ethics, to make a well-informed statement on an issue of paramount importance to humanity.

For more than half a century we have been warned about pollution and climate change. The probability of catastrophe has been acknowledged for decades yet there is no overall reduction of causal pollution – this exemplifies the hopelessly inadequate controls globally over potentially devastating technologies. Environmental degradation and species extinction both advance unabated along with our pervading trust in science and increasing dependence on technology. Science and technology don't have to be dangerous but the reality is that we live in a world where the money spent daily on armaments (i.e. destructive power) would solve the world's food shortages for a year.

Mankind's premature demise may be inevitable unless we heed the wisdom bequeathed to us!

What is needed is that a stand be taken, a visible turning point, the embrace of new/old values which will enable humanity to safely achieve its potential. To add GM to the existing system – or to sanction what is already underway – is to fuel what is already well on the way to destroying civilization and countless eons of evolution.

Alternatives and Futures

I wish to speak about alternatives and futures. It would be presumptuous of me to claim to have the answer for humanity's future, but I appeal to this Commission that this question should not be ignored. All I can say at this point is that intelligence is one thing – wisdom is another. It is wisdom that is needed. The wisdom needed exists and is available. We can only learn an alternative future by stepping out in another direction.

I am concerned that decisions made now – which are in the context of the existing unsustainable order – will make it so much harder to reach toward where we ought to be in the coming age. Our spiritual potential is emerging, but it depends in part on a living environment which is being whittled away by persistence of the passing order.

It amounts to a call for a new moral, spiritual, and ecological consciousness – one with profound implications not just for biotech but for our economic and political systems as well. In order to handle a technology as powerful as Genetic Modification we humans need to be far more compassionate and wise than we currently give evidence of being.

Ultimately, if we as a society wish to employ some forms of genetic technology for truly beneficial purposes we must begin, not with the technology itself but with an ethical reappraisal and reform of our collective institutions and priorities. (C.T.B. p230) N.Z. has a very special role to play in this world's drama. A unique environment, physical isolation, moderate population, and relatively free from external pressures. N.Z. though small is ideally placed to insist on a precautionary stand while nurturing sustainable alternatives. For N.Z. to become an experimental plot for GM would be a tragic loss.

Closing Remarks

Our own country bears the shame of being linked with USA, Canada and Australia in opposing at The Hague late last year, the plans for curtailing global greenhouse emissions. Also in Teharan, August last year, the same group of four countries were key figures in threatening the future of the global bank of genetic resources of food plants. These facts are reported in 'New Scientist' 16th December 2000 in an article headlined 'Sold to the Highest Bidder'. The article illustrates the driving forces and outcomes and the light in which this country is seen. The focus is now on New Zealand as to the outcome of this Commission. We appeal to you to give prime consideration to the contextual aspects, the difficult but challenging questions, the broad issues, and to consider those aspects which are of positive value to ensure a safe and worthy future.

We ask you to urgently counsel the government to address those fundamental issues which make GM unsafe – an absolute prerequisite for any GM development. That the cost of not doing so is far greater than any short term pain. New Zealand caused ripples round the world with its nuclear free stance. We stand to demonstrate our integrity also in the GM issue.

Summary

It is irresponsible to condone the use of GM technology at this point in history insofar as:

- GM is possibly the most powerful instrument ever to be in the hands of humanity.
- Risk assessment is insufficient to protect against adverse outcomes.
- No adequate controls exist, neither are there safe grounds for any to be established.
- GM is wanted – for commercial advantage, but not needed – for basic benefits.
- GM emerges as the plaything of systems which cannot be relied on to act for the good of humanity and the environment.
- The precautionary principle must be based on the premise that unexpected outcomes fatal to life are a reality.
- There are viable alternatives which are threatened by GM.
- Compromise outcomes would give no assurance. It seems that only a clear-cut outcome will be effective in guiding us safely into a progressive and sustainable future.

In closing, I leave the Commission with a sobering challenge. It is not so much a question of whether N.Z. can survive without GM, but whether the Earth will survive with it.

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