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Productivity Commission hearing on Agricultural Regulations 18/08/16

Notes on GMOs, GM food labels, new breeding techniques, and chemical regulation

Summary

1.1 This deregulatory crusade mainly benefits a small global cartel of transnational seed and agrichemical companies, the supermarket duopoly, and others with the resources to access, lobby and influence key policy-makers. Its draft report shows the Productivity Commission and others listen most intently to these groups and adopt their point of view and policy objectives.

1.2 CropLife Australia is part of a global CropDeath International network: "the voice and leading advocates for the plant science industry". Its fifteen regional bodies world-wide https://croplife.org/about/members/ serve the interests of its members: BASF; Bayer; Dow AgroSciences; Dupont; FMC; Monsanto; Sumitomo Chemical and Syngenta.

1.3 AusBiotech's vision is to be the leading Australian industry body representing and advocating for 34 large transnational and local corporates, and assorted other organisations including government departments http://www.ausbiotech.org/partners/ that: "do business in and with the global life sciences economy." It claims to be: "a well-connected network of over 3,000 members in the life sciences, including therapeutics, medical technology (devices and diagnostics), food technology and agricultural, environmental and industrial sectors."

1.4 To advance smaller businesses, farmers and shoppers, existing laws need to be strengthened not dismantled. We do not need deregulation but regulations to serve the needs of all Australians and meet community objectives, such as food security for future generations.

1.5 The draft report provides no evidence that farmers carry regulatory burdens yet assumes that radical deconstruction of laws is needed. It strongly backs self-regulation, voluntary compliance, and weak regulation without analyzing the impacts, added costs and efficacy of such a hands off approach.

1.6 The draft is ideologically driven to advocate reduced regulation but with little cogent analysis to justify its persistent calls for weakening or repeal. State government submissions (SA and Tas) are rejected on weak grounds while the claims and conclusions of others are credited without good evidence. Both cases favour the same outcome – weaken or eliminate laws and regulations.

1.7 New Breeding Techniques

We ask the Commission to recommend an immediate public review of the Gene Technology Act and Gene Technology regulations, so that full and open consideration is given to including all gene editing (NBT) techniques and their products within the existing definition and scope of the Act and Regulations.

Draft Box 6.10 is entitled: "Community views on whether NBTs should be regulated as GM technologies". This is a mis-labelled as Croplife and AusBiotech do not reflect Australian community views or interests. We concur with and strongly support the Friends of the Earth view that: **"… the current regulatory approach to GMOs should be the minimum requirement for these new GM techniques … because it at least provides a basis for assessing any potential risks that result from the genetic engineering process."**

We will advocate that the OGTR, FSANZ and others regulate all NBTs under the nationally consistent system of GM regulation.

With new GM techniques (CRISPR etc), the commercial release of diverse GMOs that we cannot yet envisage, or even conceive of, may dramatically increase. Five broad-acre crops and a few horticultural plants comprise most releases to date but other GMOs already released or proposed include: trees (GM eucalypts in North America), insects (mosquitoes in WA labs), fish (salmon, already rejected in Tasmania), fungi (CRISPR mushrooms in the USA), animals, various microbes, live vaccines (for cholera, prostate cancer, equine influenza, Hendra virus, etc.). There may also be organisms created using CRISPR, synthetic biology, etc. which do not yet exist and have never existed in Nature before. Their impacts are unknown.

Activities using NBTs support the compelling case for strong regulation is biohacking, a world-wide movement of amateur risk takers and entrereneurs. They see the codes of life that evolved over billions of years as an analogue of computer codes and progams, that can be amended and reconstituted at will. Unlike the codes of life, humans invented computer codes, yet no computer program is bug free and computer viruses are created for entertainment and personal gain. **Australia urgently needs strong regulation of such activities, to ensure that the laws which require genetic engineers to have full training, use certified containment facilities and operate under expert and regulatory supervision are effective and enforced.** DIY biohacking kits are now available on the web for as little as $130 but the OGTR says they will not be regulated unless the kits themselves contain GMOs. OGTR and Biosecurity Australia are not effectively enforcing or monitoring their laws or exercising their powers.

We ask the Commission and government to put the interests of Australians first. Watering down laws and regulations at the behest of large corporate entities will chiefly benefit them and not the public you serve. We ask the Commission to recommend that some laws and regulations be reviewed and strengthened as a matter of urgency, to keep pace with new scientific and technological developments.

Comments on draft report findings and recommendations

Draft Finding 6.1

2.1 We challenge the claim, without supporting evidence, that: “there is no … **health and safety justification** for banning the cultivation of genetically modified (GM) organisms.”

2.2 The OGTR and FSANZ assess genetically manipulated (GM) organisms and GM foods for their effect on health, safety and the environment but selectively ignore, criticise or reject any evidence of harm to experimental animals. They rely instead on assessments of chemical analyses that applicants submit.

2.3 On its website, FSANZ criticizes the many peer reviewed and published studies that have found some GM soy, corn and canola events harm experimental animals. However, it provides no hard evidence or data to support these rejections. These experiments are generally longer term (up to 2 years) and multi-generational, whereas 90 day corporate-sponsored studies do not test their subjects for long enough to discover any harm. Fatalities among the experimental animals are typically discarded and replaced without explanation.

2.4 The term ‘genetically modified’ is an industry invention that PR company Burson Marstellar promoted in the 1980s. They want to create the fiction that GM techniques are merely an extension of traditional selection, that farmers and seed savers practiced year after year for millennia within species boundaries. We prefer ‘manipulation’ as the 1992 Federal Parliamentary Report on GM regulation was aptly entitled “Genetic Manipulation: the threat or the glory?” Without GM, fish genes cannot enter a tomato!

2.5 We reject the further claim that: “Scientific evidence indicates that GM organisms and foods approved by the OGTR and FSANZ are no less safe than their non-GM counterparts.”

2.6 Firstly, regulators use science-based regulatory-science that does not employ the scientific method or apply its standards. The regulatory regimes ignore the Precautionary Principle that should be applied where history of safe use is absent or short, where good data is scarce and where there is a substantial risk of harm. The principle is defined in The Convention on Biological Diversity and embodied in many Australian and overseas laws on the environment and health.

2.7 Secondly, FSANZ applies the industry-generated concept 'substantial equivalence' (SE) to justify its claim that two foods with different chemical profiles have equivalent short-term safety. SE is an unscientific method and as it sets no benchmarks, standards or measures of comparison in advance, and each new GM event application is treated on an ad hoc, case-by-case basis. The toxicological profiles and results constantly vary, so FSANZ rejects no GM food applications, on the pretext that they all fall within the normal range even though that is not specified.

Draft Finding 6.1

3.1 We dispute the claim that: "there is no **economic … justification** for banning the cultivation of genetically modified (GM) organisms."

3.2 Without providing evidence, the draft claims that: "The successful coexistence of GM and non-GM crops is possible and has been demonstrated both in Australia and overseas." But failures of coexistence are legion. The GM Contamination Register http://www.gmcontaminationregister.org/ catalogues 396 contamination incidents around the world from 1997 to 2013 that include: Rice; Maize; Oilseed rape/canola; Soybean; Flax; Papaya; Cotton; Fish; Grass; Pigs; Sugar beet; Arabidopsis thaliana; Potato; Alfalfa; Plum; Tomato; Wheat; Zucchini; Pollen in honey; Cherry, kiwi & olive trees. In Australia https://foodcontaminationjournal.springeropen.com/articles/10.1186/s40550-014-0005-8

3.3 Corn, canola, cotton, alfalfa (hay), and wheat contaminations have led to market losses overseas. In the Starlink corn case, the food recall cost over $1 billion and Aventis went out of the GM crop business. In Tasmania, the publicly funded cleanup of GM canola contamination from Aventis field trials cost several $million. Japanese buyers rejected a container of Victorian canola. Australia's GM Contamination Register: http://www.gmcropwatch.org.au/

3.4 The draft also claims that: "… if there are any market access or trade benefits (including price premiums for non-GM products), they would be achieved regardless of whether GM crops are in the market." This is a very blinkered view since the CBH (largest grain handler and trader) experience with canola may not translate to other management systems, places, times or organisms. The costly zero tolerance policy and down-grading of any suspect canola, to enable WA to keep its GM-free canola market in Europe has come at a cost as WA MLC Darren West explained in a personal statement to the parliament. This valuable market and the premiums it earns may be lost through just one contamination.

Draft Recommendation 6.1

4.1 We oppose the proposal that state and territory governments remove their moratoria on genetically modified (GMO) crops and repeal relevant legislation. Giving up their powers to establish GM and GM-free Zones generally, or over particular GM releases, on marketing grounds is an important sharing of power between the Commonwealth and states, and between technological and commercial imperatives.

4.2 State moratoria exist to protect valuable export markets because most shoppers globally don't want to eat GM food. Ending state powers to establish GM-free zones for marketing reasons would mean any GM crop approved by the Federal Government regulator OGTR could be grown anywhere, without state or local approval. But Australia's key trading partners have zero tolerance for unapproved GM crops, so may cancel the trade if Australia allows new types of GM crops (such as GM wheat) before they are approved elsewhere.

Draft Recommendation 9.1

5.1 We oppose the proposal to remove GM labelling. The public's right to make informed choices about what we eat – for any reason – should remain intact. A majority of Australians do not want to eat GM foods and should be enabled to decide what to buy at the point of sale, through good labelling. Some people do not care or do not read labels so they constitute a market for GM foods. No product has 100% acceptance and factual, informative labels may enhance trust and confidence, not dissipate it.

5.2 The draft report is eager to disadvantage shoppers in favour of the GM and retail industries, by removing GM labels which help ensure that all parties to food purchases have access to the same information. It also ignores the Labelling Logic recommendation that foods regulated under Standard 1.5, including foods made using GM techniques 1.5.2, should be labeled for 30 years before the labeling requirement is reviewed.

5.3 The Food Standard exempts all GM vegetable oils, starches and sugars from GM labels on the spurious ground that all DNA and protein is removed in refining processes. This ignores, for instance, cold pressed oils. Refined nut oils may also purport to contain zero DNA and protein but may elicit an allergic reaction. Meat, milk and eggs from animals fed GM feed are also exempt from GM labeling, though an estimated 500,000 tonnes of imported GM corn and soy go into Australian farm animal feed each year. The feed itself is also not labeled. On the basis of baby formula tests which Greenpeace commissioned, the allowable 1% threshold for adventitious GM presence without labeling may be used to mask routine GM contamination. State governments can test for the presence of GM in food but don't.

Draft Recommendation 6.2

6.1 The APVMA should not approve products with minimal review based on pre-digested evidence from other jurisdictions. It would intensify uncritical chemical assessment, approval and monitoring, as regulators pick and choose from the mates network. In a deregulatory climate, the US advice may be adopted here when the European's stricter, more scientific, less influenced and more precautionary regulatory approach would serve us better. Risk assessment requirements should be tailor made for Australia's unique environment, social conditions, and governance processes and structures.

6.2 We opposed the repeal of the law on mandatory agricultural chemical review and re-registration that were due to begin July 1, 2014. The law was an essential step in safeguarding farmer and shopper health. The government's claimed commitment to reduce red tape for the agvet chemicals industry opened the way again to old, dirty, polluting practices that are unsafe and unacceptable. The parliament had rightly decided that an orderly review of all registered agrichemicals over the next 15 years, using modern science to ensure they are safe, was prudent and ethical. Backsliding meant many more lives are being needlessly blighted with birth defects, behaviour disorders, cancers, disease and death. A cost/benefit analysis of the trade off between health and compliance costs should be a necessary pre-requisite to government gutting the existing law.

6.3 The primitive data behind thousands of toxic pesticide and herbicide approvals made up to 50 years ago needs review to protect farmer and public health. Farmers and rural communities already have very high rates of chemical-induced diseases. And city-dwellers will continue to eat the residues of unsafe, poorly regulated and toxic, synthetic chemical residues in fresh and processed foods. Pesticides no longer approved by other nations require particular scrutiny.