

Highlights Package

Hearing 8B: GMO, 30th January 2020

At The Waikato District Council Offices,

15 Galileo Street, Ngaruawahia

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The planning position to reject the inclusion of GMO provisions in the district plan as set out in the section 42A Report is justified on economic grounds for the circumstances of the Waikato District. My primary evidence emphasised the importance of planning and policy frameworks enabling local innovation and adoption of innovations sourced from elsewhere. It is through the adoption of innovations that our living standards and wellbeing have grown over recent decades.

Innovation is especially important to the Waikato Region, in which the Waikato District lies. The region is home to the highly-rated University of Waikato, and to research facilities of *AgResearch* and *Plant and Food Research*. It is also home to the *Waikato Innovation Park*. The progress of the Waikato economy, and hence local living standards, depends on its ability to maintain and enhance the region's reputation as an innovation leader within New Zealand and - in the agricultural sector at least - as an innovation leader globally.

Additional planning restrictions that inhibit the trial and/or adoption of GMOs over and above the restrictions imposed by the EPA (which already exercises the precautionary principles of the HSNO Act) would be detrimental to the area's reputation for innovation leadership. If it were to adopt more restrictive approaches to GMOs than adopted nationally, the Waikato District (as part of the Waikato Region), would be signalling that the process of innovation, resulting in improved local living standards, is no longer considered important for the Waikato.

Several submitters have noted the potential for losses to existing growers, especially organic growers, if GMOs were to be allowed in the Waikato District. I am not an expert on the science or regulatory aspects of the degree of contamination which may be relevant to this argument. However, from an economic viewpoint, it is extremely important to distinguish between one-off income losses to a small number of existing growers, *if they were to occur*, versus increased rates of income growth for a potentially much wider body of growers.

Not only is the latter group much larger than the number of existing organic growers, but the difference between *step shifts* in incomes versus changes in the *growth rate* of incomes

needs to be given priority. As an example, assume that the net revenue from organic products (per hectare) is 10 percent larger than that for other crops. If the adoption of innovative GMO crops results in increases in incomes of other farmers at a rate of 2 percent per annum, then the increases in per farmer incomes will surpass the income loss (per farmer) of organic growers within 5 years. Within ten years, the per farmer income of adopting farmers will be 22 percent higher than initial incomes, and the gap keeps rising exponentially thereafter. It is because of the exponential increase in incomes that arises as a result of adopting innovative practices and crop varieties that priority needs to be given to enabling policies that allow for income *growth* rather than focusing on policies which relate to initial *step* differences in incomes.

To conclude, the Waikato Region, in which Waikato District lies, is renowned for its innovation capabilities, especially with regard to agriculture. This reputation for innovation – and the very real gains in living standards that result from it – should not be unnecessarily hampered by the adoption of planning rules that are more restrictive than those imposed nationally by the EPA. The planning position to reject the inclusion of GMO provisions in the district plan as set out in the section 42A Report is therefore justified on economic grounds for the circumstances of the Waikato District.