

PC1 – Hearing on Monday 20th May 2019 –Block 2

Good Afternoon.

I am Bharat Bhana and I am part of a third generation, family run, market garden business and I want you all to know what impact Plan Change 1 will have on our 60 year old operation. I understand that this block of hearings does not deal with commercial vegetable production rules directly, but my following comments will hopefully help set the scene for the next hearing block, and also address principles being applied to the Block 2 topics.

Some think that Growers are not environmentally “in tune” and sufficiently aware of the need for sustainable practices – this is totally not true.

Growers are passionate about:

- **Water quality:** Good healthy water is imperative if we are to grow healthy crops – where water borne diseases can wreak havoc on quality vegetable production
- **Our environment (including the built environment):** We undertake restoration planting and construct silt traps on each farm, and sometimes each paddock, and we do so NOT because of the extra benefits BUT because we love our land
- **Soil quality:** we leave paddocks fallow, we grow cover crops, we track rip and we rotate our crops. All these activities enhance the soil quality.

We simply do not just pour on more fertiliser to obtain better tonnage. There is a huge difference between higher tonnage and sellable healthy vegetables with store qualities. It must be remembered that we too are consumers and we take pride in producing high quality – healthy – vegetables. We, and I have no doubt most market gardeners undertake regular soil tests, and it is these tests that act as a starting point to determine what (NPK and trace elements) each crop requires.

In terms of ensuring we nurture the land for future generations I can advise that we are still cropping the land our parents purchased when they moved to Pukekohe in the 1950s. This land was purchased from another family who was cropping the land already.

I personally have been in the business for over 40 years. In that time “growing” has seen significant changes – from sediment control, erosion, water management, fertiliser use, irrigation and integrated pest management.

Wheel track ripping, silt traps on all farms to manage water runoff and sediment control, more targeted application of fertiliser (specifically during crop growth – smaller quantities more often). These are just a few examples of the tools within our toolbox and which we are undertaking on a daily basis.

All cropping operations, now, as a matter of course, undertake crop rotation. We grow a broad cross section of crops including potatoes, onions, carrots, pumpkin, lettuce and brassicas. Crop rotation forms part of our integrated pest and disease management programme. Rotation aids in the reduction of soil borne diseases thereby improving soil health and we also grow mustard and grass as cover crops which also help with the residual nitrogen uptake.

Agronomy and the use of Agronomists are used extensively nowadays to advise on both soil and crop health. This ensures that both are receiving the right treatment, at the time of the vegetable life cycle, thereby enhancing the environment AND final vegetable product.

Without changes and in its present form PC1 will, over time, result in vegetable production becoming uneconomic, and we will see the loss of vegetable production in the Waikato initially and New Zealand longer term. This therefore erodes food security, impacts negatively on employment with severe consequences for "NZ Inc". Growing vegetables is a complex business – each crop has its own requirement for water, fertiliser and spray and it is important that you fully understand and appreciate "one size does not fit all".

Fertiliser requirements are crop to crop, year to year, depending on the temperature, rainfall etc – winter crops differ to summer crops. To date we have yet to have a computer assisted calculator such as Overseer, provide accurate outputs for vegetable production.

The difference between achieving 50 tonnes of onions/hectare as opposed to 35 tonnes/hectare is only 15 units of nitrogen. Yet at 35 tonnes/hectare it is uneconomical to grow onions as the costs related to the production in our area would be crippling – and I use Auckland wages to name but one example.

The rules wants ALL Farm Plans to be written by a qualified "expert" – experts who most probably have not grown vegetables BUT have a degree, and I would suggest in fact, that most Growers are experts at what they do.

We are members of the PVGA and presently have two representatives on the committee.

Growers in our region have always looked for new innovative ways – including with types of machinery (some of which have been developed by Growers themselves – others modified) to aid in preserving our precious soils because we fully appreciate that without healthy quality soils we cannot produce healthy quality vegetables.

I ask that you refer to the Deloitte's report which highlights the importance of vegetable production in our area of New Zealand.

Our submission supports HortNZ in the "sub-catchment approach" to achieve better water quality targets – as water quality has a large and ongoing effect on our operation.

We are a part of the NZ GAP programme (Good Agricultural Practice) to ensure safe and sustainable production of vegetables. NZGAP requires growers to meet a number of standards for health and safety, food safety and market quality.

Besides having NZ GAP accreditation – which is the Global GAP equivalent for the export side of our business. We are also LEAF accredited (Linking Environment and Farming). These accreditations are independently audited by Assure Quality or SGS.

Hira Bhana & Co are audited every year and NZ GAP could easily add "The Farm Plan" requirements to their audit checklist.

We want to reduce nitrogen use and improve water quality broadly. But in order to achieve the best outcomes, Council and Growers **must work together** to do this, NOT have Council simply dictate in a prescriptive manner without the science or without the specific and focussed knowledge that we have accumulated over more than 60 years.

Thank you very much and I am happy to answer any questions