

Reflections based on J.P. Hudson's 1950-51 paper "Horticulture in New Zealand"

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About the Author

Dr Hans Maurer MRSNZ, CMIInstD emigrated to Aotearoa New Zealand in 1981 as a fruit tree nurseryman. He has also been a soldier, a garden centre manager, a perennial plants nursery owner, an employment officer at the then New Zealand Labour Department, a supermarket plant & flower buyer, head of fresh produce for a major supermarket chain, an Action Learning focused pracademic¹, a strategic adviser to the fresh produce industry; and, co-owner of a business that holds a Ministry for Primary Industries (MPI) appointment as an Independent Verification Agency (IVA). At the time of writing, Maurer was Research & Strategy Director at The AgriChain Centre² and Knowledge Representative on the Executive Committee of United Fresh New Zealand Inc.³ He chaired the United Fresh Technical Advisory Group⁴ and was the Editor of the fresh produce industry annual data almanac Fresh Facts.⁵ Maurer also chaired the Information Management & Standards Committee of the International Federation for Produce Standards (IFPS)⁶ and represented IFPS as Global Liaison on ISO Committee ISO/TC 347 Data-driven agrifood systems.⁷

Introduction

In 1945, a discharged British army major and bomb disposal expert by the name of John Pilkington (J.P.) Hudson⁸ arrived in Wellington, New Zealand, to take up a position with the then Department of Agriculture. Today, we call this government department the Ministry for Primary Industries.

J.P. Hudson spent three years in New Zealand. He returned to the United Kingdom in 1948. One of his specific tasks at the New Zealand Department of Agriculture was to work on the transportability of *Actinidia chinensis*⁹ fruit, then known to a limited audience as the Chinese gooseberry. Today, this fruit is known world-wide as kiwifruit.

Upon his return to the UK, J.P. Hudson took up an appointment as a lecturer in horticulture at Nottingham University.¹⁰ Professor J.P. Hudson CBE, MBE, GM, B.Sc., N.D.H. died in 2007, after a distinguished academic horticultural career at both Nottingham and Bristol Universities.¹¹

Legacy to New Zealand

In 1950, J.P. Hudson wrote an article with the deceptively simple title "Horticulture in New Zealand".¹² I found the article whilst searching for suitable references for an entirely different project, namely Fresh Facts 2025, New Zealand's annual fresh fruit & vegetable Industry pocket data almanac.

I read J.P. Hudson's article with rapidly growing interest, as I soon realized that I was holding the virtual equivalent of an old-fashioned time capsule in my hand, giving me a rare opportunity to gain deep insights into how Horticulture in New Zealand presented itself, a few years before my birth, to a then industry expert.

Hudson wrote his paper in a conversational style, pointing out that he was providing "*personal impressions gained after spending three years on the staff of the New Zealand Department of Agriculture during which time there was ample opportunity of seeing a great variety of holdings, meeting many growers and getting to know practically everyone in the Dominion who was concerned in any way with horticultural education.*" (Hudson, J.P. p.41).

Methodology

Hudson's paper was structured into four main sections, these being the Environment (1), Commercial Horticulture (2), Home Gardening (3), and Horticultural Education (4). Three of these main sections contains several subsections, ranging from Climate and Countryside (1), Fruitgrowing, Market Gardening, Nursery & Glasshouse Work, Cut Flowers, Tobacco and Size of Holdings (2) to School Gardening, Home Gardeners, Professional Horticulturists, and Training for Advisory Service (4).

I have followed Hudson's structure in my analysis of his paper presented here but have not necessarily commented in-depth on every aspect of the points he has made.

All text in this document displayed in *Italics* and quotation marks represents direct quotes from Hudson's paper, shown with just the relevant page number(s).

I have added my own observations to the various sections as I am discussing Hudson's paper. I am also providing some closing comments, looking at Horticulture in New Zealand from a strategic perspective and through a future focused lens.

Discussion

The New Zealand Environment

Climate

Hudson started his observations by providing his readers with some latitude-related observations about New Zealand – which he regularly referred to as “*the Dominion*” throughout his paper.

“Actually New Zealand straddles the same range of latitudes as Spain and the southern half of France and Wellington is on the same latitude as Naples in Italy” (p.42).

He continued with an explanation about the mild New Zealand winters, linking these to the Dominion's oceanic climate and “*distance to the nearest landmass*” (p.42).

Hudson further observed that “*freak hailstorms sometimes wreak havoc to glasshouses, whilst occasional violent gales, which may occur in most districts in the Dominion, make it necessary to provide shelter belts around commercial plantations. Almost every year one district or another suffers from prolonged dry weather that reduces the yields where crops cannot be irrigated*” (p.42).

Freak hailstorms, violent gales, the need for shelterbelts, prolonged dry weather and reduced yields due to the lack of irrigation are all phenomena and consequences growers producing fruit and vegetables in in 2025 are only too familiar with.

Hudson's concluding comment on climate is no longer entirely accurate in 2025 – 75 years on.

“However, despite these hazards the climate of general New Zealand is generally kind both to grower and his crops and does not impose any undue hazard on commercial horticulture.” (p.42).

Growers, wholesalers, retailers, in fact the entire supply chain from seed merchant to consumer are very much aware of several very “*undue hazard[s]*” that regularly inflicts themselves upon commercial horticulture.

I am talking about cyclones, floods and atmospheric rivers. The former were already defined events 75 years ago, i.e.; nobody would have needed to explain to Hudson what a cyclone or a flood were. The “*atmospheric river*”¹³ concept has only emerged in our vocabulary in more recent years but is obviously a “*relative*” of cyclones and floods.

All this begs these questions:

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Why are cyclones and floods missing from Hudson's meticulous list of climate related hazards for New Zealand commercial horticulture in his 1950 paper? Did he simply overlook to include those? I do not think so.

Did Hudson only describe phenomena or events that he had actually experienced in his three-year stint in New Zealand, ignoring possible evidence from reliable third party sources? I, for one, did not gain this impression when reading his paper.

What other conclusions does this suggest? Perhaps that cyclones and floods were not as intensely or frequently on the horizon of climate scientists in 1950, as they are in 2025?

Which would get us to the climate change topic, wouldn't it?

The Countryside

Having stated at the outset that "*there are few countries where an Englishman can so soon feel at home [as in New Zealand]*", Hudson discusses the "*wonderful*" but often "*inaccessible scenery*" of the "*Dominion's mountainous backbone*" (p.43).

Hudson also recognized that "*nearly a third of the dominion has been brought into cultivation from the wild in a hundred years by the prodigious efforts of the pioneer settlers. That could only have been accomplished by a technique of wholesale burning of the natural forest*"(p.43).

That led Hudson to the observation that "*the result of that system...has been to leave a scene of great desolation over much of the higher country, where fallen timber still lies uselessly rotting on the hillsides and soil erosion is causing a great deal of concern*"(p.43).

Well, neither hillside soil erosion nor timber lying around in a rotting state have gone away. Soil erosion was one of the reasons the countryside was peppered with *Pinus radiata* plantations, and the rotting timber lying around on hillsides typically consists of *Pinus radiata* waste generated at the time of harvesting. We call it "slash" today and it is a major contributing factor of North Island East Coast rivers breaching their banks as the timber waste makes it way down the hillsides in an un-called for fashion, courtesy of heavy rain and soil erosion.

Commercial Horticulture

Hudson's first sentence in this section of his paper allows today's reader to recognize his appreciation for the fresh produce supply chain decades before the phrase 'supply chain' first entered our vocabulary in the 1970s.¹⁴

"Few countries of the same size grow such a wide range of horticultural crops as New Zealand, where the greengrocer's shop is a delight to visitors from overseas" (p.44).

A very elegant way, indeed, of combining the efforts taken by growers and retailers alike.

However, Hudson was not very enthusiastic about New Zealand's future as an "*exporter of horticultural produce*", with the exception of "*apples and pears to Britain*" and "*a few less import items such as the export of tulip bulbs and nursery stock, to other countries in the Southern hemisphere for which there is still room for expansion*" (p.44).

After these general observations, the Commercial Horticulture section separated into several distinct segments.

Fruit Growing

Hudson started this section with the observation that *“peaches, apricots, Japanese plums and quinces are not normally planted by commercial growers here”*. However, he noted the *“important plantings of citrus, mainly lemons and New Zealand grapefruit”*, as well as the presence of *“cape gooseberries...; tree tomatoes...; Feijoas...; Passion fruits...; and, most interesting of all from the horticultural point of view, the Chinese gooseberry (Actinidia chinensis Planch.)”* (all p.44).

There followed a discussion about the Chinese gooseberry. He sketched the behaviour of the fruit as observed since its arrival in New Zealand *“more than thirty years ago as a decorative plant”* and informed his readers that *“in the warmer districts...several bushels¹⁵ of fruit are often picked annually from each female vine from the third year after it is propagated...”* (p.45).

Hudson described the fruit as being *“about the size of an egg, though sometimes more sausage-shaped, with a tough brown skin studded with short stiff hairs”* (p.45).

Hudson’s detailed interest in kiwifruit does not come as surprise, once one realizes that the future potential of the kiwifruit trade appears to have been one of the reasons for arrival in New Zealand. The following comment can be found in a Hudson family web-blog. *“He worked in the Department of Agriculture at Wellington and in this period he initiated experiments on the transportation of a new fruit to the UK, the Chinese gooseberry, later known as the kiwi fruit”*.¹⁶

Raspberries are also discussed in some detail, particularly the fact that in New Zealand *“few stocks are infected with the degenerative virus diseases and seem likely to remain uninfected because of the absence of the aphid species which are the only known vectors of raspberry viruses.”* Hudson’s enthusiasm for virus-free raspberries extended to such depth that he suggested *“to use New Zealand, with the co-operation of the Department of Agriculture, as a museum for new raspberry varieties, where stock can be kept virus-free until required again in Britain”* (p.45).

The kiwifruit industry has come a long way since Hudson’s early involvement in packaging and shipping trials. Zespri is one of the few produce brands in the world with instant global recognition, and a financial success profile to envy. Fruit no longer look like sausages and the Kiwi Gold variety is just about hairless. Kiwifruit growers not only earn an income from tending, harvesting and marketing their fruit, but the regulated environment kiwifruit production and marketing operates in, also generates income from license sales.

Hudson had already drawn a connection between tobacco returns and diminishing raspberry vine plantings. In the years following the publication of Hudson’s paper, raspberry production dwindled until it was a shadow of its former self. It was rare to find raspberries on the supermarket shelves in the major cities, in part also driven by the additional complexities of the new supermarket initiated direct supply chains which proved too demanding for raspberries for many years. In more recent years, this situation has started to change. Berryfruit, including raspberries, are a rapidly growing fresh produce category, and modern cool chain technology, as well fit for purpose production, packing and transport facilities & services are driving a raspberry revival.

Market Gardening

Hudson observed that *“a great deal of the Dominion’s market gardening is done by Chinese growers, who are highly skilled at that type of work”*. He also noted that the consequences of the *“rapidly expanded acreage of vegetables to meet the needs of the American forces stationed in New Zealand and the Pacific”* was still being felt five years after the end of the War in the Pacific (all p.46).

The expansion of acreage Hudson referred to, had *“partly been in the hands of European arable farmers”* who had apparently not been growing vegetables commercially before the war but *“turned to vegetable production at short notice”*, as well as the New Zealand Government, *“which successfully started a number of large market gardens as an emergency measure”* (all p.46).

The large influx of US troops into New Zealand, their evolving forward deployment into the Pacific region to wrestle islands and atolls from Japanese control, and the need to feed these troops had clearly upset the supply and demand equilibrium of vegetables. This was not helped by the fact that the US Army had strictly compartmentalized all information related to the development of the first atom bombs. This strategy had been so successful that the part of the US Army charged with conducting the conventional war in the Pacific, assumed the end of hostilities would not be reached before 1947, i.e.; an additional two years longer than the war ultimately lasted¹⁷.

Hudson then commented on greengrocers. He held New Zealand greengrocers in high regard. In his view they dominated the trade and he compared their product care and merchandise skills very favourably to those of their UK counterparts. Nevertheless, he also expressed concerns about the shelf life of New Zealand vegetables, suggesting that too much washing and trimming might be detrimental: *“Vegetables are cleaned, washed or trimmed, as the case may be, more than is usually the case in Britain, greatly enhancing their appearance in the shop (though possibly not their keeping qualities after being purchased)”* (p.46).

There is no separate retail category in Hudson's paper. That should not come as a surprise. Greengrocers and fruiterers were at the time Hudson penned his observation, the only plausible retail channel to the consumer. The first deserving retail entity of the description "supermarket" did not emerge until 1958, when Chinese greengrocer Tom Ah Chee and his business partners opened their inaugural Foodtown supermarket in South Auckland's Otahuhu.

Nursery and Glasshouse Work

The nursery industry receives a brief mention in despatches before Hudson moves on to under glass production. Here he advises that the glasshouse industry *“amounts to a total of only 80 acres, specialises in tomatoes and grapes, the only two food crops grown regularly under glass in New Zealand”* (p.46). He comments on the tomato production methodologies and he observes as follows: *“Very heavy yields of tomatoes are obtained in some districts, but it is rare to find growers planting any other crop in succession to tomatoes”* (p.46). Grapes do not get another mention, but Hudson does offer an observation on our glasshouse construction, which is using *“a great deal more timber...than in Britain”* (p.47).

New Zealand glasshouse grape production sits below the margin of error these days. Table grapes consumed by New Zealanders are imported all year around and, dependent upon the time of year, the grapes come from California, Chile and Australia respectively,

The most recent New Zealand Agricultural Census (2022) showed that 666 hectares of glasshouse tomatoes were under production.

Cut Flowers

The cut flower industry is dealt with in three sentences. Hudson observed that our *“relatively undeveloped”* cut flower industry *“received a tremendous fillip during the occupation of the American forces”* (p.47). Assuming Hudson was not suggesting that the American soldiers, sailors and marines were busy buying bunches of flowers for each other, this comment alludes to the tremendous social

changes that came about temporarily. Between 1942-1945, as a result of New Zealand being one of the key staging posts in the Pacific Theatre of War.

The New Zealand cut flower industry is stagnating at best. It experienced a solid growth phase following the arrival of Dutch flower growers here in the 1950s and 1960s, as well as the short-lived Cymbidium orchid stem export boom in the 1980s and early 1990s. Since then, the industry has slowly but surely been in decline.¹⁸

Tobacco

Hudson linked the success of the tobacco industry *"almost" located exclusively "in one small district in the Nelson province" with the "virtual disappearance of raspberries from what used to be the main raspberry-growing district in New Zealand since tobacco has proved to be a more attractive cash crop", and states that "the three thousand acres at present grown provide a living for upwards of a thousand separate growers."* He saw the tobacco industry as being a *"small-scale activity"*, that was nevertheless capable of *"producing over three-quarters of the Dominion's home requirements"* (all p.47).

By 1965, grower numbers were down to 500+. The last New Zealand commercial tobacco crop was planted in 1995. Demand had slumped and the market was oversupplied. Remaining growers were assisted into alternative crops by government agencies¹⁹.

Size of Holdings

Hudson observed that the *"majority of commercial fruit farms, nurseries and market gardens are one-man units run by the owner and his family with only seasonal help at picking time."* He goes on to discuss the *"acute shortage (and high cost) of hired labour"*, as well as the *"long-term policy of successive governments to get as many men as possible on their own holdings"*, linked to war veterans being *"encouraged by various forms of land grants, mortgages, loans and so on"* (all p.47).

One-man units are not as prevalent anymore as they were when Hudson wrote his paper.

In 2006/2007, Te Ara, the New Zealand Encyclopaedia^{20,21} made an effort to capture accurate grower statistics from the various industry sectors that constitute the fresh produce industry, and came up with an approximate total of 8,100 + fruit and vegetable growers. 3,000+ of these growers were kiwifruit growers; 700+ grew apples; 900 growers were growing process vegetables; 400 growers produced glasshouse tomatoes.

The Horticulture New Zealand Annual 2005 Report acknowledges a total of 4,200+ growers across its affiliated product groups. 2,800 of these are kiwifruit growers.²²

Given that our exports have expanded significantly since 1948, the year Hudson's role with Department of Agriculture came to an end, and our population has more than doubled since (from appr. 1.85 million in 1948 to app. 5.3 million in 2025), these 1,400 growers who are not kiwifruit growers cannot possibly be operating as one-man units. One hint about what might be going on comes in a 2023 report entitled *"Pukekohe SVGA ICMP Stocktake + Gap Analysis Report"*.²³ It suggests that in 2010, there were about 3,200 vegetable growers in New Zealand, who on average managed 16 ha of market gardens. The equivalent 2020 data had grower numbers drop to below one thousand, but the average land holding managed by one of these growers had risen to 57 ha, representing a more than threefold increase compared to 2010.

Home Gardening

A short section on home gardening allowed Hudson to introduce what appears to be his favourite topic - Horticultural Education. He set the scene in his Home Gardening section by discussing the *"dearth..."* of *"reliable literature written in the Dominion by horticulturists with experience of local conditions,"* but recognised that *"the gap is gradually being filled by various monthly magazines and a steady trickle of gardening books published in New Zealand"* (all p.48).

Hudson raised his concerns about the lack of suitable literature suitable for home gardeners, within the context of *"the universal 5- day 40-hour working week"*, which he claims, *"is leaving many New Zealanders with a surplus of time and energy."* He is also of the view that *"no better outlet can be found for some of this spare time and energy than tending a garden"* (all p.48).

Horticultural Education

Having read Hudson's paper to the point where he started sharing his thoughts on Horticultural Education, it becomes patently obvious that Hudson was very passionate about this topic. He opened his discourse with:

"As will have been gathered from the preceeding paragraphs, horticultural education is not only important to those who earn their living in horticulture, but it has a direct impact on the lives of most people in the Dominion, from the youngest to the oldest and whether living in town or country" (p.48).

Then Hudson took the reader through his thoughts as they applied to Education related to school gardening, home gardeners, professional horticulturists, and finishing with a section on *"Training for Advisory Service"* (p.51).

Hudson started his comments on school gardening with the prediction that *"all New Zealand children will some day have homes of their own with at least an eighth of an acre of garden, and an interest in gardening, aroused at school, is likely to bear rich fruits later in life. School gardening is designed to be part of the general education of the child, and is not in any sense vocational training"* (p.48).

Statistics New Zealand is in the habit of releasing key demographic data at 5-year intervals. We therefore have no firm picture of what homeownership statistics would tell us right now, as 2025 draws to a close. But we do have the agency's report released in 2020, entitled *"Housing in Aotearoa: 2020"*. It does not make pretty reading.

At the time of the report Radio New Zealand reported on its findings.²⁴ These included that *"Homeownership hit its peak in the 1990s when 73.8 percent of people owned their own home."* The reported figure *"as of 2018, "has fallen across all ages down to 64.5 percent"*.

An eighth of an acre equates to ~ 505 square meters, a realistic garden size, at a time when Kiwis were pursuing their 'quarter acre dream'. But these times have long gone. Our sections are shrinking. The New Zealand Herald reported in 2018 that *"The land that new houses are being built on in Auckland now have a median size of less than 500sq m - signalling the end of the quarter-acre dream"*²⁵.

That prediction of Hudson's ended up being somewhat off the mark.

After a brief discussion of the merits of horticulture education being added to the correspondence school curriculum, Hudson concluded that *"the greatest brake on the development of school gardening is still the lack of teachers with the necessary training to teach this subject"* (p.49).

Well, someone must have taken Hudson serious at the time, because forty years ago, the Horticulture and Agriculture Teachers Association (HATA) was established. HATA is *"dedicated to promoting and improving the teaching and learning of Agricultural and Horticultural Science in New Zealand schools"*²⁶.

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Sadly, I have to admit that I had been unaware of HATA's existence until I started my research for this paper. I wonder who else did not know this before reading these lines?

For focus related reasons, I will not discuss at any length what Hudson had to say about the Education needs of home gardeners, other than sharing this direct quote:

"New Zealand can be a true gardener's paradise, and as many of the failures are due to misdirected zeal rather than indifference, there is a very real need for horticultural education of the home gardener" (p.49).

Hudson commenced his extensive comments on professional horticulturists and their education needs by starting in 19th century Britain, *"where superb grounds were entrusted to head gardeners who were probably the finest horticultural craftsmen the world has ever seen. Moreover, many of them were men of great character as well as masters of craftsmanship, imprinting their stamps on the personalities of those whom they trained. The life was hard, the hours of work were long and the pay was poor, but great attention was paid to the training of promising youths"* (p.50).

Hudson then observed that *"several depressions and two world wars had shattered"* (p.50), the large hereditary and personal fortunes which had, in essence, underwritten horticultural education in Britain; and, that these sources could no longer be relied upon to fund horticultural education.

In the meantime though, Hudson stated, *"young men well- trained in the fundamentals of garden craft passed from these establishment to places all over the world, including New Zealand, taking with them enthusiasm, energy, knowledge and skill"* (p.50).

He then returned his attention to New Zealand, starting with the *"founding in 1927 of the National Diploma in Horticulture (N.Z.) by the Royal New Zealand Institute of Horticulture"*, which he saw as *"an important step in putting horticultural education on a national basis and also in providing a worth-while professional qualification"* (p.50).

"Lincoln and Massey Agriculture colleges" (p.50) are acknowledged by Hudson as having *"founded horticultural departments towards the end of the recent war"* (p.50), and offering two-year College Diplomas. Hudson also advises that *"steps have very recently been taken"* (p.50), to start a four-year degree course, with the possibility of achieving a Master's degree through adding a fifth year of college attendance. Hudson also points out that both Massey and Lincoln are constituent colleges of the University of New Zealand.

Training for Advisory Service

Here Hudson provided a fascinating insider's view of how his employer, the Department of Agriculture, today's Ministry for Primary Industries, went about recruiting and retaining its advisory service staff.

He explained that *"on the advisory side the Horticulture Division of the Department of Agriculture, mainly concerned at its inception with the inspection of apples for export and the policing of regulations, has been turning its attention more and more to the provision of extension services"* (p.51).

Hudson continued with this insight; *"Until recently many district officers in the Division were saddled with the triple role of policeman, tax collector and teacher which they acquitted with astonishing tact and patience, but the instructional and inspectional duties are now being separated and the whole service vigorously overhauled"* (p.51).

Horticulture Advisory Officers also represented an administrative problem, according to Hudson.

"Until the recent inception of the degree courses just referred to, there was no degree in horticulture in New Zealand. It was however necessary for officers recruited into the Horticulture Division to have degrees of some sort if their salary scales were to be on the same basis as those of officers in the

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agricultural branches of the Department, who, since 1913, have been able to take an agricultural degree in New Zealand” (p.51).

Hudson then set out how future advisory officers would be trained, pending the establishment of the degree courses in horticulture:

“A recruiting campaign in the secondary schools, designed to interest boys of school leaving age in horticulture, ensures that a number of boys each year applied for entry into the Horticulture Division. A few of these were handpicked and appointed for six years as cadets, during which time their living expenses were to be subsidised by the Department. For the first three years they studied at the University for an ordinary science degree (B.Sc.), taking chemistry and botany as the main subjects” (p.51).

“After graduating, each cadet spent three years doing practical work on commercial holdings selected by the Division, working normally, one year on a fruit farm, one year on a nursery and one on a market garden.” At the end of “his six years’ training the cadet takes his place on the staff of the Division as an Instructor. This scheme presented a new departure in horticultural education” (p.51).

Hudson concludes his narrative on training of future Department of Agriculture staff by stating the training system will work once the new horticultural degrees at Massey and Lincoln Colleges are fully functional:

“Cadets will in future be expected to study for a horticultural degree. They will still be recruited to the division immediately after leaving school and will go straight to University to take the Intermediate Course. Following this, cadets will spend one year working on a selected commercial holding and will then return to University to complete their final degree course, leaving one further year of practical experience to be gaining after graduation and before joining the staff of the Division as Instructors or Inspectors” (pp.51-52).

Matters have certainly changed in this area. By the 1980s, Hudson’s Department of Agriculture had become the Ministry for Agriculture and Fisheries (MAF). What then happened is summarised in a 2021 MPI technical paper as follows:

“Reforms of the 1980s disbanded the Advisory Services Division and with it, a clear pathway into advisory roles. Over time career pathways have become less clear-cut and more varied²⁷.”

Is there some re-thinking going on in this space?

Hudson’s Conclusion

Hudson’s concluding comments are entirely focused on the topic of horticultural education. He expressed the view that,

“...the last two decades the former system of horticultural education, with its fine tradition of personal training and its main emphasis on craftsmanship and the arts of horticulture, has become to some extent outmoded. Yet the new system, based on the so-called scientific horticulture, is still only in the formative stage, although it is growing in experience and value with every year that passes” (p.52).

Hudson moves on to consolidate his views on the “...great responsibility [that] rests on professional horticulturists and others concerned with the future of horticulture”, as he forecasts “that the plans made now”, are likely to have “far reaching effects on the standard of horticultural thought and work for generations to come” (all p.52).

The sentence that stands out like a beacon in the dark in Hudson’s conclusion is this one:

“Horticulture in all its phases, has a part to play in the future welfare and prosperity of New Zealand” (p.52).

I could not have put it better myself.

Summary Comments

John Pilkington Hudson afforded me the opportunity to view the New Zealand horticultural scene through his lens, which, naturally, was focused and influenced, from both angle and perspective, through his own experiences and preferences.

I have attempted to provide a 2025 view on some of the issues raised by Hudson in the above Discussion section. Naturally, that did occur from my perspective, which clearly differs from Hudson in some areas.

Where we do not differ though, is in our jointly held view that *“Horticulture in all its phases, has a part to play in the future welfare and prosperity of New Zealand”* (p.52).

Hudson wrote this statement 75 years ago, five years after the end of World War II, and after three years of having an intense interest in the horticultural affairs of “the Dominion of New Zealand”, as he referred to Aotearoa New Zealand.

For my part, I am in absolute concurrence with Hudson, based on my engagement with our horticultural industry over the last 45 years.

During this time, I have witnessed the rise and regulation of the kiwifruit industry, the deregulation of the pipfruit industry, the removal of agricultural subsidies, the deregulation of banana, citrus, grapes and pineapples imports, the demise of the milkman, beer and wine becoming main supermarket staples, and the produce auction system fading into insignificance and coming to an end, following the supermarkets’ pursuit of strengthening direct relationships with fruit & vegetable growers. This latter development occurred in part, due to the leverage the corporate retailers were able to develop through degrees of critical mass, and in part, through the genuine recognition that consumers were demanding more information about what they were eating, and greater assurance that what they were eating was safe.

All these changes came with concepts such as trickle irrigation, mechanised harvesting, Reuseable Produce Crates, Controlled Atmosphere storage, computerisation, category management, distribution centres, planograms and supply chain management, to name a few.

All that remains to be asked now is : Where are we heading in the next 75 years?

Who knows for sure, but there are some indications. These include that standards will increase in importance; artificial intelligence has started to produce operational concepts that are now being introduced; supply chain management has evolved into value chain management; and quantum computing is likely to turbocharge anything we touch that requires a process.

So how can we prepare for the future, given that we will never be able to accurately predict it?

Well, Hudson’s mantra - *“Horticulture in all its phases, has a part to play in the future welfare and prosperity of New Zealand”* – clearly has to be the starting point.

Why?

- Because one of the significant outputs of commercial horticulture are fruits and vegetables and we need those to survive. We cannot just live on meat alone, and I surely do not need to make the case for this here.
- As horticultural outputs leave orchards, market gardens, and packhouses, they turn into produce that is sold as fruits and vegetables in supermarket produce departments, at greengrocers and fruiterers stores, at farmers markets and on the side of the roads.
- Aotearoa New Zealand punches above its weight in agricultural and horticultural exports and our country’s prosperity does to a large degree depend upon the intergenerational success as a primary industries exporter.

- But as a nation, we cannot just live on kiwifruit and apples alone either. We need the entire range of fruits and vegetables being available to us, albeit on seasonal cycles if year round supply is no longer an option due to circumstance.

I am convinced that we do understand that horticulture has a part to play in our country's welfare and prosperity.

But are there enough members of the next generations educated to the point that we can reduce the mistakes we make when we build houses on the best horticultural land we have, for example; or when legislation starts interfering with crop rotation practices that are instrumental to producing safe and nutritionally sound vegetable crops and are contributing to country's food security needs?

I believe our focus and investment in years to come needs to exponentially grow in the horticultural education segment because that where our intellectual and best practice future grunt will need to emerge from.

There are four words in Hudson's mantra which are easily overlooked; "*..in all its phases..*"

We can only achieve success in **all horticultural phases** if we stop majoring in minors, start working together in unlocking value out of supply chains and find ways by which formal education and on the job based training are better aligned and integrated, leveraging of each other, rather than wasting valuable energy through being constantly at loggerheads.

Endnotes

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- ¹ <https://www.sciencedirect.com/science/article/pii/S1053482225000026>. Accessed 25/7/2025.
 - ² <https://agrichain-centre.com/>. Accessed 25/7/2025.
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