

Hawke's Bay Horticultural Sector Economic recovery following Cyclone Gabrielle

Findings and Recommendations
May 2023



Context of this six week project



Objectives

- A **quantitative and qualitative assessment** of Cyclone Gabrielle's economic impacts (immediate and longer lasting) on the Hawke's Bay horticultural industry, backed by industry, experts and locals and analysed by global experts
- A prioritised **suite of solutions** that government and other stakeholders should consider providing to support the replanting, rebuilding and long-term success of the horticulture industry
- A **compelling commercial and economic case** for the recommended solutions

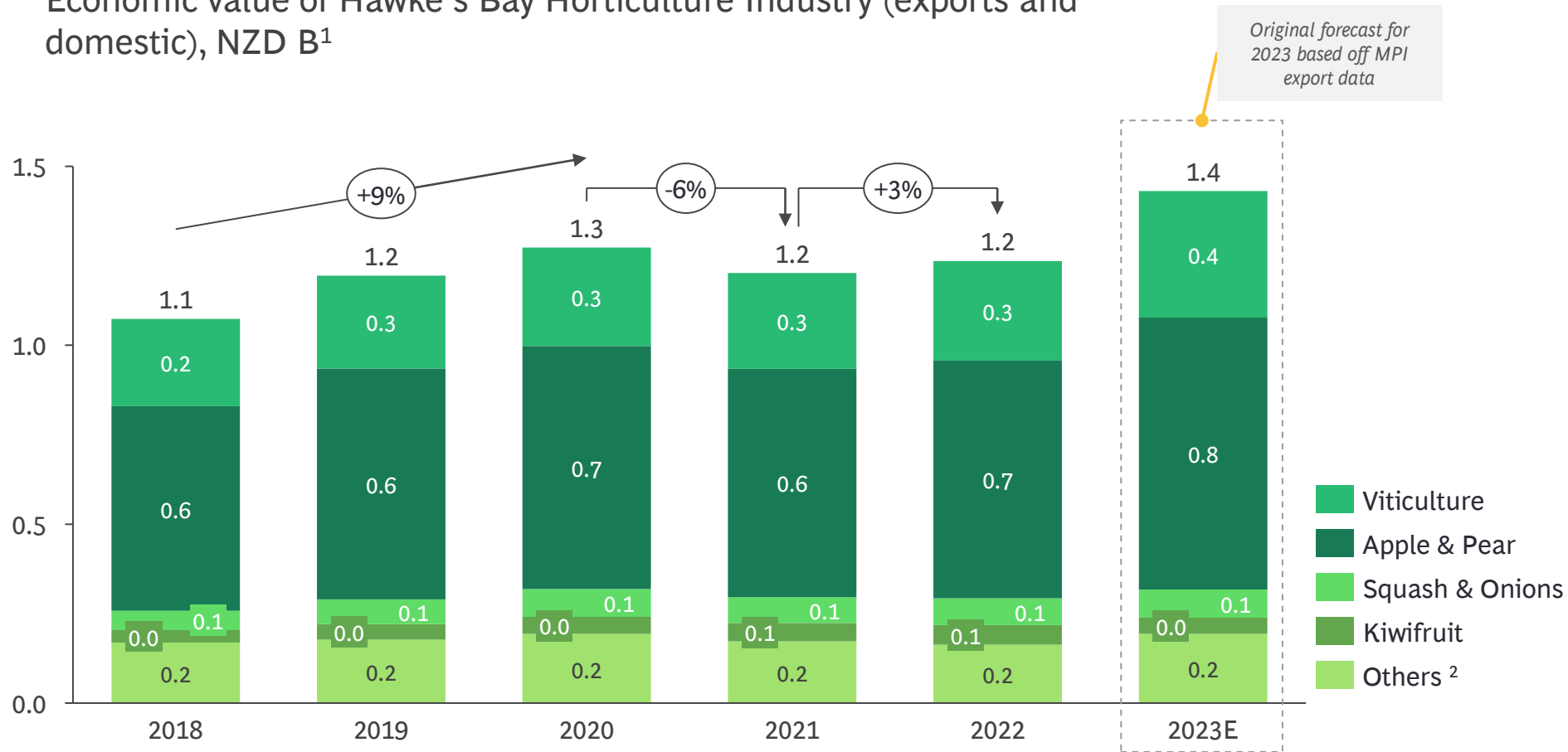


Our report findings

- Prior to Cyclone Gabrielle, the Hawke's Bay horticulture industry contributed **\$1.2B to the NZ economy**, sustaining a **vibrant, diverse and innovative** community
- In **2023 alone**, Cyclone Gabrielle will cause **\$1.4B+ of negative economic impact** to the Hawke's Bay region, in addition to the **social and humanitarian toll** on the community. A further **\$3.5B+ in 2024 – 2030 losses** from lost productivity and growth will result without targeted intervention
- Out of this devastation, there's an **opportunity** for the Hawke's Bay to '**grow back better**', **doubling** the sector's contribution to the economy and **increasing its resilience** for the future. This opportunity requires sound **planning**, targeted **intervention** and a **partnership** approach across stakeholders

Prior to Cyclone Gabrielle, the Hawke's Bay horticulture industry contributed \$1.2B to the NZ economy, sustaining a vibrant, diverse and innovative community

Economic value of Hawke's Bay Horticulture Industry (exports and domestic), NZD B¹



6,700 permanent jobs supported

1.9x value multiplier to local economy

4,000 Māori employed

Leader in growing techniques

1. Methodology: Used MPI National Horticulture export revenue forecast from 2004 – 2024; assumes exports account for 85-90% of total economic value, except other fresh fruit and vegetables (exports account for c.40% of total value); Calculated Hawke's Bay share of economic value using share of horticulture land: c.12% of wine, 67% of Apple & Pear, 60% of squash, c.16% of onions, c.2% of kiwifruit, c.12% of other fresh and processed vegetables, are produced in Hawke's Bay.

2. e.g., processed vegetables and summerfruit

Sources: MPI, NZAPI, Stats NZ, Hort NZ, NZ Wine, Summerfruit NZ, Productivity.govt.nz, Onionsnz, Freshfacts, Industry expert interview, BCG analysis

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\$370m+ in critical response

Costs vary depending on type of crop on the land and the extent of the damage



\$550m+ replanting¹ & reinstatement²
(like-for-like replacement)

Cost of replanting with the same crops and nurturing damaged plants to health



c.\$500m in 2023 direct economic losses

Growers impacted in 2023
c.\$130m loss in net value³ from lost profits for the year given pre-harvesting costs already incurred

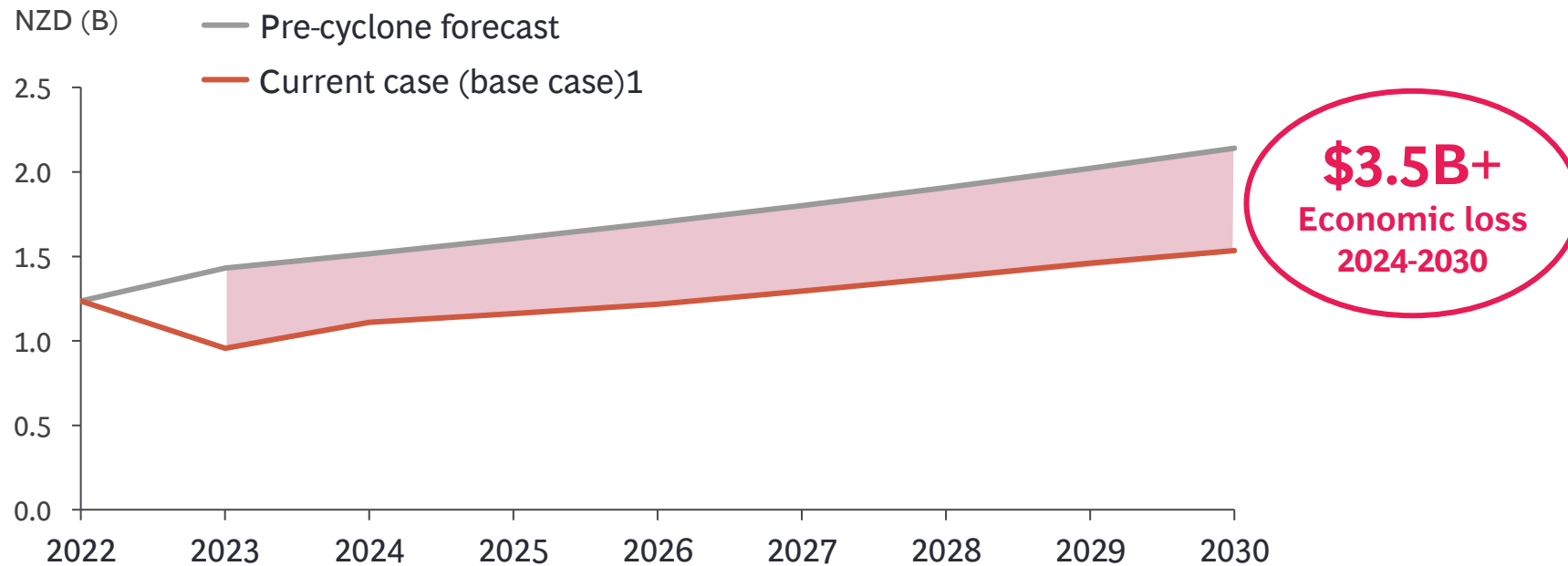
A total of \$1B+ in losses will sit with growers

1. Replanting includes the cost of trees/seeds (in the case of vegetables) and infrastructure. 2. Reinstatement is equivalent to one year's production costs for damaged and replanted crops 3. Net value is defined as post-tax profit 4. Extrapolated based on IBR Report and Waikato University report on Kiwifruit Industry



A further \$3.5B+ in 2024 – 2030 losses from lost productivity and growth will result without targeted intervention

Projected economic value of Hawke's Bay Horticulture Industry (exports and domestic), NZD B



Year	2023	2024	2025	2026	2027	2028	2029	2030
Cumulative losses vs. pre-cyclone forecast (\$B)		\$(0.4)	\$(0.9)	\$(1.3)	\$(1.8)	\$(2.4)	\$(2.9)	\$(3.5+)

\$3.5B+
Economic loss
2024-2030

Constraints to recovery

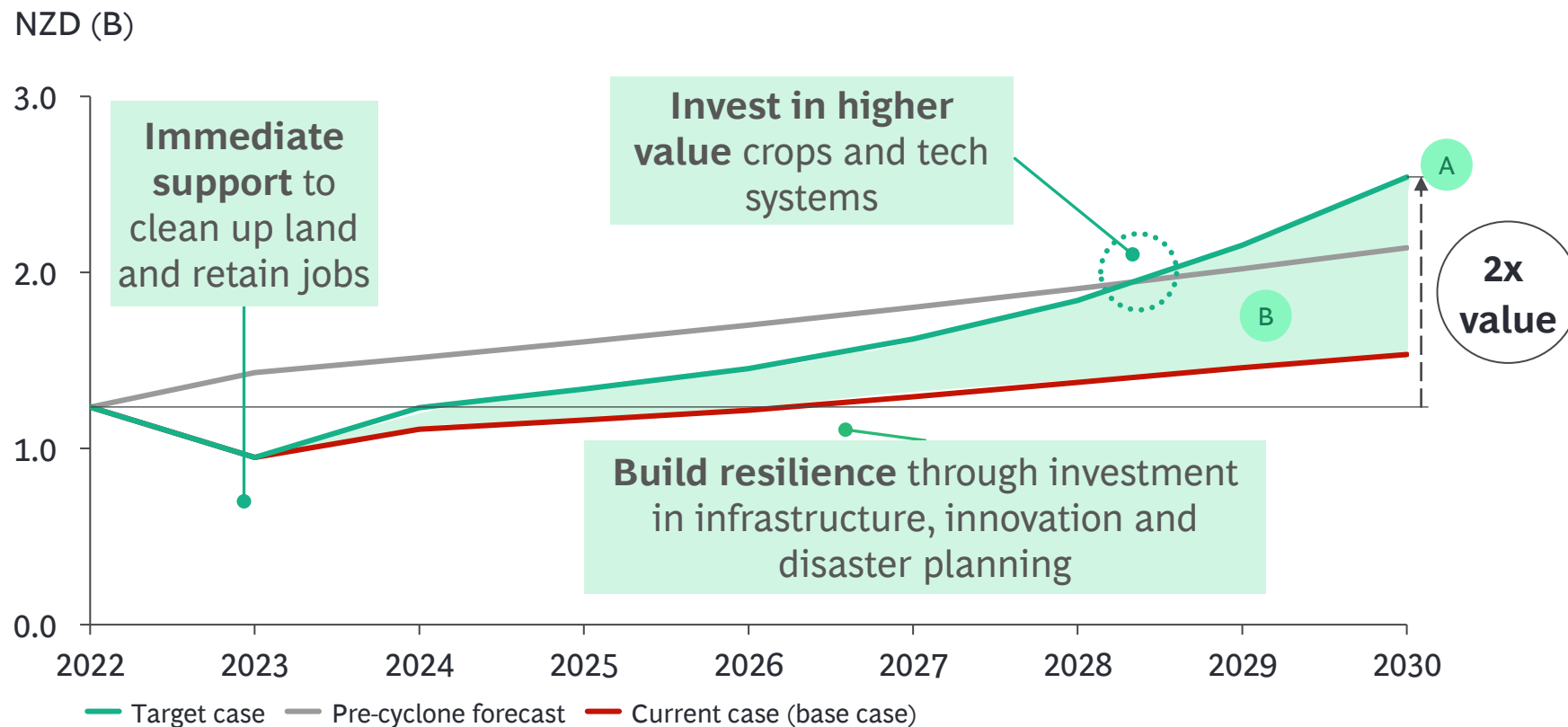
- Funding for land availability / clean-up
- Nursery plant supply
- Farming technology
- Increased climate risk
- Infrastructure deficits
- Loss of human capital
- Reduced investment
- ...

1. Base case assumes that only 50% of the sector will be able to recover without additional government assistance (impact will vary across growers, with some growers likely becoming unviable without additional support, and others who can recovery with minimal additional assistance)

Source: MPI, NZAPI, Stats NZ, Hort NZ, NZ Wine, Summerfruit NZ, Productivity.govt.nz, Onionsnz, Freshfacts, Industry expert interview, BCG analysis

Out of this devastation, there's an opportunity for the Hawke's Bay to 'grow back better', doubling the sector's contribution to the economy and increasing its resilience for the future

Projected economic value of Hawke's Bay Horticulture Industry (exports and domestic), NZD B



Value created by 2030

A Double direct annual value

B \$2.4 – 3.6B cumulative additional value

PLUS

6K+ more permanent jobs¹

1. Assumes jobs grow at the same rate as economic value; 6700 perm jobs in 2022, c.10K temp jobs (including 4000 RSEs) in 2022
 Source: MPI, NZAPI, NZ Wine, Statistics New Zealand, Horticulture New Zealand, Productivity.govt.nz, industry interviews, Freshfacts, Productivity.govt.nz, Onionsnz, Industry expert interviews, BCG analysis

This opportunity requires sound planning, targeted intervention and a partnership approach across stakeholders

c.\$650 - 960m required to unlock constraints and reach target state



1. Incremental from base case, based on average clean-up costs by crop type provided by and validated with industry bodies as of March 31, 2023 2. Incremental from base case, equivalent to one year's production cost for damaged and replanted crops 3. Incremental from base case, includes cost of trees/seeds, infrastructure and add'l costs of higher value crops and higher productivity growing systems where applicable, and support required for non-growers to maintain capacity and in market demand *Costs may be higher if non-assisted recovery is below base case

Backup: Critical response

	Description	Potential levers	Support req'd	Example
Clean-up	<ul style="list-style-type: none"> Immediate clean up support for affected areas 	<ul style="list-style-type: none"> Direct funding Suspension of BAU compliance regulations 	\$150-230m ¹	<p>2011 Queensland floods</p> <p>Clean up recovery grant</p> <ul style="list-style-type: none"> To assist clean up and removal of flood-related debris for primary producers and small businesses Immediate response did not require proof of damage/expenditure Subsequent provision dependent on personal circumstance and required proof of damage and expenditure
Reinstatement	<ul style="list-style-type: none"> Targeted interventions to ensure business viability including production reimbursement and employee retention schemes 	<ul style="list-style-type: none"> Direct funding Concessional loans Wage subsidies³ 	\$80 - 110m ²	

1. Incremental from base case, based on average clean-up costs by crop type provided by and validated with industry bodies as of March 31, 2023 2. Incremental from base case, equivalent to one year's production cost for damaged and replanted crops 3. A tailored approach is required to wage subsidies as Cyclone Gabrielle has had an asymmetric impact to growers in the region *Costs may be higher if non-assisted recovery is below base case

Backup: Short-term reestablishment

	Description	Potential levers	Support req'd	Example
Replant	<ul style="list-style-type: none"> Innovative capital investment across the entire value chain for replanting higher value crops, with updated tech and capacity 	<ul style="list-style-type: none"> Direct funding Conc. loans Tax incentives Relaxed regs for capital sources 	\$420 – 620m ¹	<p>2004 Manawatu floods</p> <p>Agricultural recovery programme</p> <ul style="list-style-type: none"> Up to 75% government assistance for essential infrastructure (e.g., re-establishing essential drainage, boundary fencing etc.) Farmers needed to meet a cost threshold, but no funding cap for eligible items
Land and water use	<ul style="list-style-type: none"> Increased flexibility of planning and policies to support land and water use change in high flood zones 	<ul style="list-style-type: none"> Updated flood zoning Updated regional planning for water use 	<i>Enabler</i>	
Short-term risk mitigation	<ul style="list-style-type: none"> Schemes to mitigate heightened costs of recovery for growers during period of infrastructure rebuild 	<ul style="list-style-type: none"> Partnerships for affordable insurance options 	<i>Enabler</i>	

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Backup: Long-term resilience

	Description	Potential levers	Support req'd	Example
Resilient infrastructure	<ul style="list-style-type: none"> Rebuild resilient infrastructure including flood protection systems / spillways 	<ul style="list-style-type: none"> Updated regulations Direct funding 	<i>Enabler</i>	<p>2002 German Elbe floods</p> <p>Germany Flood Control Act</p> <ul style="list-style-type: none"> The Act established a binding timeline for implementation of flood management Provides the legal framework for the management of floods, flood plains, land use and cooperation in river basins
Innovation	<ul style="list-style-type: none"> Increase wider value chain and go-to-market economic and environmental resiliency 	<ul style="list-style-type: none"> Grants Stakeholder collaboration/ partnerships 	<i>Enabler</i>	
Disaster planning	<ul style="list-style-type: none"> National plans and policies that consider increasing climate related risks 	<ul style="list-style-type: none"> Updated climate risk policy National disaster funding 	<i>Enabler</i>	



Recap: Our report findings

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