National **SCiCNCE** Challenges





Ko Ngā Kai Whai Painga









Aotearoa New Zealand needs a unified national food strategy

Food is central to our health and wellbeing, our economy, our environment, and the health of our planet. Our current food system is fragmented and disconnected. This is why we need a unified food strategy.

The National Science Challenges can provide robust evidence and connections to subject-matter experts to underpin the development of a National Food Strategy.

Why do we need to redesign our food system?

- Poor quality food is a major cause of ill-health and disease in Aotearoa New Zealand.
- An increasing number of New Zealanders cannot afford the high-quality food that constitutes a healthy diet. In some areas there are few options for buying healthy food, but ready access to junk food and alcohol.
- Food production contributes almost half the greenhouse gases produced in Aotearoa New Zealand, and water quality has been declining in many farming catchments.
- Extreme weather events have increasingly disrupted food production and highlight a major vulnerability. There is a need for better food security, particularly in the aftermath of disasters.
- The food we produce for export is vitally important for our economy. Overseas markets increasingly demand more sustainable food production and higherquality nutritious products.
- Government policies relevant to food and the environment do not accommodate the interactions between different components of the food system, sometimes working against each other.
- The wellbeing of farmers and growers is suffering as they try to comply with policy, respond to extreme weather events, and take increasing responsibility for environmental restoration.

A unified national food strategy would deliver:

- A clear framework that underpins and connects policy relating to food across all sectors.
- > More equitable access to affordable, nutritious high-quality foods.
- Better population health, education, and productivity outcomes by reducing the burden of diseases related to poor nutrition.
- A food production ecosystem that does not contribute to environmental degradation or exacerbate climate change.
- A food system that embraces and respects traditional methods and knowledge of food production and the protection of taonga species.
- Optimised local food production and distribution systems that reduce food waste and are resilient to disruption by adverse events.
- A balanced food system that meets domestic needs and delivers the important economic benefits of international food trade.
- > Informed, timely adaptation to climate change by food producers.

Statement issued on behalf of:

Ruth Berry Co-director, Building Better Towns, Homes and Cities

Professor Sir Jim Mann *Director Healthier Lives*

Joanne Todd Director, High-Value Nutrition

Dr Jenny Webster-Brown *Director, Our Land and Water*

Dr Richard Smith Director, Resilience to Nature's Challenges

Dr Julie Hall Director, Sustainable Seas

Dr Phil Wiles Director, Deep South

A national food strategy must be informed by science

A science-informed food strategy can provide integration across the food system, which is critically needed to alleviate the problems in our food system. Australia, Canada and the UK all have science-informed national food strategies that guide an integrated approach to the production, affordability and consumption of food.

The National Science Challenges were tasked with creating research evidence to help solve the most pressing issues facing Aotearoa New Zealand. They collectively represent expertise in the domains required to create a strategy for a unified food system.

Relevant evidence from National Science Challenges

The National Science Challenges have convened researchers from a wide range of disciplines and organisations. Examples of their research that can inform a National Food Strategy include:

 Helping our population to shift towards a healthier diet would produce large health gains and health system cost savings, reduce health inequity, and lower greenhouse gas emissions.

☑ healthierlives.co.nz/research/sustainable-nz-diets/
 ☑ healthierlives.co.nz/replacing-red-and-processed-meat-in-our-diet

 Aotearoa New Zealand can produce the right foods to feed our population a healthy diet by shifting land uses in areas unlikely to meet water quality targets without land-use change. Growing more grains and vegetables would improve water quality and reduce greenhouse gas emissions, without severely impacting red meat and dairy exports.

☑ ourlandandwater.nz/news/growing-for-good-a-win-win-win-plan-for-future-food-production

 Secure local food production and food rescue (waste reduction) are useful mechanisms to increase community resilience and reduce social and economic impacts in disaster response and recovery.
 www.mdpi.com/2071-1050/12/22/9369

I rgs-ibg.onlinelibrary.wiley.com/doi/epdf/10.1111/area.12762

- International consumers regard our food products as high-quality and desirable, and are often willing to pay a premium. They can also have nutritional advantages over those from other sources, and it is possible to eat a healthy diet from predominantly New Zealand-produced food.
 Image: The source of the source
- Climate change is affecting what food we can produce in different parts of the country. Overlaying crop requirements with projected regional climate change is giving insight and enabling us to adapt and prepare for these changes. A database of future land-use opportunities has been developed.
 deepsouthchallenge.co.nz/research-project/climate-change-risk-assessment-for-land-based-activities
 landuseopportunities.nz/
- With the right framework grounded in ecosystem-based management (EBM) principles, a thriving seaweed sector could be possible in Aotearoa New Zealand. A Seaweed Sector Framework grounded in blue economy and EBM principles has been co-developed with Māori partners and stakeholders.

 sustainableseaschallenge.co.nz/our-research/building-a-seaweed-economy



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For further information, please contact Healthier Lives (Cherie Stayner > *cherie.stayner@otago.ac.nz*) or Our Land and Water (Annabel McAleer > *annabel.mcaleer@agresearch.co.nz*)