

2. Post harvest disinfestation systems that are of quarantine importance for the horticultural exports; and that enhance the image of New Zealand products.
3. Seafood storage, handling, transport and processing that enhance fish species and products relevant to New Zealand.
4. Processes that add value to unprocessed exports through transformation into high quality food ingredients, emphasising modern biological and microbiological techniques.
5. Horticultural and food products in human health and nutrition, including food safety; with specific emphasis on major export products.

Output Class 14—Fibre, Skin and Textile Processing and Products

1. The development of environmentally friendly and consumer acceptable materials and technologies in the fibre, skin and textile industries; with emphasis on bio-technological alternatives.
2. Processes and end uses that add value to unprocessed exports in the fibre, skin and textile industry.
3. The physiological and genetic bases for, and manipulation of, skin and skin product quality including the impact of on-farm management practices.

Output Class 19—Building and Construction Processes, Systems and Products

1. Minimising the lifetime cost of building and construction in New Zealand.
2. Low energy architecture.
3. Ways to improve indoor environments in which we live and work to aid the health and efficiency of the people who use the buildings.
4. Improving building safety for occupants.
5. The factors that the building and construction industry must take account of in building for the changing population mix and distribution in New Zealand.

Output Class 25—New Zealand History, Society, Culture and Te Ao Maori

1. Iwi development, on Maori social, cultural, political and economic issues.

Output Class 26—Social and Personal Development, Relationships and Wellbeing

1. The inter-relationship between economic and social policy, with a specific focus on the impact of government policy on individual family and group well-being in New Zealand.

Output Class 27—Political and Economic Relationships

1. New Zealand labour force dynamics and workplace culture in their national and international context, with specific attention to structural adjustment, employment generation, immigration, quality of working life and equity of employment opportunity.
2. New Zealand trade and investment patterns, market problems and opportunities within the framework of a rapidly-changing regional and global economy.

Output Class 28—Education, Knowledge and Training

1. Research on the process of skills formation in New Zealand (including analysis of the barriers and opportunities to developing a highly skilled workforce) in the context of continuing economic change. This includes equity issues in education and employment.

Output Class 33—Climate and the Atmosphere

1. Studies of stratospheric ozone and other stratospheric gases aimed at understanding the chemistry determining ozone concentrations in the atmosphere, and ultraviolet

measurement and analysis, including detailed spectral measurements.

2. Studies of tropospheric gases, including isotope studies and measurement of greenhouse gases, aimed at understanding the chemistry of the troposphere
3. Climate dynamics and paleoclimate studies aimed at describing and understanding past and present New Zealand climates and to predict future variations in atmospheric circulation.
4. Climate monitoring and climate databases, in particular the production of high quality climate records.
5. Trace gas budgets for radiatively active molecules and aerosol, including their sources and sinks in terrestrial and aquatic ecosystems and soils.
6. Investigating interactions between the atmosphere and land surfaces, including the biosphere, with an emphasis on the impacts on the atmosphere.

Output Class 40—Scientific and Technological Services

1. The establishment for the scientific community of an integrated, nation-wide, electronically-based information network with appropriate flexibility for ongoing international connections, to foster the growth of the country's scientific infrastructure.

Annex C: Themes Applying Across Outputs

I Climate Change

1. Fundamental Climate Knowledge

- A. improving understanding of physical and chemical processes and constituents in the atmosphere and oceans, including long term research, monitoring and modelling of atmospheric and climatic variables; (output 33, although some work on oceans may fall within output 32)
- B. investigating interactions between the atmosphere and land surfaces including the biosphere; (various outputs).
- C. collection and use of instrumental, historical, and proxy data in the New Zealand, South Pacific and Antarctic Region to assess climate variability; (outputs 33).
- D. collaboration in developing and validating computer models for predicting regional scale changes; (output 33).
- E. trace gas budgets for radiatively active molecules and aerosols, including their sources and sinks in terrestrial and aquatic ecosystems and soil. (various outputs).

This work is a priority both nationally, regionally and globally, and priority should be given to those programmes which are part of larger efforts directed at increasing fundamental knowledge of climate change parameters, both locally and internationally. Fundamental climate knowledge is the basis for all climate change research.

2. Adaptation to Climate Change

- A. impact studies, including sensitivity and adaptive responses of natural and managed ecosystems and responses by the agricultural, horticultural and forestry sectors; (various sector specific outputs).
- B. assessment and mitigation of climatically influenced hazards. (various sector specific outputs).

Adaption and impact studies are listed as a second priority because it is necessary to understand the likely nature of climate change, based on a better understanding of climate process and the impacts of rising levels of greenhouse gases to define adaption and impact studies. Preference should be given to funding of broad, coordinated programmes aimed at increasing knowledge of the local situation.

II Control of Possums and the Threat of Bovine Tb

- A The epidemiology of Tb in farmed and feral animal species.