



Ministry for the
Environment
Manatū Mō Te Taiao

Valuing New Zealand's Clean Green Image

The Ministry for the Environment commissioned PA Consultants to carry out this study (funded by the Contestable Research Fund of the Ministry of Research, Science and Technology) to provide an estimate of the value for New Zealand's export trade of our clean green image.

There is considerable discussion about New Zealand's clean green image, but relatively little solid information about its value. This was clear from an earlier study which the Ministry commissioned through the Sustainable Management Fund, *Green Market Signals*, published in 1999. The current study is, in part, a response to the suggestions received from industry groups and others at that time.

The aim of this current study is to quantify the extent to which particular New Zealand exports benefit from positive perceptions about our environment. The project focuses on three export sectors: dairy, inbound tourism, and organic produce. It assesses the potential consumer reaction to an illustrative decline in New Zealand's cleanness and greenness.

The empirical work done in this study reinforces the qualitative evidence that our clean green image is valuable, and provides some useful insights into the size and nature of that value. The results are of course not definitive – no contingent valuation study can ever be so – but they do strongly indicate a significant vulnerability of export value (through reduction in product quantities likely to be purchased by consumers) in the event of a (hypothetical) degradation of New Zealand's environment.

While the research's approach and findings have been robustly peer reviewed, like all empirical economic estimates, the conclusions rest on assumptions and a specific methodology. That said, the study certainly provides food for thought. Main findings are as follows:

- New Zealand's clean green image does have a value. Environmental image is a substantial driver of the value New Zealand can derive for goods and services in the international market place.
- The study suggests this image is worth at least hundreds of millions, possibly billions, of dollars – aggregating value elements from dairy, tourism, and organic produce, and extrapolating to other sectors such as meat.
- New Zealand is relatively clean and green. This is mainly attributable to our low population density resulting in relatively benign environmental pressures.
- However, there are environmental problems that are sufficient to raise questions about the sustainability of the value of New Zealand's exports attributable to its environmental image. There is a risk that New Zealand will lose value that is created by the current environmental image if we are not vigilant in dealing with the problems that could threaten the image.

If you would like to discuss this report further, please contact Dr Ralph Chapman, Manager of the Strategic Policy Group, Ministry for the Environment, at (04) 917 7444 or email him at ralph.chapman@mfe.govt.nz.

8. GLOSSARY

AIME	Africa India and the Middle East
BGH	Bovine Growth Hormone
BSE	Bovine Spongiform Encephalopathy (Mad Cow Disease)
DTO	District Tourism Operator
EPI	Environmental Performance Indicators
EP	Environmental Plan
EU	European Union
FFV	Fresh Fruit and Vegetables
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GE	Genetically Engineered/Genetic Engineering
GM	Genetically Modified/Genetic Modification
GMO	Genetically Modified Organism
GST	Goods and Services Tax
HEA	Horticultural Export Authority
HSNO	Hazardous Substances and New Organisms Act
IFOAM	International Federation of Organic Agriculture Movements
IFP	Integrated Fruit Programme
MRL	Maximum Residue Level
NIMBY	“Not in my Backyard”
NZDB	New Zealand Dairy Board
NZDRI	New Zealand Dairy Research Institute
NZMP	New Zealand Milk Products (Ingredients business)
OECD	Organisation for Economic Cooperation and Development
OPEG	Organic Products Exporters Group
OTSP	Office of Tourism and Sport
PSRM	Pressure State Response Model
rBST	Recombinant Asbovine Somatotropin
rBGH	Recombinant Bovine Growth Hormone (same as rBST)
RTO	Regional Tourism Operator
SPS	Sanitary and Phytosanitary
tce	Tray Carton Equivalent (18.2 kilograms)
TIANZ	Tourism Industry Association of New Zealand
TNZ	Tourism New Zealand