

Report to
MINISTRY FOR THE ENVIRONMENT

APPENDIX 2
TO

**ECONOMIC RISKS AND OPPORTUNITIES
FROM THE RELEASE OF
GENETICALLY MODIFIED ORGANISMS
IN NEW ZEALAND**

*The effect of GMO release on market perceptions of
the NZ environment
Questionnaire (phone version layout)*

November 2002



The Effect Of GMO Release On Market Perceptions of the NZ Environment

Questionnaire (Phone Version Layout)

"Good morning/afternoon/evening. I am Xxx, from NRB, the market and social research firm. Is there a man/woman aged 18 years or over living in your home?" (IF MORE THAN ONE, ASK FOR THE ONE WHO LAST HAD A BIRTHDAY. IF OUT, ASK FOR SUITABLE CALLBACK TIME)

A. **Introduction**

"We would like to get your impression of the state of the environment in a number of countries. It's only your personal image of the country we are after, so you don't need to have studied or visited the countries."

B. **Definition of Environment** [READ EACH POINT TO THE RESPONDENT]

"By "state of the environment" we mean how well the country manages to...

- "minimize pollution of their air, rivers and seashore",
- "minimize erosion or chemical damage to the land",
- "protect natural plants and animals, including large reserves",
- "keep towns and cities clean, with many trees and parks".

In short, people's use of the environment is managed to be sustainable, clean and green."

C. **Questions on relative image of the environment**

Q.1 "I'll read out the names of some countries. Would you please answer by saying whether your image of their environment was...

very good, among the best,
 OR
 just good, above the average,
 OR
 average, say in the middle,
 OR
 not very good, below the average,
 OR
 relatively bad, among the worst.

Of course, if no image comes to your mind at all, just say "no image".

[READ OUT EACH COUNTRY, STARTING AT THE ASTERISK. THEN READ THE SCALE..

REFRESH THE PERSON ON THE DEFINITION, OR THE SCALE, AS SUITS THEIR INDIVIDUAL GRASP OF WHAT IS REQUIRED OF THEM.]

	"Very good - among the best"	"Good - above average"	"Average"	"Not good - below average"	" Bad - among the worst"	No Image
Mexico	5	4	3	2	1	9
Switzerland	5	4	3	2	1	9
Thailand	5	4	3	2	1	9
New Zealand	5	4	3	2	1	9
Argentina	5	4	3	2	1	9
Australia	5	4	3	2	1	9
South Africa	5	4	3	2	1	9
Canada	5	4	3	2	1	9
Netherlands	5	4	3	2	1	9
China	5	4	3	2	1	9
United States	5	4	3	2	1	9
United Kingdom	5	4	3	2	1	9
Japan	5	4	3	2	1	9

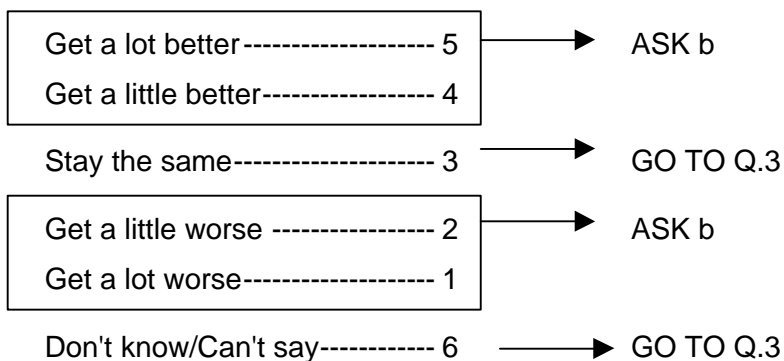
D. Questions on Image Change

"This next question refers to your image of the state of the environment in **New Zealand**."

[IF NZ WAS ANSWERED "NO IMAGE" IN THE PREVIOUS SECTION, SAY "You said earlier you had no image of NZ's environment so please answer the next question on the basis that it is "average - neither good nor bad".]

Q.2 "Suppose New Zealand was one of two or three countries that used genetic technology to control local pests such as rats or wasps. For example, a gene which caused them to breed less often was put into a number of rats or wasps. These are then released to mix with those in the wild so that the gene is passed around."

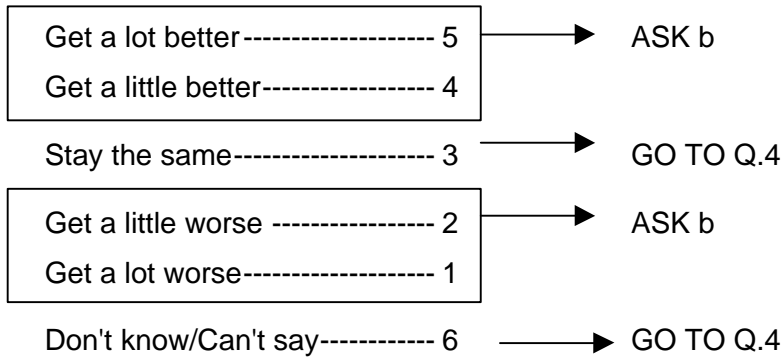
(a) Would your image of that country's environment get better, stay the same, or get worse? IF BETTER/WORSE, ASK: "By a lot or a little?"



(b) "Can you say why?" (RECORD FULLY)

Q.3 "Suppose New Zealand was one of two or three countries to use a strain of rye grass modified by genetic technology. The gene of the grass would be changed to increase its food value. Farmers would plant fields of the modified rye grass to feed their livestock."

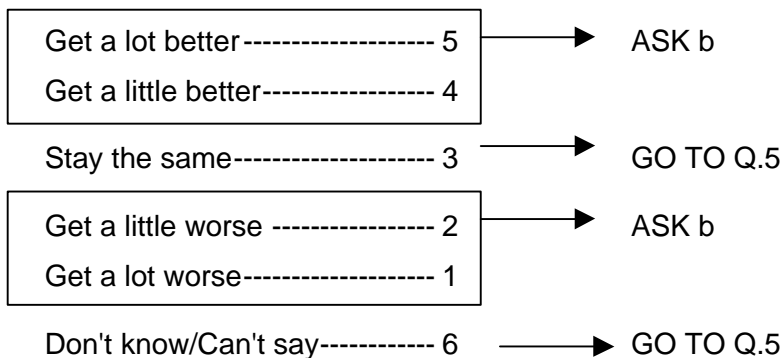
(a) Would your image of that country's environment get better, stay the same, or get worse? IF BETTER/WORSE, ASK: "By a lot or a little?"



(b) "Can you say why?" (RECORD FULLY)

Q.4 "Suppose New Zealand was one of two or three countries to use a virus whose genes have been changed in such a way that protects a person against a contagious disease such as Hepatitis or Meningitis. The modified virus, once in the person's bloodstream, would remain there, attacking the disease virus if or when the person got infected."

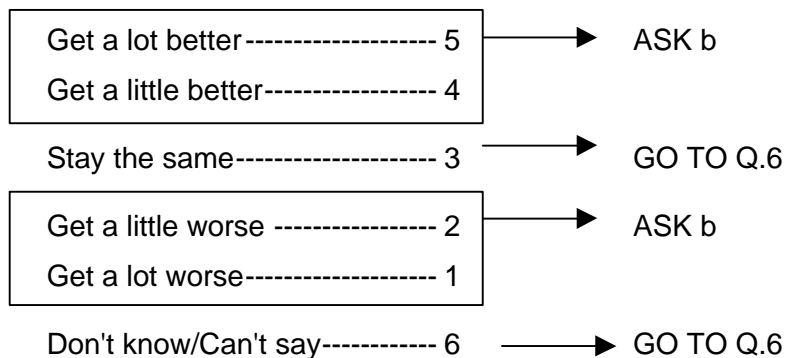
(a) Would your image of that country's environment get better, stay the same, or get worse? IF BETTER/WORSE, ASK: "By a lot or a little?"



(b) "Can you say why?" (RECORD FULLY)

Q.5 "Suppose New Zealand was one of two or three countries **not to use** genetically modified organisms in production, **nor** release GM organisms into the environment."

- (a) "Would your image of that country's environment get better, stay the same or get worse? IF BETTER/WORSE, ASK: "By a lot or a little?""



- (b) "Can you say why?" (RECORD FULLY)

E. Questions on Purchase Change

Introduction:

Please answer the next questions on the basis that New Zealand became one of two or three countries to use genetically modified plants, organisms, seeds and animals, in the ways we covered earlier.

- Q.6a "Say you were at the shops, buying fruit. Some of the fruit was from New Zealand and some from countries that did not use genetic modification. Knowing that New Zealand used genetic modification technology, although not with the fruit that interested you, - would you feel...?" (READ OUT)

- "More inclined to choose New Zealand fruit?" --- 1 → ASK b
 "Less inclined to choose New Zealand fruit?"---- 2 → ASK d
 "Or no different than before?"----- 3 → GO TO Q.7

Depends on looks/taste/variety etc. ----- 4 → GO TO Q.7

- (b) "If the New Zealand fruit was priced at about 5 cents in the dollar dearer than similar fruit from countries who didn't use genetic modification, would you buy it at that price?" (READ OUT)

- "Yes"----- 1 → GO TO c
 "No"----- 2 → GO TO Q.7

Depends on looks/taste/variety etc. ----- 3 → GO TO Q.7

- (c) "If the New Zealand fruit was priced at about 10 cents in the dollar dearer than similar fruit from countries who didn't use genetic modification, would you buy it at that price?" (READ OUT)

"Yes"----- 1→ GO TO Q.7
 "No"----- 2 → GO TO Q.7
 Depends on looks/taste/variety etc. -----3 → GO TO Q.7

- (d) "If the New Zealand fruit was priced at about 5 cents in the dollar less expensive than similar fruit from countries who didn't use genetic modification, would you then buy it?" (READ OUT)

"Yes"----- 1→ GO TO Q.7
 "No"----- 2 → ASK e
 Depends on looks/taste/variety etc. -----3 → GO TO Q.7

- (e) "And if the New Zealand fruit was priced at 10 cents in the dollar less expensive than similar fruit from countries who didn't use genetic modification, would you then buy it?" (READ OUT)

"Yes"----- 1→ GO TO Q.7
 "No"----- 2 → ASK f
 Depends on looks/taste/variety etc. ----- 3 → GO TO Q.7

- (f) "How many cents per dollar less expensive would the New Zealand fruit need to be for you to buy it?" (READ OUT)

"Cents per dollar cheaper _____ cents"----- 1
 (PROBE ONLY IF NEEDED: "Would you say
 12, 14, 16,18, 20, or over 20?")
 "Would not buy it at all"----- 2
 Don't know/Can say ----- 3

- Q.7a "Now please think of taking a 10 day holiday in another country, and also that New Zealand was one of several countries you found equally appealing. On being told that New Zealand used genetic modification technology in the ways we covered, - would you feel...?" (READ OUT) (IF ASKED: "You don't know whether the others do or don't use GM.")

"More inclined to choose New Zealand for a holiday" - 1 → ASK b
 "Less inclined to choose New Zealand for a holiday" --2 → ASK d
 "Or would make no difference to you"-----3 → GO TO Q.8
 Depends on other things----- 4 → GO TO Q.8

- (b) "If it happened that the New Zealand holiday was priced 5% dearer than a similar holiday in countries that did not use genetic modification, would New Zealand..." (READ OUT)

"Still be equally appealing to the other countries
you were considering as a holiday choice" ----- 1 → ASK c

"Now be less appealing than the other countries
you were considering as a holiday choice" ----- 2 → GO TO Q.8

Depends on other things ----- 3 → GO TO Q.8

- (c) "If it happened that the new Zealand holiday was priced 10% dearer than a similar holiday in countries that did not use genetic modification, would New Zealand..." (READ OUT)

"Still be equally appealing to the other countries
you were considering as a holiday choice" ----- 1 → GO TO Q.8

"Now be less appealing than the other countries
you were considering as a holiday choice" ----- 2 → GO TO Q.8

Depends on other things ----- 3 → GO TO Q.8

- (d) "What if you could get the New Zealand holiday at a discount of 5% less than a similar holiday in countries that did not use genetic modification, would New Zealand..." (READ OUT)

"Still be less appealing than the countries
which don't use genetic modification" ----- 1 → ASK e

"Now be equally or more appealing, again, to the
countries you were considering" ----- 2 → GO TO Q.8

Depends on other things ----- 3 → GO TO Q.8

- (e) "What if you could get the New Zealand holiday for a discount of 10% over the price of a similar holiday in countries that did not use the sort of genetic modification technology we covered. Would New Zealand..." (READ OUT)

"Still be less appealing than other countries
which don't use genetic modification" ----- 1 → ASK f

"Now be equally, or more appealing, again, to the
countries you were considering" ----- 2 → GO TO Q.8

Depends on other things ----- 3 → GO TO Q.8

- (f) "What percent discount would you want, for New Zealand to be as appealing a holiday purchase, as countries which did not use genetic modification technology?"

"Discount _____ %" ----- 1

(PROBE ONLY IF NEEDED: "Would you say

12, 14, 16,18, 20, or over 20?")

"Would not buy /Go at all" ----- 2

Don't know/Can't say ----- 3

Q.8a "Suppose you were at the shops buying a dairy product like cheese, a milk drink, or butter. The store had dairy products from New Zealand as well as from countries that did not use genetic modification in the ways we covered earlier.

Knowing that New Zealand used genetic modification, though not in the dairy product you were buying, would you feel..."(READ OUT)

"More inclined to buy the New Zealand dairy product" --1 → GO TO b

"Less inclined to buy the New Zealand dairy product"---2 → GO TO d

"Or would make no difference to you"-----3 → GO TO Q.9

Depends on looks/taste/variety etc.----- 4 → GO TO Q.9

(b) "If the New Zealand dairy product was priced about 5 cents in the dollar dearer than similar products from countries which did not use genetic modification, would you buy it at that price..."(READ OUT)

"Yes"----- 1 → GO TO Q.c

"No"----- 2 → GO TO Q.9

Depends on looks/taste/variety etc.-----3 → GO TO Q.9

(c) "If the New Zealand dairy product was priced about 10 cents in the dollar dearer than similar products from countries which did not use genetic modification, would you buy it at that price..."(READ OUT)

"Yes"----- 1 → GO TO Q.9

"No"----- 2 → GO TO Q.9

Depends on looks/taste/variety etc. ----- 4 → GO TO Q.9

(d) "If New Zealand dairy product were priced at about 5 cents in the dollar less expensive than similar dairy products from countries who didn't use genetic modification, would you then buy it?" (READ OUT)

"Yes"----- 1 → GO TO Q.9

"No"----- 2 → ASK e

Depends on looks/taste variety etc ----- 3 → GO TO Q.9

(e) "And if the New Zealand dairy products were priced at 10 cents in the dollar less expensive than similar dairy products from countries who didn't use genetic modification, would you then buy it?" (READ OUT)

"Yes"----- 1 → GO TO Q.9

"No" ----- 2 → ASK f

Depends on looks/taste variety etc ----- 3 → GO TO Q.9

- (f) "How many cents per dollar less expensive would New Zealand dairy products need to be for you to buy it?" (READ OUT)

Cents per dollar cheaper _____ cents ----- 1

(PROBE ONLY IF NEEDED: "Would you say

12, 14, 16,18, 20, or over 20?")

Would not buy it at all ----- 2

Don't know/Can't say ----- 3

- Q.9a "Now suppose New Zealand were **not to use** genetically modified organisms in production, **nor** release GM organisms into the environment. Please answer the next questions on the basis that New Zealand became one of the two or three countries to **not use** genetic modification.

Say you were at the shops, buying fruit - some of the fruit was from New Zealand, and some from countries that did use genetic modification, the fruit itself was not genetically modified. Given that New Zealand did not use genetic modification technology, would you feel..."

"More inclined to choose New Zealand fruit?" --- 1 → ASK b

"Less inclined to choose New Zealand fruit?" ---- 2 → ASK e

"Or no different than before?"----- 3 → GO TO Q.10

Depends on looks/taste/variety etc. ----- 4 → GO TO Q.10

- (b) "If the New Zealand fruit was priced at about 5 cents in the dollar dearer than similar fruit from countries who **did** use genetic modification, would you buy it at that price?" (READ OUT)

"Yes"----- 1 → ASK c

"No"----- 2 → GO TO Q.10

Depends on looks/taste/variety etc. ----- 3 → GO TO Q.10

- (c) "If the New Zealand fruit was priced at about 10 cents in the dollar dearer than similar fruit from countries who **did** use genetic modification, would you buy it at that price?" (READ OUT)

"Yes"----- 1 → ASK Q.d

"No"----- 2 → GO TO Q.10

Depends on looks/taste/variety etc. -----3 → GO TO Q.10

- (d) "How many cents per dollar more, would you be prepared to pay for the New Zealand fruit, than fruit from other countries that did use GM technology?" (READ OUT)

Cents per dollar more _____ cents - 1 ----- → GO TO Q.10

(PROBE ONLY IF NEEDED: "Would you say

12, 14, 16,18, 20, or over 20?")

Don't know/Can't say ----- 2 → GO TO Q.10

- (e) "If New Zealand fruit was priced at about 5 cents in the dollar less expensive than similar fruit from countries who did use genetic modification, would you then buy it?" (READ OUT)

"Yes"----- 1 → GO TO Q.10

"No"----- 2 → ASK f

Depends on looks/taste variety etc ----- 3 → GO TO Q.10

- (f) "And if the New Zealand fruit was priced at 10 cents in the dollar less expensive than similar fruit from countries who did use genetic modification, would you then buy it?" (READ OUT)

"Yes"----- 1 → GO TO Q.10

"No"----- 2 → GO TO Q.10

Depends on looks/taste variety etc ----- 3 → GO TO Q.10

