Information sheet 1: Population sustainability and household consumption

(Adapted from Ministry for the Environment, Environment New Zealand (2007) at www.mfe.govt.nz)

Growing populations place growing demands on the resources that support them. Some parts of our planet are becoming overpopulated. According to the WWF '**Overpopulation** indicates a scenario in which the population of a living species exceeds the carrying capacity of its ecological niche[1]'. Population growth therefore needs to be carefully planned for, managed and monitored.

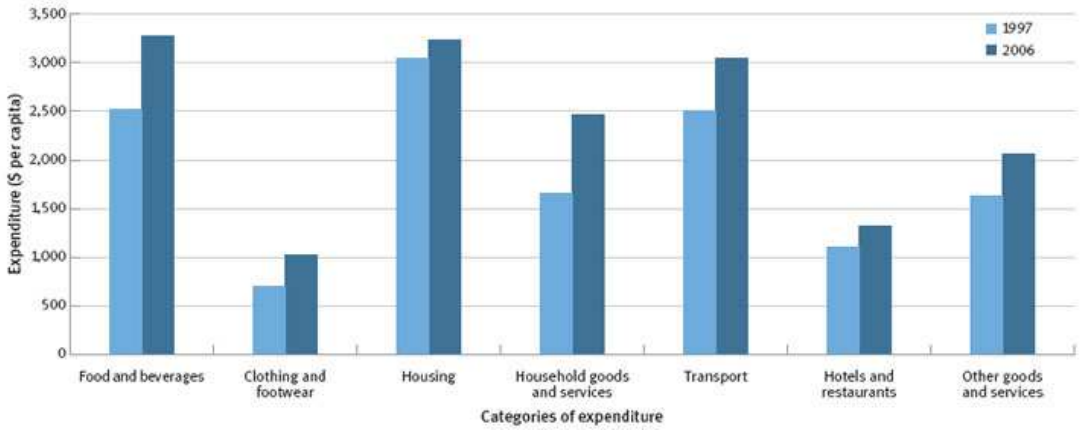
Environmental reporting is one way that we can check to make sure that our approaches to environmental management are effective over time. State of the Environment reporting conducted by the Ministry for the Environment and local government agencies is one type of environmental reporting done here in New Zealand. This type of reporting relies on **environmental indicators**. Environmental indicators are used because we cannot continuously measure every aspect of our environment. Indicators allow us to monitor environmental impacts in a practical, cost effective and meaningful way.

One national environmental indicator that is used to measure the pressure that households place on the environment is '**household consumption**'. There are two important aspects of household consumption in terms of the effect a household has on the environment:

1. How much money is spent (the volume of household consumption expenditure)
2. The kinds of products and services that are consumed (household consumption expenditure across consumption categories).

The amount of money being spent by households is increasing over time. This and the way in which people are spending are illustrated in figure 1.

Figure 1. Household consumption expenditure in 1997 and 2006 (Ministry for the Environment)



[1]Ecological niche is the particular environment a species or population lives in and may include the unique set of physical characteristics required for that species to flourish and survive.

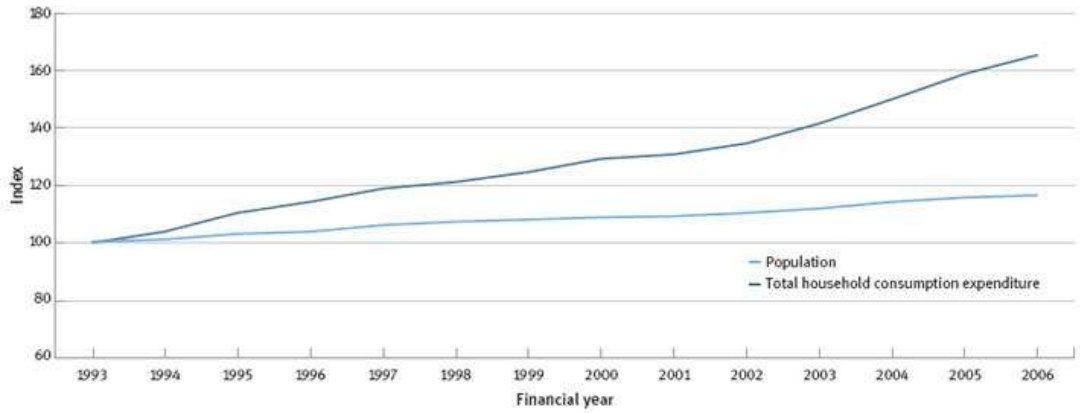
Factors that affect household consumption

A variety of factors can influence household expenditure patterns at individual and national levels, and consequently, the degree to which our consumption affects the environment. Our purchasing patterns change as our lifestyles change, as the size of our families and homes change, and as our population and economy grows. Factors that can influence household consumption expenditure patterns include lifestyle changes, emerging technologies, marketing campaigns, and changes in styles and tastes. Other important factors include population, the number of households and household size, the availability and affordability of goods and services, economic growth and income levels and individual choices. The following is a summary of how some of these factors have changed in New Zealand. These factors are relevant to the western Bay of Plenty sub-region, as it has one of the fastest growing populations in New Zealand.

Population

Between 1993 and 2006, New Zealand's population increased about 16 percent and the estimated number of households increased about 22 percent. While these increases could be expected to cause household consumption expenditure to rise, total expenditure has been increasing at a comparatively greater rate than the population has been increasing. Total amount of money spent per household increased about 65 percent between 1993 and 2006 (see Figure 2). This suggests New Zealanders are spending relatively more now than they were 10 years ago.

Figure 2 Change in population and real total household consumption expenditure, 1993–2006 (March financial years)



Source: Ministry for the Environment

Households and household size

Between 1997 and 2006, the number of households in New Zealand increased, while the average number of people living in each household decreased slightly. Overall, the trend has been towards larger dwellings with fewer occupants (Statistics New Zealand, 2003). Data from the 2006 census shows that the average number of people per household marginally declined from 1996 to 2006, from 2.8 people per household to 2.7 people per household (Statistics New Zealand, 2007). Over the same period, the proportion of one person households in New Zealand increased from nearly 21 percent (256,569) to 23 percent (328,299) of households (Statistics New Zealand, 2007). Without any resource-efficiency measures, such as energy-efficient fit-outs and appliances, larger houses can be expected to consume more resources. At the same time, smaller households (fewer people occupying a housing unit) 'generally use more space, energy and water, and generate more waste per person' than do larger households' (European Environment Agency, 2005).

Availability and affordability of goods and services

As in other countries, New Zealanders have access to 'a steadily expanding range of low-price, mass-produced goods and access to a progressively more global marketplace' (Organisation for Economic Co-operation and Development, 2002b, p 6). Such trends can change not only the volume of household consumption, but also the kinds of goods households purchase. For example, in some cases it may become more affordable to buy something new rather than to repair it. The greater variety of products for consumers to buy is also reflected in an increase in the availability and variety of 'eco-friendly' products and services.

Economic growth and income levels

Economic growth and household consumption growth are closely linked, and have followed similar trends. Higher levels of income mean greater discretionary spending (that is, money available to spend on consumables beyond the basic necessities) and a greater ability to purchase more and/or higher-priced goods.

Individual choices

By making environmentally-conscious decisions, such as choosing appliances or vehicles that are more energy efficient, people can reduce the effects of their consumption on the environment. The opposite is true when household activities increase energy consumption or generate more waste that needs disposal.

References

Ministry for the Environment. 2007. *Environment New Zealand*. MfE. Wellington.
Statistics New Zealand. 2003. *New Zealand 2021: The growth dilemma*. Electricity engineers conference speech presented by John Cornish, Deputy Government Statistician, on 20 June 2003 in Christchurch.
Statistics New Zealand. 2007. QuickStats about Housing: Number of usual residents.

Question / Pātai:

1. '**Overpopulation** indicates a scenario in which the population of a living species exceeds the carrying capacity of its ecological niche'. Think of examples of evidence where the carrying capacity of a population is under threat (examples may be for any species including humans).

2. Why do we have **environmental reporting**?

3. What are **environmental indicators** and why do we use them in environmental reporting?

4. In your own words, what are the two most important aspects of **household consumption** in terms of how a household affects the environment?

5. Make a list of other factors that you think will affect how **household consumption** affects the environment? For example, population size, growth….

6. How do you think **house size** could increase or reduce a household's effect on the environment?

7. What are some of examples of **products** that you or your family buy that are low priced, mass produced goods?

8. What are some of examples of **products** that you or your family buy that are eco-friendly products?

9. Think of one example of a **product** that you recently replaced rather than repaired? And one example of a product that you repaired rather than replaced. In each case consider why? Would you change what you did the next time? Why?

10. How is **economic growth** linked with consumer spending?

11. Think of three ways that you can you reduce your environmental impact through you **consumer behaviour**.