Sustainable Lifestyle and It's Impact on New Zealand Society

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Abstract

Sustainable lifestyles are based on the belief that people in developed countries (predominantly) need to start making lifestyle decisions on the basis of the impact of those decisions upon the people and environment of the world. It is a lifestyle that thinks about the future and future generations and recognises that people and countries around the world are interconnected. As a term 'sustainable lifestyles' is not original to this thesis. Many writings have alluded to actions such as 'sustainable livelihoods' and 'living simply' and 'world citizens' but few have acknowledged the term sustainable lifestyles and it's out workings to any major degree. This thesis seeks to give parameters to the term 'sustainable lifestyle' and to evaluate to what degree sustainable lifestyle values and actions are impacting the way New Zealanders live.

Chapter one will introduce the purpose and methodologies of the thesis while chapter two sets out how the concept of sustainable lifestyles evolved and what exactly a sustainable lifestyle is. From a basis of sustainable development that focused on the environmental impacts of development in the developing world, wider aspects of development arose. The social, economic and cultural aspects of development began to take higher precedence. The focus also shifted from the developing world to include the developed world and the role the developed world played in bringing equitable and sustainable development.

Chapters three to seven will focus on five areas of New Zealand society. These chapters will seek to determine to what degree sustainable lifestyle is impacting New Zealand society. These areas are production and consumption and policies, economics, environment, values, and education. Each of these is used because they provide a form of measurement in determining the impact of sustainable values. They are also key aspects that contribute to New Zealand functioning well as a society.

Chapter eight will evaluate a Sustainable Lifestyle survey that was carried out among 50 people. The purpose of the survey was to determine the understanding and actions of individual New Zealanders in the area of sustainable lifestyles. This survey revealed a general understanding that sustainable lifestyle was about the need for people to live in way that others can also share in that lifestyle. However many responses focused on being able to provide for oneself and to be able to maintain one's present lifestyle. It also revealed that most people had no practical outworking of sustainability in their lives. Chapter nine will draw all the conclusions and evaluations together to provide an overall sense to what degree sustainable lifestyles are understood and enacted in New Zealand society.

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Chapter 1

Introduction

The effect of present day lifestyles upon people, social structures and the environment in the developing world is more clearly understood than at any other time in history. The effect of issues such as unemployment, deforestation, poverty, and hunger in the developing world are becoming increasingly evident to people in the developed world. The growing inequality between the worlds's rich and poor is causing a focus on meeting basic needs on a global scale. The lifestyle choices of people in the developing world are directly impacted by the lifestyle choices of people in the developed world.

The ability for New Zealand to maintain its present lifestyle is based on this country receiving more than its fair share of resources and opportunities. This awareness of our connectedness to the world has lead to the development of lifestyle choices that seek to lessen our impact upon the world and the resources and people in it. Ideas about global culture, holistic lifestyles, ecology, and the environment movement have risen in prominence in recent decades. These ideas and actions can be grouped under the term 'Sustainable Lifestyles'. The term 'sustainable lifestyle' is not unique to this thesis as it has been alluded to my other writings but often this is the form of other terms similar in nature. This thesis uses the term 'sustainable lifestyle' as it incorporates the sense that it is the whole of a person's life (their lifestyle) that must be made sustainable for the sake of other people and the environment.

To have a sustainable lifestyle in New Zealand will require a reduction in the amount of producing and consuming that occurs. This will require a change in our lifestyle. This new lifestyle is about helping people to become self-reliant rather than dependent, about conserving rather than wasting, about long-term profits rather than short-term gains but mostly about recognising the value of people and the wider world. A sustainable lifestyle is not one that just seeks to preserve the environment and to have 'green consumerism' but it is about challenging the way that people live. Lifestyles cannot be maintained that rely on a socio-economic system that is based on growth and affluence. Lifestyles must be adopted that work at basic actions (i.e.: recycling, reducing traffic, green consumerism, shared housing, better use of waste) and at complex actions (i.e.: simpler lifestyles, self-sufficient local economies, reducing greenhouse gas emissions) (Trainer 1995: 9).

This thesis will evaluate the impact of Sustainable Lifestyle in New Zealand society. It will identify to what level New Zealand society has understood and is practicing sustainability lifestyles. This thesis will propose that New Zealand society has sustainable lifestyle values and actions in many of its historical, cultural and political structures. However sustainable lifestyles are only impacting the fringes of today's society. For this lifestyle to become cemented in the general population may require that perimeters and identity be established. As people gain understanding of what a sustainable lifestyle is, this then allows them to identify with that lifestyle. It then also creates a sense of ownership and participation.

To give an overall analysis on the level of impact sustainable lifestyles are having in New Zealand five areas of society will be evaluated. These areas are:

- Economics
- Production, Consumption and Policy
- Environment
- Values
- Education

These parts of society will be chosen because they are identified by Denis Goulet (Trzyna and Osborne 1995: 51) and David Reid (Reid 1995: Chapter 8) as necessary aspects for sustainable lifestyle to occur. Goulet and Reid acknowledge the need for an economic component. This includes the concept of progress, the goods and services that we produce and consume, and the concept of wealth. They also refer to a political dimension and a focus on ecological soundness and the natural world. A chapter on values encompasses the need for the respect for humans and the valuation of human potential while the chapter on education helps reflect the dominant social values.

The methodologies used to help evaluate the impact of sustainable lifestyle values in these five areas of New Zealand will be:

- An analysis of appropriate New Zealand literature of the last thirty years
- An analysis of articles appearing in newspapers and magazines in the last thirty years
- An analysis of literature on sustainable development and sustainable lifestyles
- Evaluation of central and local government policies
- Use of statistics
- The interviewing and evaluation of New Zealand organisations working towards sustainability issues

This thesis will also highlight the research carried out by the writer to practically determine the way sustainable values are impacting the lives of individuals in New Zealand. This research involved a survey about people's awareness and involvement in sustainable lifestyle issues. This survey is titled the ' Sustainable Lifestyle Survey' and was carried out on 50 people. The key responses and trends from the survey will be evaluated. A full list of the answers is given at the end of the thesis in the appendices.

Chapter 2

What is Sustainable Lifestyle?

Sustainable lifestyle is an evolving way of living that impacts people in both developed and developing countries. It is the belief that all people in the world contribute to the economic, social, environmental, and cultural health of the world. It challenges people to make lifestyle decisions on the basis of how those decisions will impact the natural and social systems around them. It is a lifestyle that thinks about the future and future generations and understands that people today are more interconnected with one another so actions by one person or group has the potential the lifestyles of other people.

> "Sustainability is a community's control of capital, in all its forms – natural, human, human-created, social, and cultural – to ensure to the degree possible that present and future generations can attain a high degree of economic security and achieve democracy while maintaining the integrity of the ecological systems upon which all life and production depend" (Trzyna and Osborn 1995: 37).

The ideas surrounding sustainable lifestyle have many historical roots. These ideas evolved into the concepts such as sustainable living and living simply. The term sustainable lifestyle is one way of bringing together multiple values and actions under this banner. To properly understand sustainable lifestyle requires that we understand the origins and growth of sustainable development. This is because the present concept of sustainable lifestyle has evolved out of sustainable development theory and practice.

Sustainable development moved from focusing on the environmental impact of development to understanding that there are wider social, economic and cultural aspects to development that are just as vital. Thinking in the development area also began to note the importance of the lifestyle choices of people in developed countries and their impact on the ability of developing countries to provide basic necessities for themselves. The understanding that the world is now a 'global village' impacts the lifestyle choices of people in that village. As New Zealand is part of that 'village' then there needs to be an evaluation of the lifestyles of New Zealanders.

The Historical Roots of Sustainable Lifestyles

Sustainable lifestyle values have been promoted for at least two thousand years. The early Fathers of the Christian church such as John Chrysostom, Gregory of Nyssa, and Basil the Great often preached sermons on the difference between material and spiritual riches. "Genuine wealth, the Fathers contend, resides in the eternal freedom which makes one use material goods instrumentally to meet needs, and as a springboard for cultivating those higher spiritual goods which alone bring deeper satisfactions: virtue, friendship, truth, and beauty" (Trzyna and Osborn 1995: 45). Christianity is not the only religion to teach against materialism.

> "While Jesus, Buddha, Lao-Tse, and other spiritual guides disagreed about many things, they all agreed on the emptiness of materialism as an ethical precept. They all believed that 'the pursuit of material wealth is a wrong aim' and that 'we should aim only at the minimum wealth needed to maintain life.... They all spoke in favour of unselfishness and of love for other people as the key to happiness and to success in human affairs" (Brown 1981: 351).

One of the first people to start to question the results of development in the world was Thomas Malthus (1766 – 1834). Thomas was a member of the English clergy in the late eighteenth century and he identified a direct link between population and food supply. His *Essay on Population (1798)* set out his belief that food supply in the world could only increase at a linear rate, whereas population would grow exponentially, thereby leading to food shortages and a check on further population growth (Allen and Thomas 1992: 4). Thomas Malthus' name became attached many years later to others working in this area (such as Paul Ehrlich) who became known as 'neo-Malthusians'.

In the 1970's there was a series of works linking development and the environment. The main ideas of these writings were based on the dramatic increase of world population growth. This it was argued would lead to the depletion of non-renewable resources thus leading to falling per capita food production and increased pollution and eventually environmental and economic disaster. Curbing population growth in the developing world was seen as a necessary condition if these countries were to become developed (Elliot 1999: 7). The strength of this school of thought was confirmed by the large amount of foreign aid that became available for programmes that controlled population growth. These programmes have been promoted for over 40 years by international development agencies as an efficient and cost-effective way to tackle the problems of development (Allen and Thomas 1992: 4).

Ghandi was probably one of the best known modern day exponents of the philosophy that encouraged people to live in ways so that all could share in the benefits. Coming from a land of poverty and economic extremes he was well aware of the results of development and the benefits it could bring to his country. While wanting to see the end of grinding poverty he however opposed development which would create material affluence because he was convinced that affluence would lead to cultural erosion and moral bankruptcy (Sider 1981: 73).

Richard Gregg, a student of Gandhi, developed the idea of Voluntary Simplicity from an essay he wrote in 1936. He emphasized that to live 'voluntary simplicity' means to consciously live more deliberately, intentionally, purposefully. By definition, it is an option only for those who are affluent. To practice 'voluntary simplicity' is to acquire goods only to satisfy basic needs and to seek a high satisfaction in personal development, in human relationships, in intellectual and spiritual growth.

Adherents of voluntary simplicity can now be found in significant numbers in most Western industrial societies (Brown 1981: 354). "Perhaps more than any other ethic, voluntary simplicity reconciles the needs of the person, the community, the economy, and the environment. It is a response to the emptiness of materialism. It answers questions posed by resource scarcities, ecological stresses, and mounting inflationary pressures" (Brown 1981: 355).

Sustainable Development: The Foundation of Sustainable Lifestyles

In the 1970's there was awareness that conventional approaches to development had obviously failed to improve the welfare of the people to whom it was directed. There were disappointing results of the emphasis placed on developing countries to give priority to industrial development mainly in the forms of import substitution and export promotion (Gumbert 1986: 4). There was also a concern, particularly among environmentalists, that industrialisation and Western lifestyles were having a destructive effect on the environment both in developed and developing countries (Adams 1990: 29). There also arose again the debate about the dramatically increasing world population and its effect on the world's resources and environment.

This debate was heightened by Paul Ehrlich's book *The Population Bomb (1968)*. This book pinpointed that world overpopulation was a problem brewing in the Third World and that the solution to this potential global catastrophe lay in controlling the growth of the teeming millions of the Third World. In 1970 the world population was 3.5 billion, and 'Spaceship Earth' was said to be "filled to capacity and beyond and is running out of food" (Ehrlich and Ehrlich 1970: 3). This argument is a modern version of demographic determinism where the weight of population itself is the cause of problems.

The pessimistic views on population and the environment of the 1960's and 1970's were paralleled by a similar debate about economic growth and its ability to support development. Over this time period economic growth in industrialised nations gave way to recession and inflation. This caused people to question the long-term benefit of economic growth for developing countries.

> "As long as national economies were expanding steadily, the affluent and powerful could always rationalise that since the economic pie was expanding, everyone would eventually get more. But as the growth in the production of material goods and services slows, or even levels off and declines, the distribution issue must be viewed against a new backdrop, one unfamiliar to our generation. With the economic pie no longer expanding, it becomes more difficult to dodge the question of how the pie is being distributed"
> (Brown 1981: 358).

Where once there was the assumption that one day all people in the world may be able to enjoy an affluent Western lifestyle it was clear that the thing wrong with the affluent Western lifestyle is that others couldn't share it. The problem, it seemed, was not that there weren't enough basic necessities to go around but that the distribution of these necessities required not just proper planning, distribution, and consumption but also the right human values to make this happen. "According to the WCED and UNCED, Northern states have an obligation not only to assist environment and development in the South, but also to reduce dramatically their resource consumption, in order to make environmental 'room' for Southern development. At the centre of UN-sponsored efforts in this area has been the belief that – with respect to environment and development – the fate, problems, and responsibilities of the wealthiest and of the poorest nations are linked" (Lafferty and Meadowcroft 2000: 438).

Trainer also makes the connection between that of consumption levels in the developed world and sustainable development when he writes "There cannot be satisfactory, appropriate development in the Third World unless the rich countries move down to much lower per capita resource use, allow drastic redistribution of world wealth, and enable most Third World land, labour and capital to produce what Third World people need" (Trainer 1995: 5). The Caring for the Earth Strategy acknowledges that sustainability will be impossible unless human population and resource demand level off within the carrying capacity of the Earth. The strategy states that the minority of the world (those in the upper-income countries) need to accept a reduction in its resource consumption through gains in efficiency, and a stabilization of its standard of living, but then goes on to say that "it is unrealistic to expect people willingly to reduce that standard" (IUCN and UNEP and WWF 1991: 43). This reiterates the diverse understanding of what being sustainable requires.

In the 1970's there were attempts to produce global models of possible scenarios of world development. A team from the Massachussetts Institute of Technology carried out the most notable model for the 'Club of Rome'. This was an international group set up with the backing of European multinational companies (Adams 1990: 29). They attempted to review the problem of the global environment by using a computer model of the world, encompassing its population, resources, food supply, technology etc. Their first report was entitled 'The Limits to Growth' and gave some startling and gloomy conclusions of the collapse of global environmental systems and massive famine resulting. They believed that even with the introduction of technological improvements, increasing non-renewable resources, and controlling population growth, there was only a prolonging of the inevitable using the model (Adams 1990: 29).

The Club of Rome stated that the only way out was to embark on a global programme of immediate zero population growth, zero economic growth and severe limits on technological growth. At its most basic level the report in effect suggested trapping Third World countries into a state of continued poverty by controlling their populations while having no economic growth. This report "gave little attention to the social, technological or institutional factors which affect the relationship between people and resources. It was also apolitical in considering the future of the Earth as the overriding and paramount concern, with no consideration of how the solutions advocated would favour some nations or groups over others" (Elliot 1999: 22). While this report was criticised from many sides (Adams 1990: 29) it did bring the whole debate of the issue of 'sustainability' into the political and public realm.

Other events during this period that contributed to the understanding and growth of sustainability included the United Nations Conference on the Human Environment held in Stockholm in 1972. This is widely credited as being the first forum to give the concept of 'ecological sustainable development' an international political focus. "Following Stockholm, international debate about sustainable development began to be more extensively influenced by concerns about the need (and potential) for development in the Third World" (Adams 2001: 58).

A further meeting of experts held at Cocoyoc (Mexico) in October 1974 looked at environmental problems from the perspective of the Third World and particularly the Third World poor. The resulting 'Cocoyoc Declaration' pointed to the problem of the misdistribution of resources and to the 'inner limits' of human rights as well as the 'outer limits' of global resource depletion. Interestingly it stressed the priority of basic human needs and called for a redefinition of development goals and global lifestyles (Adams 2001: 40).

In 1975 the Dag Hammarskjold Foundation published a report entitled *What Now: Another Development*. This report was seen as a decisive step forward in the integration of development and ecological concerns. This report argued that there was a crisis of development which affected both the North and the South. It could be seen not just in the failure to meet the basic needs of the masses in the South, but also in the "growing feelings of frustration that are disturbing the industrialised societies", and in "the alienation, whether in misery or affluence, of the masses, deprived of the means to understand and master their social and political environment" (Dag Hammarskjold Institute 1975: 5).

This report was one of the first evaluations of development that emphasised a holistic approach. Meeting human needs meant more than just meeting people's basic needs but it also required a form of development that respected people and the distinctiveness of their traditions and culture.
The World Conservation Strategy published by the International Union for the Conservation of Nature in 1980 developed strong linkages between environment and development concerns. It was however mostly theoretical rather than practical in regards to development (Adams 2001: 46 - 51). Out of this growing awareness of the impact of humanity's affect on the environment emerged a realisation that environmental concerns could not be divorced from development policies. Any attempt to deal with one, without consideration of the other, was short-sighted and destined to limited success (Grundy 1993: 26).

By the mid-1980s there was an emerging consensus growing around aspects of the sustainable development concept. Up to this point much of the focus had been on the environmental perspective of development with the emphasis on the physical sustainability of ecosystems. Development thinking began to focus around models that included other aspects of development. Sustainable development thinking evolved into a tripartite structure that had three subsystems – ecological sustainability, social sustainability, and economic sustainability (Barbier 1987 and Munro in Trzyna and Osborn 1995: 27 – 35).

This triple approach to development seemed to have wide support. The IUCN (1980) stated "For development to be sustainable it must take account of social and ecological factors, as well as economic ones; of the living and non-living resource base; and of the long-term as well as the short-term advantages and disadvantages of alternative actions" (Grundy 1993: 28). Other groups and writers to talk of a triple approach to development at this time included WCED (1987), The European Community's Fourth Environment Action Programme (1987), O'Riordan (1988), Chambers (1986), Barbier (1987) and The Canadian Environmental Assessment Research Council (1990) (Grundy 1993: 28 - 30).

Much of the thinking and ideas that had been proposed and debated culminated in April 1987 in the Brundtland Report entitled 'Our Common Future'. This report was the work of The World Commission on Environment and Development. The World Commission had been established in December 1983 at the call of the UN General Assembly. The primary message of the report was "The time has come to break out of past patterns. Attempts to maintain social and ecological stability through old approaches to development and environmental protection will increase instability. Security must be sought through change" (World Commission on Environment and Development 1987: 22). The nature of this action had two core components. These were the recognition and fostering of the 'common interest' amongst individuals and amongst nations. There is an urgent need for nations to recognise that all people are sustained by the global ecosystem, and the environmental problems require an international approach to achieve the common good. The second component was the call for a new era of growth, particularly directed at developing countries in order to meet essential needs, based on policies that sustain and expand the environmental resource base and ensure a more equitable distribution of resources.

The report defined sustainable development as "Development which meets the needs of the present, without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development 1987: 43). The Commission who wrote the report saw sustainable development as a process of change rather than a fixed state.

Many of the ideas of the report were not new but they highlighted critical linkages that up to this point had not been clear or understood as relevant in development circles. In particular the effort to bring a global perspective which focused on the interdependencies between developed and developing nations and the concept of 'equity' where physical sustainability cannot be secured unless policies specifically address issues such as changes to access to resources and the distribution of costs and benefits. It highlighted that economic systems fail to reflect (and in many cases works against) the perceived social and environmental values held by many individuals and communities. It stressed that economic systems are systems of power and this reinforces iniquitous arrangements between people.

The Brundtland Report elevated the concept of sustainability to a political level, and into the realm of everyday language. The report steered clear of competing political ideologies by stating that "no single blueprint of sustainability will be found, as economic and social systems and ecological conditions differ widely among countries. Each nation will have to work out its own concrete policy implications" (World Commission on Environment and Development 1987: 40). 'Our Common Future' made such a large impact because of three factors. Firstly, it built on the groundwork and impetus of both the Stockholm Conference of 1972 and The World Conservation Strategy. Secondly, it placed elements of the sustainable development debate within the economic and political context of international development. Its starting point was deliberately broad, and a move to limit its concern simply to the 'environment' was firmly resisted. Thirdly, it placed environmental issues firmly on the formal international political agenda by getting the UN General Assembly to discuss environment and development as one single problem (Adams 2001: 58).

Prominent in the report was a fundamental concern in meeting basic needs. The answer it seemed was on 'growth' (OECD 1987: 89 - 90). Economic growth was seen as the only way to tackle poverty, and hence to achieve environment – development objectives. The type of growth talked about was sustainable, environmentally aware, egalitarian, integrating economic and social development (World Commission on Environment and Development 1987: xii). The argument was that it is poverty that puts pressure on the environment in the Third World, and it is economic growth that will remove that pressure. With this view in mind Adam lists the weaknesses of the report as:

- It does not question growth or technology
- It avoids arguments about eco-disaster
- It does not give answers about the pressure of growth itself
- What about demands for energy and raw materials, or pollution
- It does not discuss how the balance will be found between world growth and environmental constraints

(Adams 2001: 57 - 62)

In the 1990's the main movement in the sustainable development cause was the United Nations Conference on Environment and Development (UNCED) in Rio de Janiero in 1992. The conference in Rio (also known as the 'Earth Summit') was convened by the UN to report progress five years on from the Brundtland Report. Agenda 21 was the action plan for sustainable development and was the main outcome of the conference. It covered issues such as the inequities between rich and poor, wasteful consumption, the population explosion and the integration of environment and development. Three key themes can be identified from Agenda 21. These are:

- The ongoing believe that there was a need for the revitalisation of growth to achieve sustainability
- The theme of 'sustainable living' with emphasis on poverty, health and population growth
- The problems of urbanisation including water supplies, wastes, pollution and health

Rio helped develop a global learning process through the increase in knowledge of sustainable issues and through the involvement of an increased number of people. Practically it provided the Rio declaration on legal principles for sustainable development, two framework conventions on climate and biodiversity, a set of 'Forestry Principles', the establishment of the Earth Council and the Commission for Sustainable Development. Agenda 21 provided the basis for many kinds of actions in pursuit of 'sustainability', but it makes none of them mandatory. "The Rio Conference established mainstream sustainable development thinking, but it failed of itself to achieve binding or timetable commitment to systematic change in national or international policy" (Adams 2001: 100). Other authors also note a general lack of practical results from Rio (Reid 1995: 195 – 198, Brundtland in Dodds 2000: 256 – 257).

In determining what has occurred in the area of sustainable development and lifestyle since Rio, Gro Harlem Brundtland offers the following thoughts.

- The number of people living in absolute poverty has increased. They number today some 1300 million people who live on less than US$1 per day. If we go up to US$2 a day, the number rises to half of the world's population – to three billion fellow human beings.
- Industrial countries gradually turn their backs to the very modest commitment of allocating 0.7 per cent of GDP for development assistance. The OECD average is 0.2 per cent
- Their has been frequent lessons of global interdependence such as a changing climates and global contamination through disease
- The last rounds of trade talks (since 1999) have demonstrated that health and environment risk are becoming bouncing balls in a struggle to protect not necessarily health or environment, but market shares

(Brundtland in Dodds 2002: 256 – 259)

The next major indicator of the progress of effective change in the sustainable development arena was the Johannesburg Summit 2002. "The progress in implementing sustainable development has been extremely disappointing since the 1992 Earth Summit, with poverty deepening and environmental degradation worsening. What the world wanted, the United Nations General assembly said, was not a new philosophical or political debate but rather , a summit of actions and results" (www.johannesburgsummit.org). Johannesburg 2002 was aimed at evaluating progress since Rio and looking at new ways ahead. The summit reaffirmed sustainable development as a central element of the international agenda, broadened and strengthened the understanding of sustainable development, reaffirmed targets to achieve more effective implementation of objectives by governments, focused more on energy and sanitation issues and supported the establishment of a world solidarity find for the eradication of poverty. Summing up Johannesburg 2000 the Johannesburg Summit website had the following statement. It reflects where things were left at from Johannesburg but also describes where the place of sustainable issues in the world is at.

> "By any account, the Johannesburg Summit has laid the groundwork and paved the way for action. Yet among all the targets, timetables and commitments that were agreed upon at Johannesburg, there were no silver bullet solutions to aid the fight against poverty and a continually deteriorating natural environment. In fact, there was no magic and no miracle – only the realization that practical and sustained steps were needed to address many of the world's most pressing problems" (www.johannesburgsummit.org).

Before describing how sustainable lifestyle has evolved out of sustainable development it is important to present a picture of the different positions presently taken in the area of development theory and practice. These different positions are given in the form of three dominant sustainable development policy narratives. A policy narrative can be described as rhetorical statements about an issue, problematising it and forming solutions to it out of a cohesive set of beliefs, meanings, understandings, technical concepts, and analytical methods (Harrison 2000: 4). It is important to understand these narratives at this point because they give us wider understandings of the various worldviews that make up the sustainable development debate. Harrison gives a description of the three policy narratives. They are efficiency, equity, and ethics (Harrison 2000: 4).

Efficiency is the most common narrative and this is especially so in developed countries. The main premise is that sustainable development can be achieved by reducing the consumption of natural goods required to maintain or improve human well being. Increasing eco-efficiency reduces pressure on natural goods processes and extends the lives of natural goods stocks. Eco-efficiency is a measure of the quantity of consumption of natural goods per unit of satisfaction of human needs and wants. This measure can only be increased through continued economic development, the extension and liberalisation of markets (which optimize the efficient allocation of scarce resources), and technological innovation. Greater wealth is expected to increase eco-efficiency because protection of the environment occurs as a consequence of economic development. At the heart of the efficiency narrative is a mechanistic model where human society is seen as a machine in which outcomes can be predicted from actions.

The equity narrative was popularised by the Brundtland Commission and supported by many United Nations agencies. The basis of this narrative is that concern must logically be extended to equity within each generation. This narrative does not start with goods but with people and their education, organisation, and discipline (OECD 1987: 46). It aims towards a progressive transformation of economies and societies based on the belief that physical sustainability cannot be secured unless development policies pay attention to such considerations as changes in access to resources and in the distribution of costs and benefits. The scope of what is to be sustained includes non-material social values such as justice and equity. Like the efficiency narrative, the equity narrative also treats society as a machine in which outcomes can be predicted from actions

The ethics narrative encompasses a wide variety of radical environmental arguments that share a belief in the need for a change in the rules governing the relations between humans and non-humans. The core belief is that a sustainable society cannot be achieved without a change in human consciousness where individual priorities and values need to be transformed. Generally the responsibility for changing consciousness is on the individual, and therefore decision making is inherently decentralised and large-scale political activity in support of an ecological worldview is impractical. The concept of 'deep ecology' comes under the ethics narrative. The concept came from the writings of the Norwegian philosopher Arne Naess. Deep ecology is seen as biocentric while mainstream sustainable development is seen as 'shallow ecology'. The basis of deep ecology is that the natural world has intrinsic value and we should care for it not simply because this may be of benefit to us. Shallow ecology is concerned about the value of nature only for the human species. Deep ecology is different because it rejects the separation of 'human' and the 'environment' and because it is based on the principle of 'biospherical egalitarianism, and a recognition of the equal rights of organisms to live and blossom (Adams 2001).

From Sustainable Development to Sustainable Lifestyle

The previous section of this chapter helped show the way development theory and practice has evolved. By following the changing understanding of what 'development' is, reveals the way in which a wider understanding of development has arisen. From Cocoyoc 1974, Dag Hammarskjold Foundation 1975, IUCN 1980, Brundtland Report 1987 to Agenda 21 1992 a growing amount of focus in developmental theory has focused on development that incorporates social, economic and environmental concerns. However at the same time the varied understanding of sustainable development allows people with different irreconcilable positions in the development debate to search for common ground without appearing to compromise their positions.

Part of the ongoing debate regarding the effectiveness and form of development was about what the Western world saw as 'development' and what developing countries saw as 'development'. This type of thinking led to the introduction of the term "sustainable livelihoods". This has become a better way to describe the type of development that most people in developing countries require. Sustainable livelihoods grew out of the gap between Western knowledge and values determined by science, communication, and instruments and the knowledge the people in developing countries have themselves. It also acknowledges that people in developing countries are the only experts in their life experiences and priorities and it is up to them to set their priorities and what development is within their communities.

Sustainable livelihoods acknowledge the high level of dependence on the local environment where without an adequate environment there is no survival. "But our power in the past has overwhelmed their knowledge, hidden their analytical abilities, and allowed us to assume that we know what they experience and want. The problem is one of balance between two realities – ours which is powerful, and theirs which is weak. Standing back and standing down, we need to search for overlaps where their realities and aspirations can give rise to practical concepts which we can then use to help empower them" (Chambers, Robert 1995: 22).

Chambers states that 'sustainable livelihoods' is one such overlap. "For many of the poor, livelihood seems to fit better than employment as a concept to capture how poor people live, their realistic priorities, and what can help them. 'Sustainable' then refers to the longer-term, and 'livelihood' to the many activities which make up a living" (Chambers 1995: 23). People in developing countries have an array of responsibilities and jobs to help them survive that don't fit into the Western understanding of 'employment'. In developing countries family members contribute to find different sources of food, fuel, animal feed, cash and support in different ways and at different times of the year. The issue this raises in development studies is that often only that which can be measured is counted and that which can't be measured is neglected.

There are other aspects of life that measuring economic growth or per capita income miss out all together. These are measures of life that have nothing to do with finances and possessions. "The real difficulty with conventional measures of real per capita income is that they leave out of direct consideration some of the most important determinants of human happiness. Many studies have shown that family and other personal relationships are what matter most" (Goldin and Winters 1995: 84). It is important to widen the scope of the measurement of 'income' to include other aspects of society that give the most fulfillment and happiness. There are things like leisure time, longevity, educational attainment, and access to beautiful countryside and preservation of species. If it is possible to determine aspects of life that bring fulfillment then it is also possible to provide an indicator of 'bads'. This may include suicide rates, divorce rates, crime rates, and measures of air, water or noise pollution (Goldin and Winters 1995: 84). As supplies of conventional goods and services are more available in wealthier countries, more attention shifts to other indicators of what areas of society need to be sustained.

Ernst Friedrich Schumacher's *Small Is Beautiful (1973)* helped set the scene for development thinking that was more focused on people rather than economic systems. His book had a subtitle of "a study of economics as if people mattered". His premise was that development must address the primary causes of poverty, which are 'immaterial', not material. "Development does not start with goods; it starts with people and their education, organisation, and discipline. Without these three, all resources remain latent, untapped, potential" (Schumacher 1973: 140).

Johan Galtung did further thinking in this area of work. He focused much of his work on self-reliance – which he regarded as essential if the full range of human needs was to be met. "Human needs could not be fulfilled, he felt, by a programme of economic development that attempted to integrate a national economy into an international economy dominated by more economically powerful nations and corporations. Such development created forms of dependence that thwarted the full development of human potential" (Reid 1995: 72).

For Galtung, self-reliance has five basic principles:

- The satisfaction of basic human needs must not depend solely on the market, nor should economic activity be limited to this one goal
- A society seeking to become self-reliant must try to produce what it needs by relying on its own resources
- When societies need to trade then any exchange should be carried out so that the net balance of costs and benefits including externalities, for the parties to exchange should be as equal as possible
- Self-reliance allows a community to consider moral criteria as well as purely economic ones in deciding whether to enter into transactions
- Self-reliance applies not just to nations, but also to local communities and to regional groupings of nations. It is thus the basis for a form of global interdependence that does not make any one nation dependent on a more powerful one

(Ekins 1986: 97 - 109)

In 1991 the IUCN published the policy statement 'Caring for the Earth'. This statement saw a shift from conservation ethics to 'sustainable living' (IUCN and UNEP and WWF 1991: 13 – 17). The statement emphasised that improving the quality of human life concerned more than just material welfare and would be achieved if certain 'virtually universal' goals were met. These goals included a long, healthy life, education, access to resources for a decent standard of living, political freedom, guaranteed human rights and freedom from violence. In this report local communities were seen as the focus for many of the changes needed to achieve sustainable living, but it also emphasised that they can do little without any power to act and must, therefore, be given the authority to manage the resources on which they depend (Reid 1995: 55).

The answer to obtaining development in developing countries was not found by focusing on Western models of development or even on economic growth as a solution. Wider issues such as equity, cultural and community values and needs, and social justice needed to also be considered especially in regards of the relationship between the developed and developing world. In light of the increased inclusiveness of sustainable development new descriptions and models evolved of what sustainable development may look like in the developing and developed world. David Munro gives the following widened description of the terms 'development' and 'sustainable':

> "Development is any and all kinds of activities and processes that increase the capacity of people or the environment to meet human needs or improve the quality of human life. The product of development is people who are healthy, well-nourished, clothed and housed; engaged in productive work for which they are all well trained; and able to enjoy the leisure and recreation we all need. Thus development includes not only the extraction and processing of resources, the establishment of infrastructure, and the buying and selling of products, but also and of equal importance activities such as health care, social security, education, nature conservation, and supporting the arts among other things. Development is a complex of activities, some with social, some with economic objectives, some based on material resources, some on intellectual resources, all enabling people to reach their full potential and enjoy a good life. For development to be sustainable, it must continue, or its benefits must be maintained, indefinitely. This means there must be nothing inherent in the process or activity concerned, or in the circumstances in which it takes place, that would limit the time it would endure. It also means that it must be worthwhile; it must meet the social and economic objectives just noted"

(Trzyna and Osborn 1995: 28)

David Munro's description of sustainable development provides a glimpse into the wider understanding that now exists regarding sustainable development. It has moved from being a tool to help preserve the environment to a tool to preserve the wider attributes of what it means to live and function in this world. This shift in understanding has shifted the focus of sustainable issues from the developing world to include the developed world. Issues such as equity, capacity building, cultural and community values, caring for the environment and consumption patterns are all aspects of life in the developed world as much as the developing world. The question therefore arises in what capacity can people in the developed world (including New Zealand) be involved in playing their part in living in a sustainable manner and what would this lifestyle look like?

What does Sustainable Lifestyle look like?

The term 'sustainable lifestyle' is not an original term unique to this thesis however the term has not been used explicitly in major writings. The Massey University Library catalogue (KEA) does not contain the term 'sustainable lifestyle' in the keywords, title or subject heading search. Writers have alluded to terms and actions similar in nature in either the headings or main texts of their writings. Some examples are voluntary simplicity (Durning 1990), sustainable living (Caring for the Earth 1991), conserver society (Trainer 1995), sustainable livelihoods (Chambers 1995) and sustainable society (Beaumont 1997 and Milbrath 1989). Many of these terms are similar in their meaning and practical outworking as that of sustainable lifestyles. The term 'sustainable lifestyles' is therefore a certain way of describing a lifestyle that the terms above refer to. This thesis will use the term 'sustainable lifestyle' as it incorporates the sense that it is about the very way that people live that must be made sustainable.

Understanding what a sustainable lifestyle is can be evaluated on two levels. Firstly, there is the wider level of systems, processes and dominant values and secondly, the practical level of how a sustainable lifestyle is lived out. In both spheres the two key parts of a sustainable lifestyle is valuing people and valuing the earth. For this to occur requires a change in understanding and lifestyle. "Sustainable living must be the new pattern for all levels: individuals, communities, nations and the world. To adopt the new pattern will require a significant change in the attitudes and practices of many people" (IUCN / UNEP / WWF 1991: 5).

Denis Goulet details six elements that he believes are necessary for a sustainable lifestyle to occur and that also need to have a change in attitudes and practices. Each of them has direct impact upon people and their ability to live fulfilling and sustainable lives.

- *Economic Component* – dealing with the creation of wealth and improved conditions of material life, equitably distributed
- *Social Ingredient* – measured as well-being in health, education, housing and employment
- *Political Dimension* – embracing such values as human rights, political freedom, legal enfranchisement of persons, and some form of democracy
- *Cultural Element* – in recognition of the fact that cultures confer identity and self-worth to people
- *Ecological Soundness*
- *Full-Life Paradigm* – refers to meaning systems, symbols, and beliefs concerning the ultimate meaning of life and history

(Goulet in Trzyna and Osborn 1995: 51)

Many of the differences between 'development' and 'lifestyle' can be seen in the differences of 'Having versus Being'. Much of the focus of Western lifestyle and sustainable development is about providing the basis and opportunity for each person in this world to be able to 'have' the basic goods and services that are experienced in developed countries. Development is considered to be successful when people have the necessary material goods such as food, water, clothing, housing, health, education, and transport. This does reflect a very Western view of life where the sign of fulfillment or success is when you have all the 'right stuff'. The other side of human life is that of 'being'. This side of life is about the people we are, the relationships we share, how we maintain those relationships, and what aspects of life we consider to give us a sense of meaning and purpose. Under this banner are issues of culture, religion, history, and the customs and celebrations that help remind us of who we are and what is important to us. A Western point of view may see wealth being determined by what we 'have' rather than by 'being'.

David Reid talks of the need for a new paradigm where the focus is on thinking holistically. " The new progress will have clearly defined objectives – not of growth and aggrandisement through expansion, domination and competition, but of sufficiency, equity and security founded on co-operation rather than competitiveness; participation rather than token consultation, oppression or exclusion; empowerment rather than deprivation and dispossession; and self-reliance rather than dependence" (Reid 1995: 155). He notes five ways in which a sustainable society must differ from an unsustainable paradigm. These include:

- Its conception of progress
- Its regard for the natural world
- Its respect for humans and its valuation of human potential
- Its conception of wealth
- Its view of economic activity

(Reid 1995: 155)

A sustainable society will aim for each person's right to fulfill his or her needs and on the provision of equal opportunities for all to develop their abilities and it will allocate resources accordingly. This would have to be based on an acceptance of the need for more equitable distribution both nationally and internationally because of an understanding that there is only a finite amount of resources and wealth to be shared. Wealth would have a different understanding than it presently does. Money may be a useful means of exchange and a convenient way of storing some forms of wealth. Wealth may include a wide range of goods – physical and nonphysical. They may be economic or non-economic such as health, family life, livelihoods, working conditions, income levels and income distribution, leisure, and the state of the environment and security. For this to occur would require new indicators of welfare. An example of this is the Physical Quality of Life Index, developed by the Overseas Development Council, which gives equal weight to infant mortality, life expectancy and literacy in an attempt to measure the contribution of quality of life of welfare provision and living conditions generally (Reid 1995: 162).

The practical out workings of a sustainable lifestyle will require changes in lifestyles. Ultimately it will require "a reduction in consumption in wealthy societies and changes in the kind of things consumed toward products that are durable, recyclable, useful, efficient, and sufficient" (Orr 1994: 62). Sustainable lifestyles therefore have the ability to influence the way people purchase goods and services. This includes the type of products, the amounts, and the way products or services are produced or dispensed. For this to occur requires living more simply, high levels of self-sufficiency and cooperation, and smallness of scale. This involves practical actions such as recycling, shopping locally, purchasing products made and shipped locally, recycling, increased use of public transport, better use of waste and waste water, better house designs and learning to consume less.

Conclusion

Sustainable development theory and practices arose out the growing needs of people in developing countries. Initial development theory focused on the environmental impacts of both poverty and development upon the world and upon people's opportunities to take care of their own basic needs. Much of the development work in the last fifty years has not brought the results hoped for and this caused an evaluation of what the purpose of development is and how this is achieved. This provided the opportunity to widen the scope of what comes under the 'sustainable development' banner. Other aspects of development such as the social and economic outcomes began to play a larger role.

There also arose a general dissatisfaction and failing of both sustainable development practices and the Western view of what is important in life. The interconnectedness of people in the developed and developing world caused people to see that everyone played a part in the development of countries and people. A person's lifestyle had a direct impact upon the world environment and upon the ability of other people to have their fair share of resources and services. This widened understanding of development helped create the concept of 'sustainable lifestyle'.

Sustainable lifestyle therefore challenges people to live in such ways so that not only other people have access to resources but also future generations. It also widens the development concept beyond the economic one to include issues that involve people and their communities. Through doing this it challenges the very understanding of wealth, progress and the benefits of non-material development. This challenge is on both a wider societal level with a focus on values, policies and attitudes and on a more personal level where the focus is on individual and community actions.

Chapter 3

Production, Consumption and Policy

A major aspect of sustainable lifestyles is about providing resources for future generations and not taking more than your fair share. These values therefore directly impact upon both production and consumption in society. Production methods identify the way products and services are made, including the amount of energy and waste produced and their ability to be reused, reduced or recycled. Evaluating consumption practices helps to determine the types of products and services produced in New Zealand. It reveals what products and services New Zealanders spend their money on. This is important to know because all products impact society in different ways. As national and international policies help determine both production and consumption in New Zealand it is important to evaluate the amount of sustainable lifestyle values explicit in New Zealand's policies.

The levels and methods of production and consumption can be determined by examining five aspects of society. These aspects that help reveal our sustainability attitudes are consumption patterns, energy consumption, energy efficiency, waste generation, and waste disposal. This chapter will show that in all five areas New Zealand is struggling to be sustainable in its approach. The consumption patterns show that we are living within our own resource capacity but taken from a worldwide perspective our lifestyle would not be sustainable.

Determining the political support for sustainable lifestyles will be carried out through a general description of the political environment that New Zealand has established regarding the importance of sustainable values. The key national and international agreements and Acts New Zealand has committed itself to will also be highlighted. While New Zealand has been at the forefront of promoting and signing various international sustainable agreements this commitment has not transferred to the New Zealand situation. Central government has relied on the Resource Management Act (RMA) to be its overriding piece of legislation in the area of sustainable issues. The RMA is focused however on mainly environmental issues and central government has not provided the outworking or resources to help local government properly implement the RMA. New Zealand needs a single policy document that will identify sustainable development and lifestyle as overriding outcomes from which other Acts and policies will draw from.

Consumption Patterns:

One way of determining consumption patterns is through evaluating the 'ecological footprint' of a country. An ecological footprint is the amount of land needed to provide a years supply of goods and services per person. Among the activities that contribute to a society's ecological footprint are its energy use, its generation of wastes that must be absorbed by land, air or water, its use of forest products, and its use of farm products. New Zealand's pattern of resource conversion is fairly similar to Australia and the affluent societies of the Northern Hemisphere. In terms of productive land use (ie: pasture and cropland, timber forests, roads and urban areas), New Zealand uses about 7.6 hectares of land per person to provide a years supply of good s and services. At the same time New Zealand's available capacity is 20.4 hectares per capita meaning there is a surplus of 12.8 hectares per capita per year. While this may look like New Zealand is living in a sustainable manner it must be noted that the global average footprint is 2.8 hectare per person (www.ecouncil.ac.cr).

It is estimated that throughout the world only 1.7 hectares of land per capita is available for human use. Based on the study called 'Ecological Footprints of Nations' only nine countries presently use less than the 1.7 hectares per capita. Another analysis states that New Zealand's footprint is 5 hectares per person (State of New Zealand's Environment 1997: 3.3). Based on this figure if everyone presently alive aspired to New Zealand's level of 'land affluence' the world would need 28 billion hectares of productive land. This is twice the earth's land area and about five times the area currently used for production.

Whether the footprint is 7.6 or 5 hectares, it shows that even though New Zealand is living within its own means it is using more than its fair share of world resources. Part of the reason for New Zealand's large ecological footprint is because it relies heavily on livestock production. Large areas of land are required for fodder crops and the animals themselves and the industries that process their products generate large amounts of waste. Societies whose food energy comes mostly from starchy plants rather than livestock have smaller environmental impacts because they only require about a quarter the land area to produce the same number of food calories (State of New Zealand's Environment 1997: 3.3). This in turn has a marked effect on the extent and patterns of land and water use and habitat replacement

Another way of measuring the impact of our lifestyle is by determining how many people could be supported if everyone were to live at the consumption levels of a New Zealander. In 1990 there were approximately 5.3 billion people in the world. If everyone ate like a North American then the agricultural output of the world would have supported 2.3 billion people. If everyone ate like a European then it would have supported 4.1 billion people. If everyone ate like a Bangladeshi then it would have supported 10.9 billion people. New Zealand's consumption habits would fall somewhere between North America and Europe in terms of the number of people that would have been supported (State of New Zealand's Environment 1997: 3.3).

The long-term viability of New Zealand's ecological footprint is under scrutiny. "So far, the small size of the New Zealand population and the relatively large land area and water resources at our disposal have allowed us to have our environmental cake and eat it too. In effect, the environment, particularly the indigenous wildlife, has partly subsidised our economic development by providing a succession of quarried resources and plentiful energy resources to use, and abundant land, water and fresh air to absorb our wastes. However, those subsidies cannot be sustained indefinitely and will eventually be reduced or withdrawn if we cannot manage our activities sustainably" (The Ministry for the

Environment 1997:Chap3:45). Reporting on the progress on the issue of consumption Stanhope writes that "little work has been done to change the production and consumption patterns of New Zealanders or to address related issues of efficient resource use" (Stanhope 2000: 171).

Energy Consumption

Understanding the amount of energy New Zealanders consume shows how we are using this energy. It reveals whether we are requiring increasing or decreasing amounts of energy to maintain our chosen lifestyles. New Zealand's energy use is comparable to that of other developed countries and slightly below the OECD average (State of New Zealand's Environment 1997: 3.4). This does not mean however that we are being sustainable in our approach to energy. New Zealand's energy consumption has increased markedly since the 1950's. Although the population of New Zealand rose by only 17% between 1974 and 1995, energy consumption increased by 53%. An alternative way of evaluating our energy needs is to see that the average New Zealander requires daily about 120,000 calories of 'primary' energy to yield some 78,000 calories of consumer energy (energy in the form of fuel or energy). The actual amount of calories our bodies require to activate properly is only about 2,400 calories per day. This means that each day approximately 117,600 calories are used to provide exterior needs. It is estimated that about a third of all energy production is lost before being consumed. This is mostly during extraction and waste heat (State of New Zealand's Environment 1997: 3.4).

Understanding what forms of energy are being consumed helps when evaluating energy use. In 1996 New Zealand was around 87% self-sufficient in its primary energy needs, but only 39% self-sufficient in liquid fuels. Non-renewable sources of energy make up two-thirds of our energy supply. Oil provides around 32% of our primary energy supply. Gas provides around 27% while coal provides around 7%. Renewable energy resources now make up around 34% of our total primary energy supply. Hydro-electricity provides 15%, geothermal provides 14%, and other forms of energy that contribute are wind, biofuels, direct sunlight, waves, tides and ocean currents (State of New Zealand's Environment 1997: 3.20). The form of the energy consumed is important because of the environmental impacts of energy use experienced in New Zealand. This includes atmospheric and local air pollution, electromagnetic radiation, water and soil pollution, habitat destruction, and scenic and recreational impacts. Different forms of energy and its extraction will cause different environmental impacts.

Successive governments have had a direct involvement in helping to develop many types of renewable energy sources that have played a large part in the energy sector. This direct involvement and regulation started to change through the efforts of the Fourth Labour Government. The energy sector was restructured through various measures. The centralised energy planning process run by the state was dismantled and replaced by a largely deregulated energy market. The Electricity Corporation of New Zealand (ECNZ) and the Coal Corporation of New Zealand were formed under the State-Owned Enterprises Act 1986. These SOE's were set up to be successful as private companies. Petrocorp was privatised in 1988, and the oil industry was completely deregulated in 1988, with border protection being removed. Electricity and gas distribution was corporatised (by the National Government) under the Energy Companies Act 1992, and liberalised energy distribution under the Electricity Act 1992 and the Gas Act 1992. The purpose of these measures was to facilitate the development of competition in energy markets.

The debate about competition in the energy sector is whether competition will act in the best interests of the environment and renewable energy sources rather than that of profit and a focus on non-renewable energy sources. The restructuring of the energy sector has had the following implications. There are now very few government constraints on commercial energy activities; and no explicit energy policy other than the recognition that energy businesses, like all businesses, must comply with the Commerce Act 1986 and meet safety requirements set out by various statutes.

This approach to energy matters is commonly described as 'light-handed regulation', as opposed to the more direct controls and regulation used in most OECD nations to achieve energy policy objectives (LeHeron and Pawson 1996: 269). The Resource Management Act has also largely excluded energy sustainability matters. Only the direct environmental effects of energy developments can be considered by the Act. Broader issues such as depletion rates of non-renewable energy resources and energy efficiency are not taken into account. Interestingly, in spite of the political rhetoric that often asserts that market forces will naturally lead to energy efficiency improvements, New Zealand's energy productivity declined at an accelerated rate over the 1984 to 1992 period (LeHeron and Pawson 1996: 270).

Energy Efficiency

Addressing the efficiency of resource use (including energy efficiency) can reduce the amount of resource use and the corresponding amounts of waste and emissions. "Addressing resource use efficiency (including energy efficiency) through the use of the full range of mechanisms (ie: markets, regulation, information and education) is the challenge for New Zealand in the next decade and beyond" (Parliamentary Commissioner for the Environment 2000: 18). To understand the state of New Zealand's energy efficiency requires various models and means of evaluation.

One way of comparing the performance of countries in energy efficiency is to look at the requirements for energy relative to the production of GDP. Although this gives only a basic indication of energy efficiency, the more energy required by a country to produce a unit of GDP the less efficient its use of energy. A comparison of this measurement was carried on all OECD countries between 1970 (with a base of 100) and 1988. The indexes are calculated from the ratio of total primary energy requirements divided by GDP. Countries showing a minus growth in energy intensity are countries where the amount of energy equivalent to tonnes of oil required per US$1000 of GDP has declined. This indicates a growing level of energy efficiency. 18 OECD countries showed this minus growth. Those countries showing a positive increase have a declining level of energy efficiency per US$1000 of GDP. New Zealand was among this latter group of six countries. The percentage change of energy requirements for New Zealand from 1970 to 1988 was 32.4%. In 1970 it took 0.48 tonnes of oil equivalent to produce US$1000 of GDP while in 1988 this had increased to 0.63 tonnes of oil equivalent. The only countries whose energy efficiency was declining at a greater rate was Greece (37%) and Turkey (61%) (Statistics New Zealand 1993: 42).

Another way of determining New Zealand's energy efficiency is to evaluate New Zealand's use of non-renewable resources. New Zealand has a set of climatic, geographic and other factors that tend to make conditions favourable for many specific renewable energy applications. Ralph Sims, the director of Massey University's Centre for Energy Research states "We could be the first country in the world to have 100 per cent renewable energy, because we've got the resources – high mean annual wind speeds, large and increasing volumes of forest residues, strong ocean currents, relatively good solar radiation levels, numerous streams and rivers with potential for small hydro schemes, available land with fertile soils and a good year-round climate for growing energy crops" (New Zealand Geographic: Number 57 May – June 2002. p25). Even with these facts the proportion of New Zealand's primary energy derived from renewable sources declined by 13.4% between 1984 and 1992 (LeHeron and Pawson 1996: 270).

On 30th April 2002 the government announced a preferred national target of 30 Petajoules (PJ) of additional energy use a year from renewable sources by 2012. Achieving this target will be a challenge because while most of New Zealand's electricity supply is renewable hydro, only 29% of New Zealand's supply of consumer energy is renewable and that proportion has been falling over recent years. This proposed target is part of the National Efficiency and Conservation Strategy (NEECS) which was released in 2001. Speaking on these targets Peter Hodgson (Energy Minister) stated that "New Zealand's sustainable energy future requires a balance portfolio of energy efficiency improvements and a transition to renewable energy sources" (Energy Wise News: Issue 76 (April / May 2002) EECA).

The problem remains that non-renewable fossil fuels still generally remain the lowest cost energy sources and therefore the 'rational' choice, both within the context of the new market-regulated economy and in the government's policy framework released in 1992 which prioritised low cost energy supply. There is a need for energy policies that bring full pricing and recognition of all externalities. There is also the lack of an economic instrument for CO_2 emissions, which provides fossil fuel-based electricity generation (ie: coal and gas generation) with an unfair advantage leading to distortions in the market and supply of electricity.

Commenting on the progress of New Zealand's move towards greater energy efficiency the OECD commented that "The reliance on voluntary compliance and public education may not be sufficient to move the country towards more environmentally sound energy use. Concrete actions are still required to internalise externalities in energy production and use and to eliminate remaining electricity subsidies. The lack of clearly verifiable targets and data by which to measure achievements makes it difficult to monitor progress in implementing the country's objectives" (OECD 1996: 176). Also at issue is the low investment in research and development to assist commercialisation of new technology. With no renewable energy quotas, no green energy schemes, no premium prices for green energy, no investment incentives and no effective CO2 mitigation programme there are limited incentives for investments in alternative renewable energy sources (Parliamentary Commissioner for the Environment 2000: 73).

An example where central government has been slow to take up issues of energy efficiency is in the areas of Minimum Energy Performance Standards and Energy Labeling. Minimum energy performance standards (MEPS) require specified energy-using products (ie: fridges and heat pumps) to conform to a minimum energy performance level under specific test conditions. MEPS are increasingly used in other countries as they are an important consumer protection feature as they can remove from the market the bottom 10-20% least energy efficient products or obsolete energy using technologies (Parliamentary Commissioner for the Environment 2000: 57). Energy product labeling provides specific information on energy performance to allow consistent comparisons to be made between products. Labeling works best when it is promoted and understood. It also works by encouraging manufacturers to improve the energy efficiency of their products out of concern that the market may reject a lowly rated product.

In New Zealand both MEPS and labeling have not fully been taken on board. June 1993 saw the government announce the investigation of MEPS. In June 1996 the concept of MEPS was formally approved. In 1999, however, there was still no legislation to provide for the introduction of regulations for the proposed MEPS. In November 1999 the government confirmed it would implement the MEPS for the three classes of lighting and water heater products. In June 1993 the government announced that it would investigate a voluntary programme for energy product labeling. In 1997 an in-depth review of labeling and international experience was conducted by the EECA. There has been little progress in introducing these instruments.

While government may have been slow to take up issues of energy efficiency on a policy level, the business community has begun to adapt their energy practices at a faster level. The Warehouse switched all their stores to more efficient lighting systems and presently is able to control all lighting and heating of all its stores from one central point therefore being able to make better use of energy saving opportunities. Another example is the power retailer Transalta, who offered to their entire consumer base in Lower Hutt a $160 energy savings package. The package included cylinder wraps, low-flow showerheads, energy efficient lights and an energy audit to identify other energy-saving opportunities. Much of this move on behalf of the business community may be because they are more aware of the issue of their profit line and the perception by society on businesses who are seen as wasteful.

Waste Generation

If you combine the total household and industrial waste, the average New Zealander generates about 145,000 litres of sewage each year and nearly 900 kilograms of landfill waste. New Zealand's production of waste is comparable to that of other OECD countries. Each year, New Zealand industries and households send a myriad of matter and liquids to landfills and clean fills. This includes 3 million tonnes of construction and demolition debris, 1 million tonnes of plant matter and food scraps, 600,000 tonnes of paper and cardboard, 220,000 tonnes of plastic, 300 million steel cans, and 30 million litres of used oil. There is also approximately 500 billion litres of sewage that flow into 258 public wastewater treatment plants each year (State of New Zealand's Environment 1997: 3.32). There is also an unmeasured quantity of stormwater and pasture run-offs into our waterways, and chimneys and vehicle exhausts emit unmeasured tonnes of smoke and particulate matter into the air.

In the late 1980's a survey was carried out on the amounts of municipal and industrial waste generated by all the countries in the OECD per head of population. New Zealand was estimated at having 662 kilograms per person per year. This was in line with countries like Australia and Canada but it was a much higher rate than most other OECD countries. The average across all OECD countries was 513 kilograms per person. Another similar survey evaluated the estimated amount of industrial waste produced per $USmillion of GDP in OECD countries. New Zealand was estimated to produce some 300,000 tonnes of industrial waste in total, the lowest of any OECD country. This translated into 15 tonnes of industrial waste per $Usmillion of GDP, again the lowest of any OECD country. In comparison Australia was estimated to produce some 146 tonnes of industrial waste per $Usmillion of GDP (Statistics New Zealand 1993: 117). This may on the surface look impressive but it has to be noted that New Zealand is not a major industrial power and by world comparisons our industrial output is small.

An organisation seeking to bring a more social responsibility factor into the products that we purchase, use, and dispose of is *Sustainability By Design*. This is a design company headed up by Martin Hill. Martin spent 30 years working for design and advertising companies. His work was not matching his personal vision and so he set up his own company. Martin makes sculptures and designs using natural elements of the earth. He creates these sculptures and then photographs them and eventually the sculptures return back to their original form. One example of this was a large circle made of snow on the top of Mt Ruapehu with the image of Mt Ngaruahoe situated in the middle of the circle.

Martin sells pictures and copies of the photos as a way of making a living and promoting issues of sustainability. The promotional package of Sustainability By Design describes this process in the following way. "Changing to cyclical systems and eliminating waste and poisonous emissions is the basis for establishing sustainable societies. However this will only be achieved when enough of us recognise the benefits to change, and are prepared to re design our lives and systems around the principles of sustainable development. By designing and publishing communications featuring my photographs and environmental sculptures I support this movement" (Martin Hill – Promotional Material).

Waste Disposal

Responsibility for managing waste disposal in New Zealand is largely in the hands of local authorities that manage landfills, refuse collections, sewerage and storm water systems, air pollution discharges, and the assessment and clean-up of contaminated sites. Of all the above forms of waste management the most common form of solid waste disposal are landfills. Until recently there was little information available on what made up the wastes going to our landfills. In 1990 the government set a national target of reducing solid wastes to 80% of their 1988 levels (State of New Zealand's Environment 1997: 3.33). To pursue such specific targets, accurate data was needed and so the Waste Analysis Protocol (WAP) was set up. WAP is a set of guidelines for local authorities on how to measure and analyse waste. A Landfill Census by the Ministry for the Environment in 1995 found that many of the council managed landfills were struggling to monitor the waste they received and handle it properly.

In the 1996 the OECD gave an analysis on the state of Waste Management in New Zealand. They gave a fairly poor picture. They stated that while it is clearly set out who was responsible for waste management, New Zealand "lacks comprehensive legislation dealing specifically with both waste and hazardous waste" and as a result "waste issues are poorly analysed and, in many cases, disregarded" (OECD 1996: 183). Specific areas of weakness they noted included:

- Waste disposal relies almost exclusively on landfills
- Need for improved methods for better monitoring and regulation of landfill disposal practices
- There are no adequate facilities for the treatment of most hazardous waste
- Waste management policies and programmes are hampered by a lack of reliable, comprehensive information on sources of waste and waste generation at national level
- Regional efforts need to be co-ordinated and harmonised

(OECD 1996: 183)

One of the other major forms of waste disposal to gain a high public profile has been that of waste sites around New Zealand. In the early 1990's the Ministry for the Environment estimated that there were 7,200 potentially contaminated sites in New Zealand. This figure did not include timber treatment sites. The determining of these sites takes into account the likelihood of contamination occurring and the risk of that contamination presenting a threat to human health and / or the environment. Of the 7,200 sites, 1,580 (20%) were seen as high risk to human health and / or the environment. 3,950 sites (around 60%) were seen as a moderate risk and the remaining sites (20%) were seen as low risk (Statistics New Zealand 1993: 116). The OECD Environmental Performance Review noted that strong efforts have been made to identify contaminated sites, and initial work is under way to clean up most hazardous sites. They however, recommended that the government needed to "implement specific legislation for the control, treatment and disposal of hazardous waste; take steps to facilitate the siting of dedicated treatment facilities within the country and negotiate disposal agreements with other OECD countries, as need be" (OECD 1996: 183).

As local councils play the major role in waste disposal they often take the lead by seeking to reduce the amount of waste going to landfills and into the water and air. The Waitakere City Council seeks to reduce waste through their Eco Building Initiatives and Eco Friendly Home. These two initiatives seek to promote housing that is more energy efficient and to generate less waste from the building and construction industries. Presently 20% of all of Auckland's waste comes from these industries. They have focused on nine key areas to do with the construction and maintenance of buildings. They are energy efficiency, water conservation, adequate building materials, low environment impact, sustainability, waste reduction, health and well-being, economic performance, and community support. Waitakere City also provides guides on waste minimisation (cleaner production) for the boat building industry, shops, cafes and restaurants, the metal finishing industry, and screen-printing industries (www.waitakere.govt.nz).

The Christchurch City Council has a programme called 'Target Zero'. This is a waste minimisation initiative working with Christchurch businesses to save money and reduce environmental impacts. It focuses on close monitoring of business inputs, processes and outputs to make efficient use of resources, minimise waste and maximise profits (Christchurch City Council Website: www.ccc.govt.nz). One venture in the Wellington region supported by all the local councils and the Wellington Regional Council is 'Enviromart'. Enviromart is a service that assists Wellington organisations find markets for unwanted materials that have traditionally gone to landfill or into the sewerage system. It is based on the waste minimisation principle of choosing to reuse resources rather than just dispose of them. The benefits of the programme are stated as the reduction or elimination of waste disposal costs, new markets for products traditionally discarded, free or inexpensive materials, reduction of the load on landfills and sewage systems, the reduction of energy consumption and an improvement of companies green image (enviromart.wcc.govt.nz).

The Auckland Regional Council has been working with the Ascension Vineyard and Café in Matakana, North of Auckland in the area of waste disposal. Ascension's commitment is to not only leave the land the way it was before development, but to leave it in a better state. Ascension has to deal with large amounts of waste generated by food preparation, wine making, and the thousands of visitors they have each year. They use a very thorough natural waste system using native trees, vermicomposters, and gravity tanks to clarify the remaining water. All water and soil that goes through the vermicomposters is put back into the plant life. As of September 2001 they had processed almost 750,000 litres of waste. The plant life around Ascension is re-vegetating at a great rate and bird life is returning to an area that has not been forested for a long time. The system Ascension uses is the first of its type in New Zealand and has been touted by many as the 'model' of how to dispose of large amounts of waste in an environmentally responsible way. Ascension also recycles all glass, plastics, wine cartons and paper. Their food scraps become chicken or worm feed. They even recycle carbon dioxide, as the wine industry is a 'net user' of CO2 (Ascension Vineyard Information Sheet - Appendices).

Policies and Production and Consumption

Government policy provides a platform to either encourage or negate movement towards sustainable lifestyles in New Zealand society. Part of the previous section of this chapter highlighted the role government has played in bringing sustainable lifestyle values and actions into five areas of society that are key indicators regarding production and consumption. This section will give a broader view of the level of New Zealand's political commitment nationally and internationally to sustainable development and lifestyles. This will initially be carried out by analysing various reports evaluating New Zealand's political path towards sustainability.

The report 'Cities and their People' by the Parliamentary Commissioner for the Environment in 1998 investigated the state of the urban environment, identified the key issues and strategic risks, and looked at how we may advance the sustainable development of our cities and towns. It identified the need to be more proactive as a society. The report stated that the concept of sustainable development has not been widely adopted or implemented in New Zealand despite the enormous influence of the RMA. "Many politicians and key government agencies do not own the concept and therefore the broad goals of sustainable development are not a feature of any legislation or policy" (Parliamentary Commissioner for the Environment 1998: 2). The report went on to put forward ideas to stimulate the adoption of sustainable development in New Zealand. The ideas included:

- Preparing a strong national sustainable development strategy that specifically recognises the requirements for creating more sustainable urban environments.
- The need for all government agencies to report annually on how they have recognised and implemented the principles of sustainable development as part of policy and programme development.
- The establishment of a sustainable development unit to inform Ministers on the strategic risks and opportunities of embracing the global agenda on sustainability.
- The setting up of a non-governmental business orientated "Foundation on Sustainable Development" as a high level independent think tank to advise government, business and communities.

(Parliamentary Commissioner for the Environment 1998: 2)

An Environmental Performance Review of New Zealand by the OECD found that until 1986, government responsibility for the environment was highly fragmented. There were a number of laws addressing planning, water use and conservation, energy, air and noise pollution. Ministries working fairly independently, with little or no attempt at integrated environmental management were administering these laws (OECD 1996: 28). The review noted that in 1985 the government undertook a broad assessment of its own environmental management system. It was found to be characterised by conflicts of interest within agencies responsible for both managing resources commercially and conserving them.

The *Environment 2010 Strategy* prepared by the Ministry for the Environment in 1995 was designed to provide a focus for environmental management in New Zealand. The strategy was attacked on many fronts for not properly addressing the relevant issues. The strategy did not make specific reference to sustainable development as a guiding principle for the country, nor refer to the other features of sustainable development. The Environmental 2010 strategy "sets few quantitative targets for environmental protection" (OECD 1996: 92).

In information provided by the Government of New Zealand to the United Nations Commission on Sustainable Development for the Fifth Session, 7 – 25th April 1997, New Zealand claimed that its "laws, regulations, strategies, and policies collectively give effect to sustainable development" (New Zealand Country Profile: Information Provided by the Government of New Zealand to the United Nations Commission on Sustainable Development, Fifth Session, 7 – 25 April 1997). This goes against policies and evidence showing otherwise. "New Zealand has no social indicators for assessing the social justice component of sustainable development" (Stanhope 2000: 172). Buhrs and Bartlett have noted that New Zealand's strongest limb of environmental policy has been the conservation of nature, rather than resource conservation and quality of life issues. They note a large number of sustainability issues that have never been dealt with in depth. These include:

- The issue of efficient resource use and issues that are relevant to the urban environment have been largely overlooked.
- They identify the need to change the production and consumption patterns of New Zealanders and that New Zealand has no social indicators for assessing the social justice component of sustainable development.
- In the area of waste they note that pollution control and sewerage waste management is left up to local government to manage without adequate resources.
- Insufficient attention has been given to appropriate land use, which contributes to erosion, one of the country's major resource problems.
- They also note that overseas development aid dropped from 0.52% of GNP in 1975 to 0.23% in 1995.

(Buhrs & Bartlett 1993: 156 - 160)

Recent government attitudes and policies have started to take note of the need for a more adequate sustainable development policy base. The new government elected on 27th November 1999 immediately indicated that it's goals included implementing a "policy platform, which reduces inequality, is environmentally sustainable, and improves the social and economic wellbeing of all

New Zealanders" (Speech from the Throne, 21st December 1999). The Ministry of Economic Development's *Sustainable Economic Development* is a move in this direction. It talks about the government's overarching economic goal is to grow an inclusive, innovative economy for benefit for all and that there is a need for greater integration and co-ordination of policy making and its implementation across the public sector, and across social, economic and environmental policy portfolios (www.med.govt.nz).

A report entitled the *New Zealand Sustainable Development Strategy* was released on 9th July 2001, following reference from the Cabinet Policy Committee. It directed officials to report back on the potential scope, process and timetable for the possible development of an integrated New Zealand Sustainable Development Strategy. The report noted the importance of communicating the government's commitment to a sustainable development approach in providing national leadership. It was also noted that there needed to be an inclusion of local government, business, Maori, Pacific Island community, unions and the voluntary sector in discussions regarding the sustainable development strategy. The report listed a number of policy initiatives currently underway, which contribute to a sustainable development approach. The policy initiatives covered such areas as Triple Bottom Line Reporting, Social Development Framework, Inclusive Economy work, Innovation Strategy, Tourism Strategy, and Energy Efficiency and Conservation Strategy. The report agreed that sustainable development principles should underpin the government's economic, social and environmental policies (www.liveupdater.com).

While there are many initiatives underway by government there are calls for an overall 'Sustainable Development Policy'. "The government has introduced, or has under consideration, a number of strategies and legislation that contribute to various aspects of sustainable development but in some cases the links between individual strategies and sustainable development are not clear. It would have been more logical to have in place a sustainable development strategy before all the other related strategies were considered" (Parliamentary Commissioner for the Environment 2002: 9).

New Zealand's Political Commitment to Sustainable Lifestyle

To understand the political commitment to sustainability requires that we need to start with the commitments New Zealand has made globally. The main method available under international law for countries to work together on global environmental issues is through Multilateral Environment Agreements (MEA's). MEA's are agreements between states which may take the form of 'soft-law' setting out non-legally binding principles which parties will respect when considering actions which affect a particular environmental issue, or 'hard-law' which specify legally-binding actions to be taken to work toward an environmental objective. New Zealand's key obligations include:

- The 1992 Earth Summit in Rio de Janeiro, Brazil. More than 100 heads of state met for the first International Earth Summit to address urgent problems of environmental protection and socio-economic development. The assembled leaders signed the Convention on Climate Change, the Convention on Biological Diversity. They also endorsed the Rio Declaration and the Forests Principles and adopted Agenda 21.

- Agenda 21 is a plan set out at the 1992 Earth Summit for achieving sustainable development in the 21st century. The most practical progress made regarding Agenda 21 has been by encouraging local government to take up the challenge of Agenda 21. Chapter 21 of Agenda 21 notes the importance of local authorities in implementing the principles of sustainable development. It talks about local authorities being the level of governance closest to the people and so they play a vital role in educating, mobilising and responding to the public to promote sustainable development.
- Twelve other agreements New Zealand has committed itself to are in areas such as wastes, wetlands, Antarctica, endangered species, pollution, biological diversity, fishing and driftnets, climate change, ozone layer depletion and nuclear free zones.

At an international level New Zealand has committed itself to many significant environmental and social agreements. New Zealand now needs to follow those commitments up with policies and actions that follow through these commitments. "There is a major risk for New Zealand's 'clean and green' image and our competitive advantage if international groups (e.g.: the OECD and our trading partners) see New Zealand resiling from its bold commitment to sustainable management under the RMA and from its responsibilities under international agreements" (Parliamentary Commissioner for the Environment 1998: 3).

There are a number of national policies set in place that seek to work towards sustainable development and values. Many of these are either in the area of the environment or they seek to directly impact the methods and levels of production and consumption in New Zealand. The most important sustainable policy in New Zealand is the Resource Management Act 1991 and therefore this Act will be highlighted in this chapter. Some of the other more important acts include the Hazardous Substances and New Organisms Act 1996, Ozone Layer protection Act 1990, Environment Act 1986, Forests Amendment Act 1993, Biosecurity Act 1996, and the Fisheries Act 1996. There are also a number of strategies in place that build towards sustainable development. These include the National Science Strategy, Sustainable Land Management Strategy, New Zealand Coastal Policy Statement, and the National Biodiversity Strategy.

Resource Management Act 1991 (RMA)

The RMA provides for the first time a statutory framework for a relatively more holistic and integrated approach to environmental planning based on ecological and democratic principles. The purpose of the RMA is to promote sustainable management of natural and physical resources. This is defined as "managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural wellbeing and for their health and safety" (www.mfe.govt.nz – The Resource Management Act: An

Overview). The focus is on the effects proposed activities will have on the environment. The key role then of planners and decision-makers should be to minimise adverse effects so that the sustainability of all resources is not jeopardised. Most of the responsibility for identifying land, air and water resource management issues, developing policy responses and implementing and monitoring these have been devolved to elected regional and district councils. It is the process of formulating these plans and policies where members of the community have the opportunity to have their say about what they want to happen in their area.

Strengths of the RMA are seen as:

- Recognition of the importance of the goal of sustainability in the purpose of the Act
- Opportunities to achieve desired environmental outcomes through a variety of approaches
- Opportunities to integrate various forms of knowledge (ie: technical, indigenous and community)
- The potential for integrated management of the environment to occur
- The participation of people and communities in the environmental management of their areas

(Parliamentary Commissioner for the Environment 1998: 2)

Prior to the RMA, all natural and physical resources were governed by more than 50 different laws, which were often conflicting, overlapping or inconsistent in their purpose. The RMA changed all that by replacing more than 20 major statutes. One of the key influences of the RMA was the Brundtland Report. However by the time the Resource Management Bill was introduced into Parliament in 1989, its scope and purpose was limited to the sustainable management of natural and physical resources, a much narrower concept than the Brundtland Report's definition of sustainable management. The Resource Management Bill Review group reasoned that "One disadvantage of adopting the term 'sustainable development' is that the concept outlined in 'Our Common Future' embraces a very wide scope of matter including social inequalities and global redistribution of wealth. It is inappropriate for legislation of this kind to include such goals" (Stanhope 2000: 163). The failure of central government to find common ground on the concept of sustainable development also stymied public debate on the issue and it remained largely confined to the political arena.

Geoffrey Palmer, one of the key figures in the establishment of the Act, was enthusiastic about the possibility of this Act making an impact in New Zealand. "New Zealand is not a difficult country in which to legislate, nor is it threatened environmentally in the way that so many countries are. For these reasons the New Zealand experience with this reform will be of some importance in looking at ways of dealing with the global environmental problem. If New Zealand cannot make sustainability work, the chances of less favourably placed countries achieving it are even slimmer. New Zealand is a relatively 'clean and green' country, with a small population and a low level of industrialisation" (Palmer 1995: 147).

Other people were less hopeful about the impact of the RMA. Dunedin Mayor, Sukhi Turner said, "Sustainable management does not mean sustainable development. This is a soft option because it is aimed at effects rather than actual development. Sustainable management is meant in an environmental sense alone; it does not incorporate the wider societal needs and equity incorporated within the concept of sustainable development" (Horton and Wearing (eds.) 1995: 1 -3). Commenting on the RMA the Parliamentary Commissioner for the Environment noted the following. "The approach to promoting sustainable management being developed in New Zealand is reactive, based mostly on the management of environmental effects rather than on setting environmental performance targets and articulating visions to improve the nature and efficiency of resource use in line with sustainable development" (Parliamentary Commissioner for the Environment 1998: 3). The commissioner went on to describe the RMA as just one of a number of pieces of legislation needed to help contribute to the goal of sustainable development. He talked of other instruments needed such as economic instruments, regulation, voluntary agreements and education.

Initiatives by Local and Regional Councils

Waitakere City Council is one of the most prominent councils in New Zealand to incorporate sustainability values into their policies and activities. It is the first Eco-city in New Zealand. "It is difficult to describe what an Eco-city is, partly because it is more about the way we live, than what we actually do. It is the processes by which decisions are made, the values we hold, and the things we choose to value" (Waitakere City Council website – www.@waitakere.govt.nz). Being an Eco-city entails embracing the Agenda 21 charter laid down in the Earth Summit in Rio de Janeiro in 1992.

Waitakere City Council seeks to focus on environmental, economic and social systems and ensuring that they are considered together. The council has three goals. These are to be:

- Sustainable: enduring, adapting and improving
- Dynamic: vibrant, interesting and progressive
- Just: fair, inclusive and participative

All these goals are worked out in a guiding document called the 'Greenprint'. It outlines council's Eco-city commitment, and the steps and actions council proposes to take. It also provides a framework for integrated decision making. The Greenprint is structured around seven key focus areas that all contribute to being sustainable. These are Community Empowerment, Urban Consolidation, Strategy of Involvement, Holistic Approach to Health and Safety, Traffic Reduction and Community, Life-Cycle Approach to Energy, Resources and Waste, and Greater Economic Independence

The council is developing access to a greater range of information, and learning more about the environment and the city's heritage. They are also encouraging strong and caring communities, enjoying and promoting art, culture and leisure activities. Waitakere City has one of the first local plans that fully integrate the intent of the RMA. This district plan maps its natural constraints alongside the human built environment and takes an effects-based approach to land use rather than regulating specific uses.

Waitakere City is part of the Auckland Regional Council (ARC). The ARC is made up of seven cities and districts. The ARC's role is to provide leadership to these seven cities in the area of sustainability. It does this through key strategies such as Regional Growth Strategy, Regional Land Transport Strategy, Regional Economic Strategy, and the Regional Policy Statement. The mission statement of the ARC is 'Working in partnership with our regional community to achieve social, economic, cultural and environmental prosperity and well being'. The major issue affecting sustainability in the wider Auckland area is growth. There is a need to accommodate growth while maintaining the things that people love about living in Auckland (Region Wide: Auckland Regional Council Magazine – Issue 16: August 2001).

Conclusion

The way a society uses the resources it has available is an indication of the overriding values and attitudes that prevail. This is revealed through the levels and methods of production and consumption and the governmental policies that dictate how these are to occur. A New Zealand lifestyle could not support the present population of the world, let alone future growth. In a land where there is a bountiful supply of food, energy, and natural resources it may be hard to comprehend why present lifestyle choices cannot be sustained. The truth is that our 'ecological footprint' is too large in comparison to the rest of the world and is not sustainable.

To understand how New Zealand uses its resources requires that we evaluate the production and consumption processes that exist in New Zealand. Our energy consumption levels are increasing compared with other OECD countries. This consumption is increasingly coming from non-renewable sources. This is in a large part due to the government initially not taking the lead in giving incentives for the development of renewable sources of energy. It has also been hindered by the deregulation of the energy sector in New Zealand. By relinquishing control over the energy sector government has given responsibility of developing renewable energy sources to the market. Competition will not act in the best interests of both the environment and renewable energy sources. While cheaper sources of non-renewable energy are available then time and finances will not be put into seeking alternative renewable sources.

Our production of waste is also above the OECD average. It is mostly the responsibility of local councils to deal with the disposal of this waste. Due to this fact they have taken the lead in helping to both reduce the amounts of waste being produced and to improve how this waste is disposed of. Councils have placed more emphasis on personal responsibility regarding waste through initiatives such as user pays for waste disposal, providing efficient recycling schemes, and reducing the amount of household wastes that can be put out each week. Councils are also working with the business sector to help them reduce their wastes. Businesses have also taken the lead in being more waste conscious in their practices and by demanding that suppliers and buyers use less packaging and more environmentally friendly packaging.

Central and local government policies provide a framework for how society and individuals will live and interact with one another and with the environment. They also provide a basis on which levels and methods of production and consumption occur. New Zealand has made a commitment internationally and nationally to various policies and laws that support sustainable development and values. While central government has provided a policy base for sustainable issues there is no policy document that commits New Zealand to sustainable lifestyle or development as an overriding goal.

The government has relied on The Resource Management Act 1991 as its key piece of legislation regarding sustainable and environment issues in New Zealand. While the RMA has not provided direction for covering aspects of sustainability such as economic and social it has put into place procedures to deal with economic growth and the environment.

Creating a smaller ecological footprint is the responsibility of all New Zealanders but it does require that central government take the lead through policies and financial incentives and support. Individuals and businesses can play their part in waste generation and disposal and energy consumption and efficiency but it will be the overall government lead in the areas of energy and waste that will set the platform for this to occur. It will also require central government making better use of the RMA and other policies to ensure that production and consumption occurs at a sustainable level both for the sake of New Zealand and her international responsibility.

Chapter 4

Economics

It is important to understand how society functions in regards to the production and consumption of goods and services. This is because part of the emphasis of a sustainable lifestyle is on living in such a way that future generations have access to the goods and resources that are presently available today. The way these resources are used and allocated has direct impact both upon how these resources are allocated for society today and whether these resources are available for future generations. The way in which communities and countries function in regards to the production and disposal of goods and services is determined through the economic system society functions under.

Capitalism is the economic system that New Zealand operates under. It is important to understand the principles of capitalism because it is important to understand the values and attitudes that result from a capitalist system. Capitalism has certain outcomes such as waste, competition, maximised profits, growth and unemployment. Measuring capitalist outcomes and values against sustainable lifestyles helps establish the differences in their workings. There is a gap between the original principles of capitalism and the ones that now exist. It can be argued that the modern operation of capitalism works against values of sustainability whereas the original principles of capitalism were more focused on providing an income and provision for goods and services for all.

Within this capitalist foundation there are many businesses in New Zealand who are seeking to be sustainable in their approach to business and who are seeking to fulfill the original intentions of what a capitalist system could provide. To better understand economics at work in a sustainable way in New Zealand two issues will be evaluated. These are Economies of Ecology and Triple Bottom Line Reporting. Economies of ecology are about the 'Clean and Green' image that has developed in this country. It has become an image that business in New Zealand trades on due to the circumstances of our physical and natural surroundings. It will be argued in this chapter that general business practices and government policies in New Zealand do not back up this image. Triple bottom line reporting aims to help businesses return environmental and social returns to society as well as financial returns to shareholders. This system of reporting has taken an important place in overseas business and government practices but it has not impacted businesses in New Zealand to the same level.

There are increasing numbers of New Zealand businesses that are changing the way they operate to become more orientated towards sustainability issues. This action is not being driven by any political intentions. It is being driven by some of the larger and high profile New Zealand businesses and business leaders. This is due to demands placed on local companies from overseas parent companies, by increased overseas government requirements and the increasing public demand for socially, economically and environmentally friendly business practices. Their example is seeking to show that it is possible to operate in a capitalist system while providing wider societal benefits.

Measuring Capitalism Against a Sustainable Society

To understand the impact of sustainable lifestyle on the capitalist system in New Zealand requires firstly an evaluation of the basics of capitalism and then a measurement of those basics against sustainable lifestyle values. A capitalist system is also known as a market or free-enterprise economy. An economic dictionary describes capitalism in the following way.

> "It is characterised by the private ownership of capital, that is, where the majority of the means of production, distribution and exchange are owned by private enterprise or individuals that are based on the market allocation of resources. The co-ordination between economic agents is achieved by the market and the price with self-interest and profits the motivating forces. The government is seen to have a minimal role in the economy which is confined to providing some goods and services for collective consumption, e.g. infrastructure relating to water, power, electricity, etc. It also extends to the provision of law and order, defense and some public services" (Stanton and Launder 1998: 17).

People choose to participate in a capitalist system for various reasons and these reasons do not focus around just personal gain or profit. Putting aside the reality that most people need to play their part in a capitalist society just to be able to survive, there are other motives people have for being involved. This can be best understood through identifying the three motives for economic actions. These are:

- Theory of profit that declares that people buy, sell, lend, develop land, save and so on, entirely and exclusively on the basis of calculations as to the most financially profitable outcome.
- Theory of mixed motives. This theory is that in almost every society of which we have knowledge, even to an extent in modern Western society, people tend to take almost all their decisions in the light of all factors in the situation, and not just the economic ones.
- The theory that there are no pure economic acts. All actions have relevance in moral and emotional spheres.

(Bieleski 2000: 25)

Within a capitalist system there is therefore wide scope in determining the level sustainable values can play. If however, sustainability is all about something that builds into all people in the present generation while maintaining enough resources so that future generations have equal access, then the outcomes of this present economic system are not meeting that need. "Our present economy is the essential cause of our serious global problems and these problems can only rapidly worsen so long as we retain this economy. The problems are primarily due to over-production, over-consumption and over development" (Bieleski 2000: 74).

Adam Smith had quite a different view of capitalism than is presently held. His book, *An Inquiry into the Nature of the Wealth of Nations* was published in 1776. It provided a theoretical structure and explanation for the workings of the increasingly dominant market system that was at the centre of the new capitalist industrial economy. "The Wealth of Nations is about how a transformed institutional environment can unleash the dynamic forces of growth in a competitive capitalist economy in a way in which all benefit" (Cypher & Dietz 1997: 110).

One of Smith's theories was the Theory of Moral Sentiment. In this theory he rejected self-love as the basic motive for behaviour, and defined virtue as consisting of three elements. These were propriety (the appropriate control and directing of our affections), prudence (the judicious pursuit of our private interest), and benevolence (the exercise of only those affections that encourage the happiness of others). He advocated high wages not only for making workers productive, but also as a policy beneficial for the whole society. "No society can surely be flourishing and happy of which the greater part of the members are poor and miserable. It is but equity, besides, that they who feed, cloth and lodge the whole body of the people, should have such a share of the produce of their own labour as to be themselves tolerably well fed, clothed and lodged" (Bieleski 2000: 46 quoting Smith, 1776).

Adam Smith proposed principles of capitalism that can be seen as sustainable. He envisaged a capitalist system that had checks in place to ensure a more equitable and sustainable society. The present outcomes of today's capitalist system work against many values of sustainability. These outcomes are waste, competition, maximized profits, growth and unemployment. They are all evident in New Zealand society today and while they may not seem totally evident they are helping to restrict the values of sustainability developing in this country. In each of these areas they are not related specifically to a New Zealand situation but are generalized in their impact upon any society, of which the focus happens to be New Zealand.

Waste refers to the amount of rubbish and physical waste that is produced each year as a result of all the packaging and all the goods that aren't recycled, reused or reduced. Waste also occurs in the sense that for the capitalist system to properly function means that more and more needs to be produced and consumed. Capitalism is not working unless there is economic growth, which generally means that unless we are producing and consuming as much as we did last year then the economy is not healthy (Bieleski 2000: Chapter 4).

Adam Smith (known as the father of the capitalist system) saw competition as a "counter-weight to, and a brake on, the possible excesses that greedy and self-interested behaviour might engender in its absence" (Cypher and Dietz 1997: 108). While competition should provide equality in the sharing of resources under capitalism there is the tendency for market forces to always allocate scarce things to the rich. The reality of capitalism is that most of the available resources go to the rich people, simply because under a free market system the rich can bid more for scarce items. Those products and services that are scarce therefore are more valued. The purchasing power provided by wealth helps determine what is produced and at what level while the poor lack this purchasing power.

The capitalist market is always looking for cheaper ways of producing goods and services and selling these same goods and services at maximum prices. This maximum profit motive cannot and has not produced appropriate development in developing countries. This is shown in the way that many people in Third World countries cannot now afford to buy the things they need that is produced in their own country because the base price is too high because overseas markets have forced the price up. "Hence it is the market system that deprives the world's poor people of anything like a fair share of the world's resources, including the resources in their own countries. The market takes much of the best land in the Third World and devotes it to the production of crops to export to the rich few" (Trainer1995: 75).

Growth is seen as providing the answers to the world's economic problems through an endless increase in the volume of capital accumulation. If you own capital then you seek a return on the ownership and use of this capital. Therefore there must be an endless increase in the amount of investing, producing and consuming taking place if there are to be sufficient outlets for all that capital. Under this 'growth' focus of many Western countries it can often be hard to see how equality or welfare comes into the economic equation. Though supposedly the belief about a capitalist system is that all will benefit from economic growth, the reality is quite different. "Today's economists are taught to believe in a free-trade philosophy, but that flies in the face of all evidence. International trade has increased 11 times since 1950 and economic growth has increased five times. In that time, poverty and environmental damage has increased at a similar rate. The economic theories taught in universities today are complete garbage" (Goldsmith, Edward – Talking to the Manukau City Council in Bieleski 2000: 66).

The most familiar indicator of growth is Gross National Product (GNP) or Gross Domestic Product (GDP). It measures 'formal' sector activity such as manufacturing, primary products, and services. All measurable activity is considered the same so arms expenditure is not differentiated from primary health care. Many 'Bad' economic activities are included such as fixing up pollution, war and gambling, wasteful use of resources, money spent on repairing cars and fixing up people smashed in vehicle accidents. GNP does not fully report the 'informal' activity where people produce for their own good. This includes activities such as growing your own food, fixing your own house or car, using Green Dollars, or the productive activities of a household. Marilyn Waring makes a devastating attack on conventional economics, in particular the obsession with GDP, when she points out with clarity how the productive work of women counts for nothing, and bizarre activities such as sex tours, oil tanker disasters and militarism count as good for growth (Waring 1988: 16). Herman Daly agrees with this view.

> "Economic growth is held to be the cure for poverty, unemployment, debt repayment, inflation, balance of payments deficits, pollution, depletion, population explosion, crime, divorce and drug addiction. In short, economic growth is both the panacea and the summum bonum. This is 'growth mania'. When we add to GNP the costs of defending ourselves against the unwanted consequences of growth and happily count that as further growth, we then have hyper-growth mania. When we deplete geological capability and ecological life support systems, and count that depletion as net current income, then we arrive at our present state of terminal hyper-growth mania" (Daly 1992: 9 - 14).

GNP is a particularly inadequate guide to development since it treats sustainable and unsustainable production alike and compounds the error by including the costs of unsustainable economic activity on the credit side, while undervaluing processes of recycling and energy conversion which do not lead to production of goods and services. GNP records the productive utilization of resources whether or not those resources are renewable. So for example deforestation is usually treated as a net contributor to capital growth. This is an important issue for sustainability because the 'informal' activity plays more prevalence in Third World countries and poorer communities in developed countries.

Unemployment is seen as a type of guiding measure of how healthy an economy is and as a natural and healthy outcome of a market economy. "In this economist's view, devoid of humanity, on one side of their absurd equation, people are mere factors of production in which a reserve of unemployment should be kept to ensure that factor costs are kept low and working conditions are subject only to demands of production. On the other side, people are mere purchasing automatons operating in isolation with insatiable greed for ever more consumption using an all-knowledge brain that can unerringly compute for monetary worth of ever action" (Bieleski 2000: 130).

This reality was worked out in New Zealand in the 1980's and 1990's when there was downsizing and privatisation of government owned and run enterprises. It was seen as 'bad' for the economy to have such a large workforce. It was seen as wasteful and bad management. So, many people who had paying jobs that gave them a basic income and a sense of meaning and purpose were made redundant. These same people then became one of the unemployment statistics who then depended on the government for their livelihood through the unemployment benefit. The cost of this work shifted from central and local government to the taxpayer. These same people became 'un-useful' members of New Zealand society and struggled to find a sense of worth sitting on the unemployment benefit. This was seen as good based on a market viewpoint but not necessarily from a welfare or sustainable viewpoint.

The New Zealand Perspective

The purpose of the first part of this chapter was to give a general idea of the economic parameters in which New Zealand functions. These parameters dictate to a large degree the way in which sustainable values are able to be worked out. The idea was not to provide specific details of how economic systems functions specifically in New Zealand as these are generally similar to many other capitalist focused countries in the world. The next part of this chapter seeks to highlight two aspects of economic systems evident in New Zealand. These are examples of ways in which sustainable issues are impacting on New Zealand economic systems and are seeking to use capitalism as a way of providing goods and services for all. These two aspects are Economies of Ecology and Triple Bottom Line Reporting.

Economies of Ecology

New Zealand has given itself the title of 'Clean and Green' to describe our setting in the world and the state of our environment. It is a picture New Zealanders can afford themselves partly because there is a feeling that as a country, we are a comfortable distance from the issues of pollution and environmental decay that seem to plague the rest of the world. However New Zealand is generating increasing amounts of waste and often because this waste is unseen, consumers don't demand much in the way of environmental performance. It is only when the effects of waste directly impact lives do people seek a resolve. An example of this has been the spasmodic closing of North Shore beaches due to raw sewage overflowing directly into the sea at times of high rain (New Zealand Herald: 5th October 2001 – Clean Up Our Beaches Shore Cries). Other environmental issues such as Greenhouse gases, changing weather patterns, and the increase in global temperatures are also impacting New Zealand.

New Zealand is being heavily influenced to change the production methods of many of our key industries due to a world-wide attempt to reduce greenhouse gas emissions. This will have a direct influence on our economy because we are dependent on primary production such as agriculture, pastoral, fishing and forestry. There is a growing emphasis from overseas countries on the need for more secure and rigid rules and policies on production and distribution of goods and services that are environmentally friendly. Some of the companies that have taken a proactive stance regarding the environment tend to be ones that are part of a larger multinational corporation. Generally however New Zealand has lagged behind in the area of legislating for environmental change with only minimal compliance attitude across various levels of society.

In seeking to answer the question of who is responsible to bring change in environmental and social areas, one view states that business is the only medium powerful enough to reverse global environment and social degradation. The New Zealand Business Council for Sustainable Development (NZBCSD) is one organisation that believes the business community can make a difference. The NZBCSD is a group of leading New Zealand companies committed to social, environmental and economic development. Their mission is to provide business leadership as a catalyst for change towards sustainable development, and to promote eco-efficiency, innovation and responsible entrepreneurship. Their aims include business leadership, policy development, best practice and global outreach. They have four core means of fulfilling this role.

- Knowledge – To foster understanding of global and regional drivers of consumer behaviour, regulations, resource use, social change, science and technology, and their implications for new business opportunity
- Influence – To participate in national and international policy development in order to create a framework that allows New Zealand business to contribute effectively to sustainable development
- Action – To demonstrate leadership through high standards of environmental and resource management, technological innovation, and social value creation.
- Dialogue – To foster dialogue and shared learning amongst leaders from all sectors of society in order to build sustainable strategies for New Zealand's future.

Some of the practical out workings they are involved in include waste minimization projects and research, endorsement of conferences and events, input into central government policies, partnering businesses with schools, input into debate and policy on climate change, providing direction in triple bottom line reporting and youth employment

One company that found out that being sustainable and environmentally friendly could have financial spin-offs is Tasman Pulp and Paper. In 1996 Tasman Pulp and Paper faced spending $7 million on a new tip for its Kawerau Mill. It was running ten big trucks to carry waste to its present landfill. They had consents to use the landfill for 25 years but after eight years it was close to full. They called in Peter Fredricsen from Materials Processing Ltd. He found that while Tasman mill was dumping its off cuts at the tip, the company was buying off cuts from other mills to fuel its boilers. He diverted the local off cuts to the boilers. He also found out that other waste material going to the tip from another Tasman paper mill could be used to make apple trays and egg cartons. In the whole process Peter cut the wastes going to the tip by 95% and cut solid wastes from the toilet paper factory to zero. The savings from the Tasman site was more than $1 million a year and the planned $7 million tip will never be needed (New Zealand Herald – August 27th, 2001).

One of the problems regarding business and sustainability is that the sustainability concept is often bandied around about by businesses that do not understand the full implications of the term. "One of the problems is that companies that have already made some changes – improved their resource use and tidied up their waste issues – then think that they have done their bit – and think they are a sustainable company, but really that is just good housekeeping" (McDowall 1999 – Economies of Ecology). He proposes that companies should be looking at introducing good process analysis and seeing that sustainability is about pollution prevention and not pollution control. He also talks about having continuous cycles of improvement and moving into the life-cycle analysis of the products they use up and down the supply chain.

One determinant of how much New Zealand businesses have taken onboard environmental management is an analysis of the type of reporting carried out as part of a company's Annual Report. A survey by Goodwin and Hille in 1992 found a low level of corporate support, through analysing of the annual reports of 39 of New Zealand's top 40 companies. (Further details of this survey are given in the Environment chapter) This survey shows that New Zealand businesses have given environmental management a low priority.

An organisation seeking to challenge and change the environmental management of New Zealand businesses is the Auckland Environmental Business Network. The AEBN was revived in 1999 after lying dormant for a number of years. It has 150 members and another 200 businesses described as 'friends'. The aim of the AEBN is to assist members in the development of more environmentally sound business practices that also meet economic and social bottom lines. They are seeking to contribute to the goal of sustainability by encouraging businesses to protect and enhance the environment, returning a profit to stakeholders, and enhancing the local community. One of the problems for firms seeking to improve environmental performance is finding the time within their own structure to implement systems or make changes. One of the services of the AEBN is to therefore provide a discounted environmental consultancy and audit service. Other services include networking opportunities, seminars, clippings service and an information and news website.

<u>Triple Bottom Line</u>

Triple bottom line reporting is an alternative way of companies looking at what their motivation for being in business is. Traditionally, the core purpose for being in business was economic, that is to return a healthy profit to owners or shareholders. Triple bottom line reporting seeks to promote environmental concerns and a social responsibility. The lead in triple bottom line actions and reporting is coming from overseas companies and governments. "International market pressures, including 'entry' requirements, are forcing business to declare the position of their products or services based on increasingly stringent environmental, social, ethical or sustainable criteria" (Auckland Environmental Business Network Web Site – www.aebn.pl.net).

The triple bottom line is about sustainability – economic sustainability, environmental sustainability and social sustainability. The triple bottom line is usually described in the order of which they started to play a larger role in business so therefore it goes – economics, environmental, and social. In recent years it has been the 'social' reporting that has risen to the top in regards of importance as society, governments, and investors have demanded a wider responsibility from business. That is why a more recent term to describe the triple bottom line is 'People, planet, and profit'. Social sustainability is now a dominant new dimension of doing business. To show how important it is in the overseas context, social reporting has become mainstream in the Dow Jones Sustainability Index, the World Business Council for Sustainable Development, and the Global Reporting Initiative (Davis, Stephen L – Triple Bottom Line: The Social Dimension. Congo Online Website).

New Zealand businesses have been slow to take up the challenge of triple bottom line practices and reporting. Gael Ogilvie (of engineering and environmental consultancy URS) says that many New

Zealand businesses put triple bottom line reporting in the too-hard basket. She says a URS report for the Ministry of the Environment shows that "green market signals from overseas consumers, retailers, financial sectors and Governments are getting louder and while New Zealand exporters are trading on the country's clean image at present, they cannot afford to be complacent for long" (New Zealand Herald May 18th 2001 – Bottom Line Becoming Broader).

One organisation that is seeking to promote triple bottom line reporting in New Zealand businesses is the Sustainability Working Group (SWG). This organisation is based from members who are all part of the Institute of Chartered Accountants of New Zealand. The SWG seeks to enhance the understanding of sustainability in business. The three core ways of achieving this is triple bottom line reporting, education, and lobbying. One of the founders of the SWG states that "the group seeks to inform, educate and encourage people to become aware of sustainability in business activities, and demonstrate how they can be instrumental in obtaining improvements in business and beyond. Improvements which will make New Zealand and other countries better places to live, work and play" (Skinner, Ray – Birth of a Sustainability Working Group Brochure).

Some of the practical work of the group includes identifying various frameworks and standards for reports and the tailoring of guidelines and frameworks for reporting to the size and nature of New Zealand companies. It also assembles material regarding the top 20 Business Sustainability Reports from around the world and catalogs applicable New Zealand reports. Ultimately the Sustainability Working Group is seeking to influence the way the financial side of business is carried out in New Zealand. They are a small number of people (about 60) who are seeking to bring about a big change in business practices promoted through the Institute of Chartered Accountants (25,000 members). They are aiming to develop frameworks and guidelines for the New Zealand context and eventually develop standards. These initiatives aim to make triple bottom line reporting compulsory in the way business reporting is carried out.

New Zealand Businesses Seeking to Make a Difference

There are many New Zealand businesses that are seeking to apply the values and principles of sustainability into their business practices. Some businesses are doing this due to personal values of the owners or leaders of those businesses. Dick Hubbard of Hubbard Foods is an example of this (New Zealand Herald 24th August 2001 – Hubbard Bares All in Cupboard). Other businesses are changing their practices because of the growing awareness that overseas customers and government policy is pushing changes in this direction. In either case, being sustainable in business is becoming more a part of how business is carried out in New Zealand.

McDonalds New Zealand in 2001 celebrated their 25 years involved in community projects. They chose to acknowledge this milestone by printing on the back of the paper bags they hand out their takeaway food the following details. Celebrating 25years in the community: 8,500 Ronald McDonald and NZ Police road safety shows, 98,500 seasonal sport team sponsorships, 216,000 community organisations and activities sponsored, 150,000 native trees planted around New Zealand, 40,000,000 dollars contributed to the community, 125,000 items of sporting equipment donated. Their motivation for acknowledging these details may have more to creating positive public relations rather than a true reflection on the operating procedures of McDonalds.

Another voice of support for sustainability in business comes from Craig Norgate, the chief executive of Fonterra. Speaking in response to the debate on the Knowledge Wave, Mr Norgate has challenged knowledge economy enthusiasts to aim for a knowledge economy with heart by promoting cultural diversity and a clean environment. In an interview with the *New Zealand Herald* he had the following to say. "If we are really to have a long-term sustainable economic success, it can only be if we are taking the whole of society with us. This country has made it very clear that it's unhappy with the inequalities that we have. So to get the buy-in from people, you have to see that there is something in it for everyone" (New Zealand Herald: August 27th, 2001). He went on to say "If all people hear about is economic performance, they will disengage and feel remote from it. We have to make what we are talking about relevant to them; take away the fear and recognise that New Zealand is a lot more than just economic performance. A lot of our strengths are around the diversity of our culture and our clean, green environment" (New Zealand Herald: August 27th, 2001).

Conclusion

Capitalism at its core has the potential to benefit all people economically while maintaining and furthering the social and environmental needs of those people. It will require an evaluation of the processes and values of business and economics that we live under to help bring about a change to the level of sustainability in New Zealand. Increasingly, there is the recognition that while economic growth is vital, it must be obtained through businesses acting in ways that build into society rather than taking away from it. Taking away comes in the form of waste, competition, maximised profits, growth and unemployment.

There is a growing awareness that economics in New Zealand must deliver not just financial benefits but also environmental, social and cultural ones as well. This awareness needs to take on practical forms. New Zealand's rhetoric in regards to the "Clean and Green" image needs to be matched with action and our reasons for doing business and reporting of it need to be revamped. For too long businesses in New Zealand have traded on the goodwill of the 'Clean and Green, image. Due to tightened reporting systems and an increased demand for "Green" goods businesses must now match their promotion and image with results and validation.

New Zealand businesses like the Warehouse, Hubbard Foods, McDonalds and Fonterra are willing to acknowledge the way different aspects of their business's build into the environment and society. Like any business there are no doubt alternative motives for their actions. At least their lead is demonstrating that business and thus economics does not just have to be about money but it should also be about people and places so that future generations have access to resources that are available today.

Chapter 5

Environment

The preservation and care of the environment was one of the founding outcomes of sustainable development theory and practice. Sustainable development sought to create ongoing economic development while ensuring that the environment was maintained for future generations. Understanding how New Zealand is taking care of its environment therefore is one of the key aspects of determining to what degree sustainable lifestyles are impacting this country.

New Zealand is a country of immense natural beauty. It is a land of green hills, pristine mountains, and sparkling rivers and lakes. It is also a land that is separated by large bodies of water from other countries and continents. These things contribute to a sense of identity with the land that New Zealanders has. We have prided ourselves on the state of our environment without really knowing the actual 'state' of our environment. There is a strong sense of being "one with the environment". Many of the views on the environment and the sense of relationship with it have been influenced by those who lived in New Zealand up to this point in time.

This chapter will investigate the history of both the Maori and European relationship with the environment. The Maori people set up a structure for the use and protection of the environment but this was only after a period where they had already stripped the land of much tree cover and some animal life. The European settlers brought an attitude of domination over the land they saw before them. This strongly contributed to the disappearance of much wildlife and forests. The end of the 19th Century started to bring about a different understanding of the importance of the environment to both our quality of life and economic way of life. This was highlighted with the development of various government policies and acts establishing measures to protect forests, fauna and wildlife.

There are numerous environmental issues impacting New Zealand society today and these are influencing our view of the environment. There is the recognition and provision for Maori values, our 'clean and green' image, the support for environmental organizations, public opinion on environmental issues and a greening of the economy. World environment issues such as nuclear power, driftnet fishing, rising global temperatures and ocean levels, and ozone layers have brought the 'environment' into our lives. Increased knowledge and understanding has provided a catalyst for the opportunity to become more environmentally aware and orientated. The 'Environment' has in recent decades become an issue that has moved into the mainstream of life. The care and preservation of the environment is the strongest way in which sustainable lifestyles are acknowledged and expressed in New Zealand society.

History of Environmentalism in New Zealand

There are two distinct streams of influence of environmentalism in New Zealand. They are the traditional Maori worldview of the environment and the values and attitudes about the land and environment brought to New Zealand by early European settlers and the subsequent views developed up to modern times.

The Maori view of the environment is based in the historical roots of the way the world is seen and the place that humans play in that world. The traditional Maori system of environmental management is holistic. It seeks to ensure harmony within the environment, measures checks and balances daily, prevents intrusions that cause permanent imbalances and guards against ecocide. All things in the natural world are seen as the progeny of Papatuanuku (maternal earth) and Ranginui (paternal sky) (Minhinnick, Nganeko Kaihau (1989). As there is a common bond recognised in this order, Maori interrelate to the surrounding environment accordingly. Maori perceive the environment in a holistic way and see themselves as an intrinsic element of that environment. The expression tangata whenua embodies the nexus between people and the land. There are three dimensions. These are te taha wairua (spiritual), te taha hinengaro (mental), and te taha tinana (physical and economic). With this triple view in mind it is not surprising that land is therefore not just valued for the uses that can be made of it.

Specific values regarding the environment can be seen in two key themes. Mauri is central to a Maori perspective on the environment. Mauri stands for the 'life principle' present in all objects, animate and inanimate. The presence of mauri in all things entrusts people to appreciate and respect that resource. Katiaki is an environmental decision making structure based on the principles which govern the relationship of Maori and the environment. Resource management is undertaken through the katiaki role. It entails the expression of those principles as they apply to specific resources within a defined tribal area. It is also the interface between the spiritual and the physical dimensions of natural resource management. The earliest laws to preserve native plants and animals were those of the Maori and included ritualised collection methods (tikanga), and both temporary (rahui) and sacred (tapu) prohibitions (James 1993: 6).

The environmental views brought by early European settlers were quite different from that of the Maori. When Europeans came to New Zealand they quickly needed to adapt to the rugged and unforgiving landscape. There was healthiness and vigor of colonial life and a desire to dominate and control nature to suit the needs of the people. Thus from the beginning there was the pressure to cut down forests, clear land for farming and agriculture, and to hunt the birds and animals for food and pleasure.

> "Our relationship with the natural environment has a fascinating history. For a long time the agonising struggle of 'man alone' against the forbidding forces of

nature shaped the national psyche. We cut, chopped, cleared' drained and leveled with fanatical determination. It was us or nature; only one winner. We thought we had nature beaten and then every so often she would remind us of the arrogance of that self-delusion. An eruption here, an earthquake there, landslips and drought provide regular wake-up calls, reminders that we now have to work within the limits of the natural world" (Laidlaw 1999: 228).

This view may have been borne out of necessity or it may have reflected the Christian traditions at the time. This tradition saw mans role as having dominion over the earth and making use of the resources God has given. While there seems to be two distinct historical views on the way to treat and live within the environment, this does not mean that the Maori people themselves treaded lightly upon the land. Before the first Europeans came to New Zealand the Maori made many forms of animals and birds extinct. "Despite their relatively small numbers, they had a considerable inadvertent impact on the environment, and large areas of the indigenous forest cover had been cleared and destroyed for purposes of hunting and cultivation before organised European settlement began in 1840" (Memon 1993: 22).

Memon does go on to say that the Maori "had learnt over the course of a thousand years, to develop successful niches within a changing physical and cultural environment. Any propensity for over-using environmental resources was mitigated by taboos regarding certain seasons, times or areas of harvest and by social norms based on sharing and reciprocity" (Memon 1993: 22). The Europeans, with the use of guns and machinery quickly added to the level of desecration and extinction that had already been occurring. "In New Zealand alone, 34 species of mammals, birds, amphibians, reptiles and insects have disappeared forever, while another 43 are on the waiting list of endangered species and a further 63 are threatened with permanent eviction from the planet" (Davis and Hodge 1991: 11).

Even with this background there were significant achievements in the area of environmental legislation during the nineteenth and early twentieth centuries. The establishment of a system of national parks and other protected areas began with the creation of the Tongariro National Park in 1894 and Egmont in 1900. The Land Act 1892 made provision for a range of protected areas such as scenic reserves, flora and fauna reserves and timber growth and preservation reserves. The Scenery Preservation Commission of 1904-6 sought to repurchase freehold lands of scenic interest for return to 'public' ownership (Memon 1993: 29). Further acts followed to help protect land and water concerns. This included the Soil Conservation and Rivers Control Act 1941 and the Soil Conservation Act 1967.

Many of these acts were in response to the impact that human activities, population growth and settlement were having on the environment. "The cumulative impact of farming and of associated land management practices, such as periodic burning of forests and tussock mountain lands, led to problems of declining soil fertility, erosion and flooding in a geographically young country, highly susceptible to environmental hazards" (Gibbs, 1974 in Memon 1993: 29). Much of the response to the needs of the environment up to this point was on a political and local government level.

A growing public awareness of the impact on our environment by human activity was brought on by various events in the 1960's onwards. There were actions by or for foreigners within the New Zealand jurisdiction such as the nuclear ship visits and the proposal to raise the level of Lake Manapouri in order to provide power for a Comalco smelter (Memon 1993: 29). There were also actions by foreigners outside New Zealand's jurisdiction that caused New Zealand to take a stand. The French carried out nuclear tests in the South Pacific and various Asian countries were using driftnet fishing in the South Pacific in the late 1980's. On a wider scale there were threatened changes to the regional and global environment that were not readily attributable to any specific actor, such as the fear of nuclear winter in the mid 1980's or that of global warming in the 1990's (LeHeron and Pawson 1996: 248).

Local environmental issues caused controversy and debate. The development of hydro schemes involving not only specific rivers, but often-whole catchments, caused strong reactions. Proposals to implement selective logging for substantial areas of South Island beech generated considerable support for environmental groups opposing such moves. As a small country New Zealand began to take the lead in the world in voicing its concern on issues impacting the world environment. The finalisation of the 1987 Montreal Protocol curbing the use of ozone-depleting substances and the establishment of the Inter-Governmental Panel on Climate Change in 1988 were facilitated by New Zealand. New Zealand also initiated opposition to driftnet fishing that was successful in ending this practice by South Korea, Taiwan and Japan in the South Pacific. The biggest and most significant environmental stand taken by New Zealand was however, the banning of nuclear warships to New Zealand in the 1980's.

New Zealand began to see itself as 'Clean and Green'. We had showed our willingness to take stands about environmental issues. We were a nation of people who lived off the land and we depended so much upon it for our livelihood. Clean and green became and still is part of the worldview or belief that New Zealanders have about their country. Whether or not this picture was totally true or not became irrelevant.

This view has been enhanced in recent decades through three specific movements. The first movement was the effectiveness of the environmental movement to extend its membership and values to a broader section of the New Zealand society. The second movement was the impact on individuals thinking and attitudes of New Zealand's anti-nuclear stand. The anti-nuclear stand taken by the Fourth Labour Government, which was electorally immensely popular, represented an environmental commitment by its citizens on behalf of future generations. In those terms it could be viewed as a sustainable lifestyle choice. The third movement was the increasing emphasis placed on the environment as an item of consumption. Often support from society for environmental positions can be based on the value of the resources secured for recreation and enjoyment. Environmental amenities such as open space clean air and unpolluted water are seen as consumption goods (LeHeron and Pawson 1996: 274).

New Zealand's stand on environmental issues into the 1990's began to wane. "The New Zealand government lost interest in the concept of sustainability and preserving the environment once it became clear that it came with a price tag" (Laidlaw 1999: 228). Other environmental issues seemed to go unnoticed. There were contaminated sites, pollution of the waterways, landfills that were future time bombs, carbon and other toxic emissions, the spread of pests and the loss of species. The Resource Management Act was a unique and special piece of legislation but once that was in place there was a sense that our troubles were over. In 1997, for the first time ever, the Ministry for the Environment released a comprehensive *State of the New Zealand Environment* report. It was a dramatic wake-up call. The big picture showed how far short we actually fall in managing the fragile ecosystems that support the air, water and soil conditions that we depend on.

Issues of Environmentalism in New Zealand Society Today

The Recognition and Provision for Maori Values

Gaining an understanding of Maori attitudes towards the environment and incorporating them into environmental procedures and management is becoming increasingly important. This is both a legislative requirement and necessary for pragmatic reasons of effective operation and avoiding conflict. It may be assumed that the Maori have had a large part to play in issues to do with the environment and environmental management in New Zealand due to their holistic approach and sense of connectedness to the environment. Until recently this has not been the case.

For many Maori the right to participate was established in the Treaty of Waitangi. "The guarantees and privileges accorded by the Treaty of Waitangi to them, including unimpeded access to land and water and participation in management decisions, were overlooked or ignored by the state and its instruments for resource allocation and management. Their sense of powerlessness was compounded by little or no legislation provision for Maori concerns to be considered when developmental decisions relating to mining, hydro-electricity development and industrial projects were made" (Memon and Perkins (Eds) 2000: 16). It has only been in recent decades that greater recognition of the Maori voice has been acknowledged. It is The Treaty Principles, outlined by the Court of Appeal and the Waitangi Tribunal, which has provided the framework for participation. It was however the Resource Management Act 1991 that represented a major shift in how Maori values and interests were to be included in resource management practices and activities. The Act defines a new relationship between resource management agencies and iwi (James 1993: 3).

This change in focus to include Maori in environmental issues is recognition of their knowledge and contribution to the area of environmental management. "In order to carry out statutory obligations, environmental management agencies cannot treat Maori as just another interest group. Their status, as people who hold traditional rights and authority over ancestral lands, water and other taonga is acknowledged in legislation and requires that they are treated as partners and their values respected" (James 1993: 4).

Clean and Green Image

This 'Clean and Green' image and slogan has become a sort of national brand image in New Zealand that carries for its citizens and trading partners all the connotations of brand quality. Clean and green appeals to business, trade and neo-liberal interests because it provides a means of identifying and distinguishing product in the market place and lending a distinctive edge alongside that of competitors. It helps to build up customer loyalty, based not on political ties or long-term marketing agreements, but on the quality of what is being produced (LeHeron and Pawson 1996: 274).

As part of the Sustainable Lifestyle survey people were asked the following question: New Zealand likes to view itself as having a 'Clean and Green' image. Do you agree that this is a true image of New Zealand? Out of the 50 people surveyed 25 people agreed with this image, 11 people disagreed and 14 people stated that they neither agreed nor disagreed. As the nature of this survey required people to give an immediate response to the question this may be an honest reflection that people generally see their country in this image. One way though, of describing this image is that it is a myth, a story of saying of what people believe is true. People may believe this image without having grounding or facts to support this belief. It must be noted that the survey did not require people to state what they understood by the terms 'clean' and 'green'.

In a survey carried out by Massey University 42% of respondents stated that they believed that New Zealand's clean and green image is a myth. The survey also reported that 67% of people agreed that New Zealand was cleaner than other countries only because of our small population (Massey University Department of Marketing March 2001). This clean and green image can be a two-edged sword, as it requires that our practice match our rhetoric. Any practices and policies that are in conflict with this image stand out sharply. An example of this was a report about toxic pollution entitled 'New Zealand's Poisoned Paradise' in the UK journal 'New Scientist'. This report was of considerable embarrassment to the government as it gave a very damning evaluation of the number of contaminated sites in New Zealand. Articles and discoveries like this demonstrate the potential vulnerability of the country's image (Szabo July 1993).

Support for Environmental Organisations

Environmental groups are a manifest expression of commitment to 'the environment', and support for these groups can be measured in membership numbers and income from donations, subscriptions and sales. Recent evaluations regarding these measurements show a dramatic increase in the support of these organisations in the last twenty years. There was a significant growth in support for environmental organizations based on three organizations, Royal Forest and Bird Protection Society, Greenpeace, and Maruia Society. Between the mid 1980's and 1991, the numbers of supporters for these three organisations went from 57,600 to 243,800 (Buhrs and Bartlett 1993: 70).

The result of the increased support meant that these organisations were able to raise their profiles and to promote to a wider audience the issues they were seeking to bring to the publics' attention. They were able to appoint more staff and to obtain more volunteers for their work. These groups are now among the largest interest groups in New Zealand, outstripping various traditionally strong sectoral interest groups such as Federated Farmers and trade unions (Buhrs and Bartlett 1993: 70). This significant growth was not just a New Zealand phenomenon. Membership of selected groups more than doubled in Britain and tripled in the USA between 1980 and 1989.

The increase in support for environmental groups could be based on the fact of the increased involvement in local and world environmental issues by New Zealand governments. The Rainbow Warrior affair certainly gave New Zealanders a reason and purpose for supporting environmental groups as it happened in our own country. We felt violated and suddenly the issues environmental groups were lobbying about became our issues. We wanted to make a stand against a larger and more powerful foe by standing up against the things they stood for. It was the same reaction that occurred with the banning of nuclear warships in New Zealand. We wanted the world to know what we stood for and one of the key ways individuals could do this was by financially and practically supporting those groups who represented and lobbied for those issues.

Public Opinion On Environmental Issues

Public opinion on the environment is a good gauge of what society is thinking in regards to environmental issues in New Zealand. Doing an evaluation of the more significant environmental opinion polls can help determine the level of environmental commitment there is in New Zealand. The 1989 New Zealand Study of Values found that protection for the environment came third in the ranking of priorities among social goals for New Zealand. First came reducing unemployment (45%), maintaining law and order (15%), and then environmental protection (11%). The survey also found that environmental protection was seen as an urgent problem requiring immediate attention by 85% of the respondents. 64% of respondents expressed the view than an increase in government spending was needed in the area (Gold and Webster 1990).

In 1989 Colmar and Brunton Research ran a survey focused on consumer behaviour and opinions regarding the environment. On the basis of the responses, the researchers identified four consumer segments. These were Deep Greens, Green Pragmatists, Green Faddists, and Green Indifferents. It is important to analyse each of these groups to get a thorough picture of environmental views in New Zealand at that time.

28% of all people surveyed were described as Deep Greens. These are people who hold strong environmental attitudes, even to the extent that they find the environment 'the most important issue'. This group is characterised by making big personal efforts to translate this view into their behaviour (recycling, buying organic food, and avoiding products sold in plastic packaging). They seek to learn more about environmental issues and they watch little TV, but read books and information magazines. They are socially and culturally active and go for walks and tramps. Most of these people are female (72%), well educated, and on high incomes. Green Pragmatists (22%) comprises people who are concerned about environmental issues, particularly those that affect themselves, but who do not go as far as the first group to translate their views into behaviour. This group is characterised by the tendency to regard environmental issues as transient and less important than unemployment. They tend to be older, poorly educated by today's standards, and belong to the lower socio-economic class. They are often retired people, who have grown up in a world where thrift and avoiding waste were important

Green Faddists (25%) consists of people who are not really interested in green issues, but who conform to environmental behaviour not requiring much effort, such as using ozone friendly sprays. This group is characterised by being fashion conscious, using many electronic appliances and plastic cards. They rely on TV as their main information source, watch videos, eat takeaways, and are socially active. They tend to be younger (under 40), have middle to high incomes, and live in households with school-age children. The last segment identified in the survey is Green Indifferents (25%). They have the least knowledge of green or social issues and the least interest in knowing about them. This group is characterised by belonging to the lower socio-economic class and is generally poorly educated. Two thirds of this group is male (Colmar and Brunton 1989).

Other important environmental values arising from this survey was that most people felt it was the governments' responsibility for solving environmental problems. Only 8% felt an individual responsibility to address these issues while only 5% indicated a preparedness to participate in various forms of protest action to support environmental issues. This result reiterated the point that a large percentage of New Zealanders have an environmental awareness but only a small percentage would actually purposefully change or adapt their behaviour to take in environmental concerns.

A Greening of the Economy

One indicator of the commitment to the environment that is occurring in New Zealand society is the phenomenon of 'Green Consumerism'. That is the sale of products that are considered to be environmentally friendly. Green consumerism is attractive particularly because it connects commitment with behaviour as well as values. It provides people with the opportunity to do something about environmental protection on a day-to-day basis.

The Colman and Brunton Survey of 1989, while evaluating the environmental behaviour of people found that a large percentage of those surveyed had involved themselves in 'green consumerism'. They asked people to evaluate certain actions and behaviour in the twelve months prior to the survey. They found that 60% of the population had used ozone friendly spray and 49% had returned bottles to bottle banks. 41% had used products with environmental labels and 31% had refused to use products harmful to the environment. 26% had eaten organically grown food while 25% had made a big effort to buy green products. These figures indicate that in 1989 a large proportion of New Zealand society was already engaged in various forms of green behaviour or green consumerism (Colmar and Brunton 1989).

The other side of the green consumerism equation is harder to measure. It is very hard to adequately measure 'green producers'. More and more products are advertised as environmentally friendly but data on sales of these products are hard to obtain. It is hard to determine on what basis this change towards green products has occurred. Business support for environmentally friendly products may be on the basis of existing or anticipated legal requirements, or by a desire to polish up a company's image, rather than an indication of a more structural change in overall corporate values and behaviour.

This reality was shown by a Goodwin and Hille (1992) survey that measured corporate support for environmental issues through analysing the annual reports of 39 of New Zealand's top 40 companies. This survey found that only 14 companies made reference to environmental issues while 25 companies made no mention of the environment at all. Of the 14 companies that made reference, 6 companies referred to environmental issues in passing, 3 companies included a statement implying some commitment to the environment, and 4 companies encompassed a more detailed discussion of environmental matters. Only one company gave a comprehensive coverage of environmental issues, and expressed a commitment to the principle of sustainability. The study noted that the level of environmental reporting by New Zealand companies compares unfavorably with other countries, especially the United Kingdom and the United States (Goodwin and Hille 1992).

An example of a company seeking to bring New Zealand businesses into line with environmental requirements for the sake of the environment and business development is Environmental Choice New Zealand. Environmental Choice is an environmental labelling programme created to help consumers find products that ease the burden on the environment. The programme is the result of a New Zealand Government initiative and International Accreditation New Zealand (IANZ) manages it on behalf of the Minister for the Environment. IANZ has developed and published specifications for a number of product categories. These specifications set out environmental criteria and product characteristics. Products that meet the requirements in the specifications can be licensed by IANZ to use the Environmental Choice New Zealand Label.

The objectives of Environmental Choice range from helping businesses to reduce the impact of their products on the environment to providing a clear, credible and independent guide for consumers wishing to take account of environmental factors in their purchase decisions. Environmental Choice states in one of its brochures "Green consumers already make up more than 14 percent of New Zealand's population. They are prepared to pay a little more for green products. These committed 'greens' and a larger 'lighter green' group constitute more than half the consumers in the country. Green marketing is a powerful tool because the green market is global. Opportunities are far-ranging for businesses that adopt green marketing initiatives" (Environmental Choice Website – www. ianz.govt.nz/echoice). There is a clear recognition at Environmental Choice that there is a need for New Zealand businesses to make sure that they are making the least possible impact upon the environment. There is also a strong awareness that a quality and internationally recognised environmental standard increases the potential for sales in a global market that is increasingly seeking environmentally friendly products.

Another organisation seeking to challenge businesses to become more environmentally friendly is 'Clean Green NZ.com'. This is a private company run by Laurence and Stacy Boomert. The vision of the company is to see New Zealand become the world capital of sustainability, an international centre for environmental innovation and education. They believe this vision is appropriate for New Zealand because the natural environment is what the economy, the health, way of life and pride is built on. They desire to bring the 'Green Movement' into mainstream thinking and lifestyles of New Zealanders.

Their aims are to empower people to think and act for a sustainable future. In regards of businesses they aim to promote cleaner greener products, services and technologies, to promote the power of preferential purchasing to effect positive change, and to promote the value of business innovation in creating environmental solutions. One of the ways the company seeks to challenge companies is to offer a service of helping businesses to become more environmentally friendly.

Conclusion

Preserving and replenishing the environment is a key aspect of a sustainable lifestyle. Maintaining the very thing on which human life and endeavor relies on has been the central aspect of development work for many decades. In New Zealand the case is no different. The natural environment of New Zealand is a national symbol. It is an asset the country prides itself on, uses for its benefit and obtains much of its livelihood and identity from. At the same time however New Zealand has struggled to understand what the consequences of ownership are. This has been evident in the way that New Zealand has seen itself as being 'Clean and Green' without knowing exactly whether in fact it was.

New Zealanders seem to live in a paradox of being aware of the environmental issues that are specific to New Zealand but unsure to what extend they need to be involved in maintaining the environment. A Massey University survey on New Zealanders and the Environment in March 2001 summed up New Zealand's attitude on the environment in the following way. "Many New Zealanders make an effort to protect the environment through recycling, and some use their cars less often for environmental reasons. However, New Zealanders are less involved in other environmental protection activities now that they were in 1993, and less willing to pay for protecting the environment through higher prices and taxes. Nevertheless, many New Zealanders would be prepared to pay higher prices to protect the environment, and a sizeable minority to pay higher taxes or accept cuts in their standard of living to achieve this end" (Massey University Department of Marketing March 2001).

Where once New Zealand thought it was safe from the effects of environmental decay it became clear that the country's environment will not sustain itself and that it requires a measure of personal and community commitment to sustain it. Our historical understanding of environmental ownership has wavered between domination and decimation and responsibility and sustainable use. Recent decades have brought both a cultural, ethical and social response to sustaining and replenishing our environment and with it a sense of ownership. There has been increased support for environmental organisations, an increased awareness of the recognition and value for Maori views of the environment, increased business reporting regarding the impact of their systems on the environment and increasing levels of 'green' consumers.

Chapter 6

Values

One of the determinants of what it means to live in a sustainable way is determined by the way in which social systems are made sustainable. Understanding the dominant values of a society can help determine whether social systems are sustainable. Values reflect what a society sees as important and reflect the attitudes and beliefs of that society. Values are a very personal thing. People have different standards by which they choose to live by and by which they wish others to also live. Values held in New Zealand are ones that have been established over centuries as the country developed. Other values have evolved more recently while others reflect religious and personal beliefs of people. People are bound by certain political and legal values while other values are created from societal pressure and events that happen. The purpose of this chapter is to establish whether the dominant values in New Zealand work for or against sustainability. The scope of what is understood as values for the purpose of this thesis can be determined by the following concepts:

- The way we treat one another and especially the way that the weakest members of society are treated.
- The way that we want society to function, which includes the actions and attitudes that help bring 'social cohesion'. Included in the understanding of these words are the physical and social structures of local communities.
- Values encompass the things that make New Zealand the country that it is. They also reflect what makes us unique from other nations and cultures around the world.

While religious and cultural values have strongly influenced what it means to be a New Zealander, this thesis will focus on the influence of Western culture and political actions. This is because of necessities of space but also because these aspects of society are somewhat more measurable and have had the largest influences in New Zealand society in more recent times. The cornerstones of Western culture have become the cornerstones of our values while political actions and policies both help shape our values and reflect the dominant values held.

It is the premise of this chapter that an egalitarian value system is dominant in New Zealand and provides a base for a sustainable society. Practically this has been worked out in the way that New Zealand has taken the lead in areas such as the creation of the welfare state, state housing and the vote for women. Recent expressions and examples of values at work in New Zealand show an increased awareness among society to take more responsibility for one another. The continued influence of Western culture is causing a tension in New Zealand society where there is a desire for individual gain but also awareness that providing equality for all is still very much part of society.

The Impact of Western Culture in Shaping Values in New Zealand

New Zealand is a country of many cultures. The dominant ones are European, Maori, Polynesian and Asian. In New Zealand the biggest and most influential impact on our values is Western culture. This does not negate the influence of the Maori or Polynesian cultures but Western values and attitudes have overshadowed these cultures in New Zealand. To understand the Western influence in our thinking and actions requires that we start right at the beginning of Western culture.

Western development and thinking is seen as a child of the European and American Enlightenment. This was a period where science played a major role in challenging many of the long held religious and social views of the day. This thinking gave birth to the belief that human society is inevitably progressing toward the attainment of a temporal, materialistic kingdom. The belief that unending economic and social progress is a natural condition of free persons became the secular religion of the West. This materialistic and economic kingdom had largely replaced the spiritual one associated with the Christian faith. The result of this thinking was that ultimately people began to be seen as nothing but the sum of their biological components and so they had no sense of divine intention or innate worth.

A key component of this Western thinking was that economics became the main determinant of change and development. There was a firm conviction that it would be economic progress that would automatically result in social and moral progress for individuals and nations. The view of a 'better future' therefore became synonymous with self-seeking and one's ability to produce and consume goods and services. In an economic world-view people were seen as having worth in what they contributed to the collective economic growth. Therefore one of the primary characteristics of people in Western cultures is to identify themselves with and indeed derive significance and meaning of life from their ability to produce and consume.

Trainer breaks the influence of Western development down into four specific attitudes and values that pervade our lives. These are individualism, affluence, competition, and social institutions (Trainer 1995: 133). Individualism is about working for one's own benefit or advantage. In an individualistic society we tend to think that one's welfare can only advance if one gains as an individual. Affluence causes people to define how successful and fulfilling their lives are based on having increased goods and services and on having expensive possessions. Competition is about having limited resources and services and the one who can pay the higher price obtains the reward. People focus on what they can get personally for themselves and their family rather than what can be obtained for the local community or the country as a whole. Social institutions are the culturally ingrained rules, norms, conventions, procedures, and practices that allow, facilitate, discourage, or prohibit behaviour. Institutions are socialising agents that tend to have a life of their own and are not easily changed.

Understanding the key threads to the value systems in New Zealand helps give understanding to the way New Zealanders think and act as a group of people. One other way to understand the thinking that dictates how we live and relate to one another is to determine this through modern views of society. Three dominant value systems in society are authoritarian, materialist, and post-materialist (Buhrs and Bartlett 1993: 79). Authoritarian is where the focus is on issues such as law and order and fighting crime. Materialist views have an emphasis on lowering unemployment and raising living standards. Post-materialist thinking has an emphasis on environmental protection, more say in government, and civil liberties and freedom. As physical and material security grows in New Zealand then materialist values may have diminishing marginal appeal and post-materialist views become more important.

The Political Role in Shaping Values in New Zealand

Historically in New Zealand there has been a belief in the right of everyone to have equal opportunity to further themselves with equal access to the basic necessities in life. "Perhaps the most sustained drive of New Zealand society throughout its history has been towards what in Great Britain would be regarded as a middle-class standard of living and against the inequalities of the British class system" (Sinclair 1980: 316). Many of the New Zealand's European ancestors came from countries dominated by class structure and this created a desire to live in a classless and egalitarian society. "Inequality was the dynamic of the Old World, equality of the New" (Sinclair 1980: 323).

This underlying basis of egalitarian views in New Zealand has been supported by the policies of successive governments. This has been especially so since the election of the Liberals in the 1890 election. Keith Sinclair refers to this event as being one of the really momentous elections in New Zealand history and a turning point in the country's development (Sinclair 1980: 170). "That democratic and egalitarian aspiration, that yearning for what was latter termed 'social justice', which the Liberals inherited from the pioneering generation, and to which they gave a measure of tangible expression decisive enough to mould the future history of the country, is the main element in the New Zealand tradition" (Sinclair 1980: 188). New Zealand's political stance meant that it was one of the first countries to give legal recognition to trade unions (Trade Union Act 1878), a universal welfare system (Legislative introduced from 1936-38 and 1945-46), state housing, old age pension (1898) and the first country to provide voting rights for women.

Providing equality and fairness in New Zealand has been directly impacted by the political actions of successive governments. It is therefore important to measure whether recent political actions have maintained or undermined the egalitarian values prominent in New Zealand. The 1972 Royal Commission on Social Security stated that the goal of New Zealand's social security system has been "to ensure within limitations which may be imposed by physical or other disabilities, that everyone is able to enjoy a standard of living much like that of the rest of the community, and thus is able to feel a sense of participation in and belonging to the community" (Kelsey 1997: 271).

The warrant of the Royal Commission on Social Policy in 1987 prescribed similar standards for a fair society. It was the structural adjustment programmes of the Labour Government in the 1980's and then National Government of the 1990's that changed this view. The universal welfare state gave way to a limited safety net founded on the principles of: fairness, self-reliance, efficiency, greater personal choice, and realism and change management. "Poverty was by this stage becoming an increasingly prominent feature of the social landscape in New Zealand, and the emergence of food banks and other emergency assistance centres stood out in sharp relief against the relative prosperity of earlier decades" (Peters and Roberts 1999: 13).

The findings of the Royal Commission on Social Policy in 1988, followed by two major surveys of social values in 1989 and 1993, showed that most New Zealanders supported policies very different from those so uncompromisingly pursued by National after 1990 and Labour before it. Underlying this view on the policies that should be followed was the idea of what New Zealanders saw as a 'good society'. A good society was "one in which one had a say and a chance to determine one's own destiny, where there is opportunity to express a choice, but where in the end there is a sense of community responsibility ands collective values that provide an environment of security" (Kelsey 1997: 323). These results were supported by a 1993 survey of 1000 people on where increased government spending should go. The survey found that there was a desire for increased spending in education, health, job training, DPB, and pensions. There was a degree of concern about the unregulated economic environment and the lack of controls over big business. The redistribution of income and wealth to the less well off was strongly endorsed (Kelsey 1997).

In 1994 the Economist observed, "It is no coincidence that the biggest increases in income inequalities have occurred in economies such as those of America, Britain and New Zealand, where free-market economic policies have been pursued most zealously" (Kelsey 1997: 271). In 1993 New Zealand dropped from 16th place to 18th among industrial countries on the United Nations Human Development Index, which rates longevity (life expectancy), knowledge (adult literacy and mean years of schooling), and standard of living (purchasing power based on GDP per capita measured in the same prices).

Various New Zealand based studies have confirmed the growing inequality of income and lifestyle in New Zealand. A Massey University study found that over the last fifteen years inequality was rising faster in New Zealand than almost anywhere else in the entire OECD club of developed nations. He found that the top five percent of the wealthiest households in New Zealand have seen their share of the national wealth rise by 25%, while the next 15% barely held their ground economically. It was the bottom 80% that were left relatively worse off (Podder and Chatterjee 1998: 14 – 18).

Another report by Bob Stephens and Charles Waldgrave and and Paul Frater sought to track poverty between 1984 and 1998. They estimated that more than 20% of the population now lives below a poverty line and that 33% of children now live in poverty. In the area of poverty they also found that over 70% of single-parent households live below the poverty line and that people employed made up almost 30% of the total poor and are often poorer than people on benefits. For the purpose of the study the poverty line was set at 60% of the median household income. The wealthiest 10% of households increased their income by 43% while the bottom 50% saw their income drop by 14%. Everyone except the top 20% of families was worse off in 1998 than in 1984 (Stephens and Frater and Waldegrave 2000).

While the pictures and statistics presented paint a negative picture of what is occurring in New Zealand society, there are other sectors of society that see it differently. In its editorial of July 28, 1998 the New Zealand Herald treated the growing evidence of growing inequality as undiluted good news. The editorial stated, "Nobody seriously disputes the widening income gap. Economic realists welcome it. In fact, it would be a worry if it were not so" (New Zealand Herald – July 28th 1998). Are these attitudes a reflection of the growing individualistic attitudes that are dominating New Zealand? Even the then Finance Minister Bill Birch was reported in 1995 as saying that income disparities "are widening and they will widen much more. That doesn't worry me" (Kelsey 1997: 271).

In 1999, however, there was a change in direction in the government of the time (Labour) in the way that policies were carried out by the Reserve Bank and Treasury. The new government's first three steps were to do with social cohesion. This included tax increases for the affluent, easier terms for student loans, and restoring superannuation to the levels equivalent to those before the previous National government. Steve Maharey (Social Services and Employment Minister) stated "We're a social policy-orientated government, giving people good economic opportunity. We want to spend money on job creation and regional development as a social policy" (Listener – March 25th 2000).

Treasury is now talking about social cohesion and inclusion as being linked to a country's economic performance and a government's ability to win popular consent for policies. "People are more likely to invest, pay taxes, perform jury service or vote when they trust their institutions to treat people fairly; and to get more involved in their community if they feel they have a stake in these institutions" (Listener – March 25th 2000). Treasury also acknowledges that fairness is lacking in such areas as health, education, employment and earnings – resentment over how well these institutions are doing has risen not just because of their failure but also because New Zealanders weren't consulted. "Support for public health services, public education and much of the social security system is not merely a matter of self-interest but an expression of being a New Zealander" (Listener – March 25th 2000).

The State of Values in New Zealand – Expressions in Society

Evaluating the most important values in New Zealand can help determine to what degree sustainable attitudes are impacting society. In the last five years values have been taking a higher prominence in the social fabric of New Zealand. An example of this is an ACNeilson and StillWater Research Good

Is Gold Report taken on the effects of sponsorship in 2001 found out the following information about people's sense of responsibility for society. 85% of New Zealanders think highly of firms that support charities. 74% would be willing to drop their normal brand or service in favour of one with similar prices and a philanthropic bent. 65% said they would pay more for a product or service if it was directly linked to a worthy cause (Buhrs and Bartlett 1993: 71). On the surface this report shows a New Zealand society that desires fairness and equality and awareness that businesses have a larger role to play in society rather than just for profit. This survey, however, doesn't give the actual percentage of consumers concerned with ethical issues enough to affect them to make or not make a buying decision. This report is typical of the problem of trying to see whether a real shift has taken place socially or whether it is in fact just lip service to what is seen as being politically correct socially.

The New Zealand Herald for a period of weeks in the year 2000 sought to determine what New Zealand's core values were. They stated "The New Zealand Herald made an editorial commitment to help lead the country to a new sense of economic, social and cultural well-being" (The New Zealand Herald – December 2nd 2000). They called the series "The Common Core Debate" and identified two key questions. What are the common values that drive all New Zealanders in the same direction and give us pride as a nation? How do we live, love, play and work together when, as many different peoples, we hold values that differ and conflict?

This desire to acknowledge New Zealand's values occurred in 2001 when a group of well known New Zealanders sought to challenge a set of values of society by starting a programme aimed at raising the awareness of child abuse in New Zealand. They sought to take a stand to help New Zealand claim an ethos or value of not putting up with child abuse of any sort. This was a worthwhile stand to take but was sadly sidetracked by revelations about the history of the person who was chosen to front the campaign. Some of the key promoters were publicly crucified for this error and the key focus of the campaign was lost. The Herald article concluding remarks about the issues were "How dare we stifle someone who cared? But dare we did. We showed in that disgraceful public incident some weeks ago that we are willing to hang people who stick their necks out for the value of caring" (The New Zealand Herald 15th March 2001. Values Revolution may be Key to Safer Nation).

When the core values of a society are challenged then this can be uncomfortable. At the same time this example shows that values need to be continually evaluated in order to help a people identify what their values are. As with New Zealanders seeing themselves as living in a "Clean and Green" country but not really doing anything to support that view, is it the same with identifying the values of New Zealand. As a country we can espouse certain strong values but our actions don't always support those same values.

One example of this reality was an article that appeared in Grace Magazine. This article was about "Bobos". This article is a cleaver reflection and insight into how much the social agenda in New

Zealand has actually changed. This article is based on the belief that the 1990's and 2000's are kinder, gentler, and more moderate times than the consumption focused 1980's. David Brooks in '*Bobo In Paradise*' thinks that people have remained as consumption-focused as ever but have developed ways of appearing otherwise. In his book, Brooks has identified a new group of consumers – Bobos. They are people who spurn the idea of consumerism, they are connoisseurs of everything they eat, drink, wear and use in the home. They seek to buy products that seem hyper-spiritualised / products that show how you ally yourself with victims of imperialism / products that show how simple you've made your lifestyle. Bobos live in a contradiction where they seek to be spiritual and material at the same time.

If there is one way to spend money while not appearing materialistic, it is to spend it on your home and garden and that is exactly what Bobo's do. An example is the Fisher and Paykel advertisement that screened on television in 2000. It showed a woman phoning her babysitter to check on her fridge so as to portray how attached and important this expensive fridge was to this woman. Finlay MacDonald (Editor of New Zealander Listener) has a theory that home obsession is the consequence of free-market individualism. "From employment contracts to whatever, you are being rewarded for individual effort, not collective effort. Individualism atomises communities, sets people apart from each other. Also, because life has got a bit tougher in terms of work, security, income, all of these things, people have retreated more into their own creative worlds rather than the public world we might imagine we once inhabited" (Grace Magazine – September 2000). Is this an example of New Zealanders being more concerned about lifestyle than living and more concerned about the style of a product rather than its sustainability?

Conclusion

Some of the values prominent in New Zealand society have given the country a basis of sustainable lifestyles in regards to the social systems in New Zealand. Values in New Zealand have evolved and changed due to the influences of the people and cultures that make up this country. They also evolve and change due to outside influences and events. Values in New Zealand are influenced predominantly by Western culture while other influences such as culture and religion now play a lesser role. Aspects of Western culture such as individualism, affluence, and competition have in recent decades caused a disconnection within society. This has created values that are more individual and less socially and community minded.

This is in contrast to egalitarian principles that have been prominent in New Zealand values. This has been worked out through values of equality and fairness and concern for those most in need. Politically New Zealand has reflected these values through the establishment of policies that ensure that everyone has access to the basic provisions. Hence the development of the welfare state, state housing, trade unions and other policies that sought equality among people. These policies ultimately sought to make the social systems in New Zealand sustainable.

Even with these policies being central to New Zealand society there has been a growing gap between the wealthiest and poorest in New Zealand in recent decades. This 'gap' was encouraged by policies of the 1980's and 1990's that sought to place increased responsibility on individuals. In the last three years there has been a move politically, back towards policies that support equality and that sustains communities. These policies are more in line with the type of country and values that New Zealanders are in support of.

The increased financial gap and sense of disconnectedness has caused New Zealand to evaluate the values it adheres to. While still wanting to have increased possessions and a bigger piece of the pie, individuals are struggling to match personal desires with a sense of community responsibility. New Zealanders can therefore live in a paradox of seeking personal gain but also desiring increased social responsibility.

Chapter 7

Education

Education helps establish the values and behaviour of people in a society. It both reflects the understandings in society and establishes new understandings. Education, more than any other part of society has the largest potential in developing the understanding and promotion of sustainable lifestyles in New Zealand. It is important to understand and evaluate the role education plays in New Zealand in the promotion of sustainable lifestyle. The type of education evaluated in this chapter will be based on the education and learning that occurs within the boundaries of a classroom or lecture theatre. This does not discount that people are educated and learn through other mediums such as society, news and experiences, local councils and the business community but this learning is often unstructured and unplanned. This chapter does not have the scope to evaluate the education that is occurring in social forms and other mediums.

The historical understanding of education and the various roles education presently plays in New Zealand influence the way education is provided, the subjects taught, and the structure of qualifications. The purpose of education presently promoted in New Zealand does not have within its scope the ability to cover sustainable lifestyle values and actions. Modern education prepares people to function within a market economy rather than to help them understand how society works and the role they can play in society. There are however movements internationally and nationally to introduce programmes such as education for sustainability and to further develop environmental education.

At the primary, intermediate and secondary levels of schooling in New Zealand issues of the environment and culture are taught at quite in-depth levels. Economics and social studies are also taught but only to a level where the understanding of basics is provided. The validity of the economic and social systems our society functions under is not often challenged. Social aspects of education are diminishing as today's education revolves around meeting the needs that the forces of supply and demand require in a market economy. This is particularly true at the tertiary level. Where once tertiary education provided social, technical, and cultural benefits to society without requiring a financial return, education as a commodity requires that education match the economic needs of a society. This has direct impacts in the teaching of sustainable lifestyle values because many of these values do not carry an immediate economic return.

There is a growing awareness that New Zealand's education system has the potential to develop people in a wider sense than is currently being carried out. There are various alternative styles of education being proposed and tried in New Zealand. These alternative education systems are seeking to teach subjects and values of society that support amongst other things, sustainable lifestyle. The area of education where sustainable lifestyle values have the largest impact is environmental education and so this aspect of education in New Zealand will be described and evaluated.

The Place of Education in Society

The root of the word, education is 'educe'. This word means to draw out. What needs to be drawn out is an understanding for living, with the goal of building humane and sustainable societies (Orr 1994: 205). How can we socialise citizens, so they learn values and lead lifestyles appropriate to sustainability and conviviality, both between people and between people and planet? That question must be answered if we are to meet the classical notion of education as being the full development of the potential within an individual. We cannot say we know something just because we can remember the facts. We should only be able to say that we know something when we understand the effects of this knowledge on real people and their communities.

In practical learning terms this difference in the use of knowledge is seen in the terms, single loop learning and double loop learning. Single loop learning is experimentally based incremental learning. Double loop learning is where the learner becomes aware of the assumptions and values on which it is based and is capable of major shifts of reference (Milbrath 1989: 94). It is important to differentiate between the two styles of learning because knowledge should carry with it some sense of responsibility to see that that knowledge is well used in the world.

The ancient Greek culture used the word 'paideia' to describe learning. It stood for a society that nourished personal and social learning. They believed that promotion of self-learning and lifelong learning should be the central project of a society. In theory at least the achievement of the human whole – and the wholly human – took precedence over every specialised activity or narrower purpose (Orr1994: 13). The historical approach to education had its roots in the natural process whereby children used to learn their living skills from the community into which they were born. The change brought about by the industrial revolution saw children put into schools to prepare them for jobs in an industrial economy (Beaumont 1997: 81).

Education now has a focus on preparing people to play their part in the global economy. This has traditionally involved loading students down with more and more facts and data so that they can adequately take their place in the market economy. "The goal of education is not mastery of subject matter but mastery of one's person. Subject matter is simply the tool. So often education can be about stuffing all kinds of facts, techniques and information into the student's mind, regardless of how and with what effect it will be used" (Orr 1994:13). Today's education system is geared to get the best out of everyone so they can play their part in society while it actually may be that the present system is geared to producing those whom the present economic system can most easily use.

International and national movements are seeking to challenge this focus. Chapter 36 of Agenda 21 recognised that education is critical for achieving environmental awareness, values, skills and behaviours consistent with ensuring sustainable development (Parliamentary Commissioner for the Environment 2002: 57). Education for sustainability has evolved over the last two decades as a response to increased concern over the environment and the state of humanity. It arose out of the environmental education movement that started in the 1970's. Education for sustainability took on a wider sense of what it means to live sustainably as it "promoted the need for education to critically examine the dominant culture that has promoted current practices such as unsustainable economic growth and consumption patterns" (Parliamentary Commissioner for the Environment 2002: 57).

Education in New Zealand that Supports Sustainable Lifestyles

New Zealand does not have a strategy for sustainability education as part of the wider education system. There are aspects of the education system at different levels that have subjects and topics that draw upon sustainable issues such as social studies, economics, biology, environment studies and cultural studies. Most of these subjects are taught at a very theoretical level providing the basic information without providing a platform to challenge the very topics being looked or to evaluate alternatives.

In 1969 the New Zealand Post Primary Teachers Association's publication *Education in Change* included a short list of human qualities which the authors believed education should be concerned to promote at all times, namely:

- the urge to enquire
- concern for others
- the desire for self respect

This list is a good basis for education on sustainable values. To install in young people a desire to go on learning, to develop in them the abilities to relate and to work with others, and to build in them confidence in their own abilities, are all essential outcomes for an effective schooling system (Hood 1998:129).

The subject that teaches children how they fit into their society and how society functions is social studies. The Department of Education states the aim of Social Studies Education as the following: Social Studies education aims to enable students to participate in a changing society as informed, confident, and responsible citizens. Students will achieve this aim by developing knowledge and understandings about human society through studying the following:

- people's organisation in groups and their rights, roles, and responsibilities as they interact within groups

- the contribution of culture and heritage to identity and the nature and consequences of cultural interaction
- people's interaction with places and the environment and the ways in which people represent and interpret place and environment
- relationships between people and events, through time, and interpretations of these relationships
- people's allocation and management of resources and people's participation in economic activities

(Ministry of Education Web Site – www.minedu.govt.nz)

Understanding one's connectedness to a wider community and society helps establish and reiterate values and attitudes that help sustain those communities. Values education is one way in understanding how the knowledge taught in schools can help shift people's frame of reference and therefore their behaviour. This is important if education is not to be just about obtaining knowledge but also about changing the way that knowledge is used to impact lifestyle.

A visiting values education specialist at the New Zealand Independent Schools Council conference in 1997 argued that "without values education the existing curriculum created 'clever devils' – people who were high achievers but who lacked the values framework needed for personal development" (Hood 1998: 129). The present place of values in the New Zealand education system is set out in the New Zealand Curriculum Framework. Commenting on the place of values in this framework, Professor Adrienne Alton-Lee of Victoria University stated that it "emphasises values and demands that students be challenged to think clearly and critically about human behaviour to explore different values and make their own informed judgements" (Hood 1998: 129).

At a tertiary level it has traditionally been the universities that have helped people to evaluate their values, attitudes and ideas regarding society and how it functions. They placed an emphasis on gaining understanding and new insights that serve society, whether those new insights contribute economically, socially, or culturally to society. In the last twenty years at the tertiary level there has been a move towards a more market-driven education system. Traditionally market-driven models of education have sought to focus on the production of education and training. This helped turn education into a commodity which could be bought and sold in an education market and could be driven by the forces of supply and demand. "When tertiary education is defined purely as a form of private investment, goals such as promoting a love of learning, fostering public debate and enhancing democratic citizenship disappear from the agenda" (Peters and Roberts 1999: 205). This change has also to an extent moved the burden of funding of education from the state to the student. This has the potential to be detrimental to those to whom market forces serve least such as women, Maori and Pacific Island students, and those from economic disadvantaged backgrounds.

Alternative Views of Education

In New Zealand today there are various forms of education that are seeking to extend what 'education' means in New Zealand and to meet some of the weaknesses they see in modern education including some of the weaknesses already acknowledged in this chapter. This thesis will evaluate three types of alternative education in New Zealand.

Social Learning

Social learning is when individuals are taught, directly or indirectly, the dominating values and attitudes within a society. It places the emphasis of learning on societies and communities where people learn from each other and from nature. Social learning may not always be very visible while it is underway, but when you look back it becomes clearer that learning has been taking place. An example of this is when a dominant institution or practice is replaced. Some of these examples in New Zealand include colonisation, recognition of the role of the indigenous Maori people in New Zealand, views on violence in the home, views on smoking and drinking, apartheid, nuclear power, conservation and the place of religion.

The development of global communication linkages has helped in the process of social learning. People have become more aware of what events and issues are dominating society, not just in New Zealand but also overseas. One term used to describe this increased global communication network is that of a 'collective social nervous system' where people are able to think and learn about issues and events happening right before their eyes. Part of the focus of social learning is finding improved ways of disseminating and utilising information so that everyone has the opportunity to be part of the social learning process.

A recent example of this was the reporting of the visit of nuclear ships to New Zealand in the 1970's and early 1980's. People were not just more informed about the issues of nuclear power and weapons but they could also visually see the ground swell in opposition to the visits of nuclear war ships through television pictures of demonstrations and protests. This in-your-face reporting meant that people were forced to face up to the situation and to have to determine their own views about the nuclear issue. The rising opposition to nuclear warships visiting New Zealand culminated in New Zealand declaring itself a nuclear free zone.

Other key aspects of social learning include the emphasis on values as much as facts, the combining of theory with practice, the examination of outcomes to learn from, and the focus of openness and the encouragement of citizen participation. Developing a learning society will not occur quickly. It will require a change of focus from individual development for personal financial gain to one of personal development for the good of society. Another view on developing social learning challenges where we think the process of education should start. One view believes that the most important education in the world is education in parenting (Beaumont 1997: 83). If people are educated to bring up their children in ways that fosters learning in sustainable and social ways then this would be the catalyst for education received in the schooling system.

Alternative Models of Schooling

Alternative models of schooling see the purpose of education as being to bring out the potential qualities of a child, as well as an adult, in the physical, spiritual, intellectual and psychological fields. "If education is not merely the acquisition of technical knowledge, but the understanding, with sensitivity and intelligence, of the whole problem of living, the state of health or well-being of our children, our societies, economies, political systems and natural environment should be a central concern of our schools" (Bunyard and Morgan-Grenville 1987: 295).

Many alternative views of education have strong arguments against the present forms of education. Much of the debate is about what education is actually training our young people for and how this is achieved. Some views seek to build on the present education system. One such idea is that schools should provide education for a healthy economy and to achieve this everyone's education should include a study in the basis of achieving and managing a healthy economy. This is based on the belief that few students leave school with even an elementary understanding of the nature of wealth as money and possessions or the quality of life.

Other viewpoints seek to change the education system. "Pupils learn and memorise what society already knows. They compete against each other, tested by difficult examinations, in order to select the future decision-makers. The majority see themselves as unimportant members of their school 'community' whose opinions are never sought. The effects of this, found in all but the highest levels of the hierarchy, are feelings of inadequacy, inability to express themselves, or to influence anyone, feelings of being shut out, cynicism, and an increase in destructive feelings" (Bunyard and Morgan-Grenville 1987: 299). This view sees the present education system as being socially unsustainable because it cuts out large sections of society.

A secondary school that was seeking to offer an alternative model of education was Metropolitan College. This school was until recently running in Auckland until The Education Department shut it down in 2001 because it was deemed that it was not providing an adequate level of education for the pupils. There was much demonstrating against the closing by pupils, staff and parents who all seemed totally happy with the education that was being provided (New Zealand Herald – 10th September 2001. Conformity is out of place in last-chance classroom).

Enviroschools

This New Zealand programme aims to integrate environmental education into the whole of school life and to create learning opportunities by working towards a healthy, peaceful and sustainable environment. Part of the premise of this programme is that traditional education does not teach students how they live in relation to where they live. It can be easy for students to grow up mostly ignorant of the biological and ecological conditions in which they live and what this requires of them. Enviroschools seek to give students a sense of place where people and nature are nurtured. The whole school environment becomes a learning resource and the process of learning involves the whole school.

The aim of Enviroschools is threefold:

- To inspire students to create a healthy, peaceful and sustainable school.
- For teachers to help reshape and refocus everyday activities so that the potential for environmentally friendly practices is maximised.
- For adults to act responsibly on behalf of the environment and serve as role models for young people.

There are four key areas that Enviroschools seek to influence. They are the schools and communities physical surroundings, the operational practices of the school, the organisational principles of the school, and to provide a living curriculum for the students. Practical out-workings of Enviroschools used to directly influence children are:

- Environmental education programmes are taught at all levels
- There is school wide recognition of special events such as Arbor Day, World Environment Day, and Conservation week
- Students have the opportunity to participate in community activities such as cleaning up beaches or preserving historical sites
- Indirect out-workings such as environmental education policies included in the school charter, waste-minimisation programmes are implemented, planting and re-vegetation programmes are practised, and energy and water-saving strategies are used.

(Parliamentary Commissioner for the Environment 2002: 58 and the New Zealand Education Gazette Website: www.edgazette.govt.nz)

Enviroschools comes under the banner of Environmental Education. It is this area of education that plays the largest role in sustainability education in New Zealand and therefore the last part of this chapter will evaluate this area of education in New Zealand.

Environmental Education in New Zealand

In June 1998, the Ministry for the Environment published the National Environmental Education Strategy – Learning to Care for our Environment. The goal of the strategy is to empower individuals and communities with the knowledge, skills and attitudes that will enable them to make informed decisions about the environment and translate these into actions. The Ministry of Education has included explicit environmental education objectives in the national curriculum statements, as well as outlines of opportunities for using environmental education examples and activities.

The key concepts underlying environmental education in New Zealand are interdependence, sustainability, bio-diversity, and personal and social responsibility for action. The strategy has moved beyond the tradition of education about the environment to emphasis education in the environment and education for the environment. There are five guiding principles of the strategy. These are awareness, participation, attitudes and values, knowledge, and skills. The aim is to get people to understand how environmental issues affect them and their community and in the process help to change people's attitudes towards the environment. Helping people acquire the skills to participate effectively in decision making that affects the environment and to play a part in identifying and solving environmental problems helps give action to this understanding.

One of the drawbacks of the National Environmental Education Strategy is that the implementation of any guidelines is purely voluntary rather than arbitrary. What this means is that the "onus being on boards of trustees to decide how it will be implemented in individual schools. It is therefore often left up to enthusiastic individuals" (Parliamentary Commissioner for the Environment 2002: 58 – 59).

While the strategy is not compulsory in schools, this specific approach to environmental education has been well received amongst educators and environmental groups. "By spending money in this area now, well be saving it down the track. We'll have students who have the knowledge and the ability to use fewer natural resources, a wider view of the world and an understanding of the consequences of their actions" (Simon Towie – World Wide Fund in Education Gazette Web Site – www.edgazette.govt.nz/articles). Another response stated, "In the past the focus on environmental education has been quite strongly on the information side of things. This is still important, but I think the challenging work is where kids can actually get out of the classroom and interact with the natural environment, and develop the values and attitudes that lead to changes in behaviour towards the environment" (Pam Crisp –Department of Conservation in Education Gazette Web Site – www.edgazette.govt.nz/ articles).

An organisation seeking to take the initiative by providing a network and framework to promote environmental education in New Zealand is The New Zealand Association for Environmental Education (NZAEE). This non-profit organization aims to encourage and promote environmental education training for formal and informal sectors. There are four main aims of the NZAEE. These are to provide networking for environmental education networks, to support a National Framework for Environmental Education, to promote Environmental Education initiatives, and to help in the professional development of various interest groups. Groups committed to the NZAEE include government agencies, city councils, universities, regional councils, and business groups. The funding for the NZAEE comes solely from membership fees that groups and individuals pay and from grants. At the present time membership is around 300.

A value system that the NZAEE has is that they believe that you need to educate people to change their attitudes and actions rather than influencing them to change. That is why they put a lot of energy into running regular workshops for groups and individuals. The scope of the benefit and influence of the NZAEE is based on the willingness and skills of the various members at the local level to get involved. One of the wider impacts of their work has been their influence in helping to establish the need for and then help work on a new Environmental Education Curriculum for schools.

To give an understanding of how environmental education is being practically worked out an evaluation of schools involved in providing this type of education follows. Three schools or groupings of schools will be described.

Otari Primary School – Wellington

Otari is one of the schools that are part of a pilot professional development programme to incorporate the Guidelines for Environmental Education in New Zealand Schools. The school has had an environmental education programme for a number of years including the establishment of a nursery, edible garden and recycling scheme. Children from the school are also involved in a guiding programme at the neighbouring Otari Native Plant Museum. They are also seeking to raise awareness of the health of the Kaiwharawhara Stream as part of the Wellington Regional Councils 'Take Action for Water Programme'. The school would like to go further and develop a whole-school approach to environmental education, incorporating it into management policy and everyday practices (New Zealand Education Gazette 8th October 2001. p4).

Mt Aspiring College – Wanaka

Mt Aspiring College specialises in outdoor education courses. It is ideally placed to focus on environmental education because they have so many students using the outdoors and the school would like to promote an appreciation of that. Students are already involved in a number of environmental projects, including an energy audit of the school, a trout study at a local hatchery and glaciation studies in the Matukituki Valley. Steve Henry (teacher and environmental consultant) says "It comes down to values – that's the difference between environmental education and just going out and playing" (Steve Henry – Mt Aspiring College in New Zealand Education Gazette 8th October 2001. p4).

Eight Waikato Schools

The Hamilton City Council initiated the Enviroschools Programme as a pilot programme in 1993. Each school forms an Envirogroup that creates a vision map to undertake long-term sustainable changes in their school. Students plan, design and take environmental action through five main themes: Living Landscapes, Environmental Buildings, Healthy Water, Precious Energy, and Zero Waste. So far the results have been positive. "The move to become an enviroschool has changed attitudes towards environmental education. It really does impact upon a lot of things we do. Our philosophy is that what we do today is going to impact on our environment in 50 years time. Sometimes it's hard to get your mind around that. One of the challenges for us, as adults, is to change our attitudes and behaviours. The only way we are going to get the message across to children is to model it ourselves" (Muter, Colin in New Zealand Education Gazette 8th October 2001. p5). Whitiora School notes that the children's ownership of their environment has seen the school go from one that had a lot of graffiti to now having almost none. They also note that vandalism has also taken a nosedive.

Conclusion

Education seeks to prepare people to play their part in society. Therefore the very structure and scope of learning plays an integral part in determining the type of society that people are being prepared for. The education systems developed at the time of the industrial revolution met the need of that time. The needs of education today are much more varied. People need to be educated, not only to obtain work in society but to also constructively contribute to society. Understanding the place of education in society requires an ongoing evaluation of the purpose and means of education in succeeding generations.

Education at the primary level still requires that basic tools and skills be taught. At the secondary level there is increasingly more varied subjects being provided but it has really only been in the areas of outdoors and environmental education that issues of sustainability are provided. Courses that challenge or offer alternative views on society, economics, values and education structures have not been able to gain a foothold in the same way that courses related to the environment or ecology have. A market driven approach to tertiary education that has developed in New Zealand is restricting tertiary institutions to providing a quality and structured service that prepares people to play their part in a market economy. This causes a restriction on these institutions to explore wider issues on the very structure and values of society.

Education for sustainability is one model of education challenging the present dominant culture and lifestyle of the developed world. It is gaining a stronger acknowledgement in education circles but generally in New Zealand any education in the area of sustainability tends to be in the area of the environment. Under environmental education various pilot schemes are underway and the Ministry for the Environment has completed a thorough education strategy in this area. At the same time alternative models of education are starting to be promoted and tried in New Zealand. These models seek to change the way learning occurs and the subjects taught. These models are providing avenues for issues of sustainability to be promoted by the very nature of the models. Generally though education systems in New Zealand have only begun to scratch the surface regarding sustainable lifestyles. It may require a total revamp on the purposes and methods of education themselves to educate people on sustainable lifestyle issues.

Chapter 8

Evaluation of the Sustainable Lifestyle Survey

The Sustainable Lifestyle Survey was carried out on fifty people. These people were randomly chosen. The object of the survey was not to target specific areas of New Zealand society such as age, sex, race, or socio-economic factors. The survey sought to gauge the general understanding and practice of sustainable lifestyle values amongst New Zealanders. A copy of the questionnaire is set out in the appendix of this thesis as well as a complete breakdown of the results.

The age breakdown of the 50 respondents was:
Under 20: 1
20 – 30: 7
30 -40: 10
40 – 50: 15
50 plus: 17

The ethnic background of the respondents was:
Pakeha / European: 30
New Zealander: 18
Pacific Islander: 1
Indian: 1

The household income bracket of the respondents was:
Under $20,000: 13
$20,000 - $30,000: 5
$30,000 - $40,000: 7
$40,000 - $50,000: 9
Over $50,000: 16

These details show that the survey accessed a cross range of New Zealand society in the areas of age and household income but not in the area of ethnic background. The purpose of this chapter is to evaluate the key results of the survey working through the questions and answers that are most appropriate to the thesis. These appropriate questions will be stated (in italics) and the responses will be given and evaluated.

What do you understand by the term 'sustainable lifestyle'?

There were two main categories of answers to this question. The first category had an aspect of considering how we live today so future generations could also share in resources. Six people (12%) talked about living in a way that could be sustained long term without adverse effects such as debt or pollution. Five people (10%) stated that it was a lifestyle that preserves resources for the future. Other responses that was similar to these included; balance between consumption and regeneration of resources; constant replacement and something that doesn't put too much strain on anything else. A number of the responses were to do with looking after the environment thereby reflecting the connection of sustainability to environmental issues. Responses under this aspect included; ability to recycle many of the resources we use, efficient use of the environment, and recycling and reusing waste products. These responses see sustainable lifestyle as focusing on the environment, both natural and physical.

The second category of answers referred to the sense of preserving resources for the future but from a very personal sense where the purpose was for maintaining the present lifestyles of individuals. Seven people (14%) stated that it meant a lifestyle that could be maintained now and through to the future. Five people (10%) stated it meant the ability to pay your own way. Four people (8%) referred to having adequate food, clothing, and houses to live in. Two people (4%) talked about being able to live the lifestyle you want and to be able to maintain it. One person stated that it meant that they could continue to live in the way they had been used to while another said meeting all my needs and wants. The focus on these answers was on sustaining the present lifestyle rather than environmental, social or economic systems. This may reflect an understanding that the area of society that sustainable lifestyle is concerned about is the economic aspect.

Each of the two categories of responses may reflect a person's sense of connectedness to the world and to what degree they see the lifestyles we presently have now in New Zealand being dependent on the lifestyles of people in other countries. It may also highlight the amount of individual values dominant in New Zealand. As people seek to make sure that they are provided for then they will focus on more economic realities. Other people may have a more social and shared sense of life where there are concerned for the wider social and environmental realities, of which they are just one person.

Another group pf people stated that they did not know what sustainable lifestyle was or left it blank. This amounted to 12 people (24%). This represents a significant number of people who did not have any clear idea of what sustainable lifestyle is. This then had repercussions through the rest of the survey as people were asked to acknowledge certain sustainable lifestyle values and actions.

In what ways do you think you contribute to sustainable lifestyle?

The second question sought to clarify what people understood by sustainable lifestyle by asking how they practically saw themselves involved in a sustainable lifestyle. It was this question that showed the gap there was between what people thought sustainable lifestyle was and what it actually meant in practice.

The first block of answers that covered an area was those that supported the environment in some way. 16 people (32%) stated that they recycled. People also said they did composting, used ozone friendly products, planted trees, did home cooking, were aware of the need to look after the environment, refused excess packaging at the supermarket, and kept their little corner of the world environmentally friendly.

The next group of answers was to do with being a good citizen and playing your part. Five people (10%) put down working or worked until retirement and four people (8%) stated that they paid taxes. Three people (6%) thought that taking a responsible attitude to various areas of society. No answer after these ones had more than one or two responses. Interestingly, this theme of being a good citizen came through in many of the answers. People stated that they obeyed laws, worked in the community, work to support the family, got a good education, saved money, self-improvement, and balance work and family.

Another category of answers referred to ways that people contributed to society. Examples of these answers were working in the community, encouraging others, taking a responsible attitude to various areas in society, maintaining friendships, voluntary work, give of my time, on committee of local ratepayers, and supporting those in financial need.

There is a sense in all these responses that people are generally aware that sustainable lifestyle has something to do with the way we live in society and the way we either treat one another or the environment. Looking after the environment naturally came to the top of people's minds. The answers to the second question would infer that to a large degree people are not consciously involved in sustainability as a lifestyle. People found it hard to label this 'sustainable lifestyle' thing or to put it into any particular box or frame of reference.

Not having established the meaning of sustainable lifestyles at the beginning of the survey may have been a failing. The survey sought to establish from scratch what people understood from the concept. While this may have helped establish what people understood, it became a weakness for the rest of the survey as the survey sought to ask questions based on the assumption that people had a general idea of what sustainable lifestyles are.

What local or central government policies are you aware of that support sustainable lifestyle?

No one in the survey was able to identify a single specific policy. 29 people either did not put down any answer or stated that they didn't know of any policy. The other responses were mostly of a general nature. People noted issues such as protection of the environment; user pays for water and rubbish, GE Bill currently under review, energy conservation measures and social welfare programmes. Generally people were more aware of initiatives that their local council were involved in. This included recycling programmes, replanting of native trees, protection of landforms and the limits placed on the city boundaries to stop the spread of housing. This emphasises that people are more connected and aware of what is happening in their local communities than nationally.

New Zealand likes to view itself as having a 'Clean and Green' image. Do you agree that this is a true image of New Zealand?

Half of those surveyed (25 people) agreed that New Zealand is a 'Clean and Green' country. 11 people disagreed with this image while 14 people neither agreed nor disagreed. It must be noted that people were not asked to give their view of what a 'clean and green' image meant to them. Further evaluation of this question is provided when cross referencing against sex, age, level of income and level of education.

There are 22 males and 28 females in the study. Considering males, 12 agreed with the image, 6 disagreed and 4 neither agreed nor disagreed. Among females 13 agreed, 5 disagreed and 10 were neither. This shows that a larger percentage of males (12 / 22) than females (13 / 28) agreed with the 'Clean and Green' image while more females than males were neither.

There are 18 people aged 40 years and under and 32 aged over 40. 11 people 40 and under agreed with the image, 1 disagreed and 6 were neither. 14 people over 40 agreed with the image, 10 disagreed and 8 were neither. This shows that more people 40 and under agreed with the image (11 / 18) than over 40's (14 / 32). A far larger percentage of over 40's (10 / 32) disagreed with the image than those 40 and under (1 / 18).

In the survey there were 25 people who earned less than $40,000 per year and 25 people who earned $40,000 or more a year. Of those earning less than $40,000, 14 people agreed with the image, 5 disagreed and 6 were neither. Of those people earning $40,000 or more, 11 people agreed with the image, 6 disagreed and 8 were neither. This shows that there is not much difference in the views of people who have different levels of income except that a larger percentage of people earning less than $40,000 agreed with the image.

When evaluating a person's level of education, 23 people had obtained a tertiary level of education or above and 27 people had education levels below that of tertiary level. Of those people of tertiary level and above 9 agreed with the image, 6 disagreed and 8 were neither. Of those people with education levels below that of tertiary 16 agreed with the image, 5 disagreed and 6 were neither. This shows that a larger percentage of those with education less than tertiary agreed with the 'Clean and Green' image. Does this reveal that those people with a higher level of education understand the realities of the condition of New Zealand's environment because they read more information and have a better understanding of environmental issues?

Do you recycle?

Consistently: 38
Occasionally: 10
Never: 2

Cross-referencing these answers when evaluating sex, age, level of income and level of education reveal the following. There are 22 males and 28 females in the survey. 13 males recycled consistently, 8 occasionally and 1 never. Of the females 25 recycled consistently, 2 occasionally and 1 never. Nearly all females in this survey recycled consistently (25 / 28) while only (13 / 22) males recycled consistently. This may reflect the fact that more females than males are aware of issues of recycling or that they consciously act on their knowledge? It may be simply that more females than males are involved with dealing with the households' rubbish.

Of those people aged 40 and under in the survey 13 recycled consistently, 4 occasionally and 1 never. Of those people aged over 40, 25 recycled consistently, 6 occasionally and 1 never. This revealed that attitudes to recycling were fairly consistent across all age groups. When considering the effect of a person's income in their attitudes to recycling the following was found. Of those people earning less than $40,000, 20 recycled consistently and 5 occasionally. Of those people earning $40,000 or more 18 people recycled consistently, 5 occasionally and 2 never. This reveals that attitudes to recycling are consistent across income levels.

When evaluating the effect of education levels of attitudes to recycling the following was revealed. Of those people who have a tertiary level of education or above 18 recycled consistently, 4 occasionally and 1 never. Of those people who had an education level below that of tertiary level 20 recycled consistently, 6 occasionally and 1 never. This reveals that attitudes to recycling are consistent across education levels.

In the last twelve months have you financially supported an environmental, social or safety group or cause?

Of the 50 people surveyed 8 people had given financially to an environmental cause, 3 people had given to an environmental group, 30 to a social cause and 12 people to a safety cause. 16 people had given no financial support in any form. The survey didn't differentiate from the different forms of giving or the amounts given. In recent years there has been a large increase of groups and organisations seeking financial assistance and through telephone marketing in particular people are more challenged to help these groups.

In the last twelve months have you committed time to a cause or organisation that supports environmental, social or safety issues?

22 people stated 'yes' they had committed time and 28 people stated 'no' they hadn't committed time to a cause. While this question was unclear because it represented three areas of support (environmental / social / safety) it does give a clear reflection of people's level of practical support. When cross referencing these answers with those of sex, age, income level and level of education the following was revealed.

Out of 22 males 8 stated yes and 14 no while among the 28 females 14 said yes and 14 no. This showed that a larger percentage of females had committed time to an environmental, social or safety cause or organsiation. When considering age, of the 18 people aged 40 and under, 7 stated yes while 11 stated no. Among those people aged over 40, 15 stated yes and 17 no.

The income level of a person revealed different responses. Of the 25 people who earned less than $40,000, 7 stated yes and 18 no. However of the 25 people who earned $40,000 or more, 15 stated yes and 10 no. There was a larger commitment to an environmental, social or safety cause by people in the higher level income bracket. A similar result was revealed when evaluating the impact the level of education of a person. Of the 23 people who had a minimum of tertiary level education, 13 stated yes and 10 no. Of the 27 people with a level of education less than tertiary level, 9 stated yes and 18 no. A far larger percentage of people with at least tertiary education had committed time to an environmental, social and safety cause. Does this reflect an increased involvement in causes that support and sustain the community from people with higher levels of education? It may be that this group of people has the right skills and abilities to make a difference in these causes or that they have the awareness of issues and the confidence to feel they can make a difference.

Who do you think should take the major responsibility for promoting and effecting sustainable lifestyles in New Zealand?

The four areas of society that people had to rank were Central government, local government, individuals, and business. People were given four options to rank from 1 to 4 with 1 being the most responsible and 4 being the least responsible. Interestingly 20 people thought central government was most responsible, 8 people stated local government, 17 people put down individuals, and no one stated that business was most responsible for promoting sustainable lifestyle. The sector seen as being the second most responsible group were rated as follows: 9 people stated central government, 19 stated local government, 2 said individuals and 7 said business. Taking those sectors seen as either most responsible or second most responsible then both central and local government are clearly seen in the view of respondents as having the most responsibility to promote sustainable lifestyle issues in New Zealand.

It shows that people believe central and local government need to take the political and financial lead in developing sustainable lifestyle. These answers may reflect the fact that New Zealand has a political history of government involvement across many areas of society, and so people are seeing this role continuing into the area of sustainable lifestyle. However, a large group of people (34%) placed individuals as being the most responsible to promote sustainable lifestyles.

Do you think there should be Government intervention such as increased taxes, subsidies or regulations to ensure that:

New Zealand becomes more dependent on renewable energy sources?

41 people stated yes, 3 no and 6 people stated that hey didn't know.

There are minimal levels of pollutants in our petrol and diesel?

44 people stated yes, 2 no and 4 people stated that they didn't know.

All New Zealanders receive all necessary medical assistance immediately when needed?

35 people stated yes, 10 no and 5 people stated that they didn't know

New Zealand urban areas become more dependent on public transport?

33 people stated yes, 12 no and 5 people stated that they didn't know

There is increased protection for New Zealand wildlife and natural habitat?

36 people stated yes, 6 no and 8 people stated that they didn't know

In each of the five areas of society mentioned above all of them showed a large percentage of support for increased government intervention. This was especially so in the areas of becoming more dependent on renewable energy sources and having minimal levels of pollutants in our petrol and diesel. This may reflect the general level of government intervention that New Zealand is used to in regards to social, environmental and social issues. These results match those given in the question about who people felt should take the major responsibility for the promotion and implementing the concepts of sustainable lifestyle in New Zealand. This question showed people consistently felt it was the responsibility of either central or local government.

What do you think should be the three most important values in New Zealand society today?

The purpose of this question was to evaluate the dominant values in New Zealand and to see the responses in comparison with the chapter on values. The ten most important values listed in order of importance were family, caring and kindness, respect for everyone, environment, community, honesty, education for all, integrity, morality and ethics (including Christian ethics), and health. All of the values stated as being the most valuable in New Zealand generally have to do with relationships with others. This reflects a "society" focus rather than an "individual" focus. These answers affirm the chapter on values when it reiterates New Zealand is a country that generally seeks after equality, fairness and the sharing of resources.

Conclusion

This survey indicates that people in New Zealand do not have a good understanding of what 'sustainable lifestyle' means. They may understand what it means to have a lifestyle that is able to be maintained but do not easily understand that it about living in such a way that other people and future generations are not neglected. While there was an emphasis on lifestyles that preserved resources and the environment there was also a large percentage of people who related sustainable lifestyles to the ability to maintain their own lifestyles and to take care of their own needs. The weakness of their understanding is revealed when people are asked to connect their understanding with physical activities. The varied answers regarding activities that contribute towards a sustainable lifestyle can indicate three things. Either people have little clear idea of what a sustainable lifestyle is or there is gaps between understanding and action in the lives of people or people genuinely don't contribute to sustainable lifestyles.

The overall sense of being a good citizen and contributing to the benefit of society seems to dominate what constitutes lifestyle. This was highlighted when people chose values that had a community and social feel rather than individual ones. The number of people who either contributed of their finances or time to groups or causes that support sustainable lifestyle values matched this thinking? The other aspect dominant in this survey is that of individuality. People saw living in a sustainable manner as a concern for their own well-being and lifestyle. This shows a reflection of the individualistic aspect of Western society in New Zealand. In this individual influenced society people may genuinely feel that it is the responsibility of central and local government to promote sustainable lifestyle values rather than individuals.

Chapter 9

Conclusion

Sustainable lifestyle theories and values have been evident in history for thousands of years. Many of the teachings of the major religions are based around living in ways where other people and the environment are respected and cared for. Ideas on living simply were also promoted by people and groups down through the centuries. These ideas were not under any particular banner or philosophy. In recent decades there has been a grouping together of ideas surrounding living simply and caring for others and the environment.

This recent movement was prompted by the search for a wider understanding of what development should include. The struggle for development practice to change the lives of those it was aimed at began to cause people to see that there needed to be a wider understanding of what aspects of society came under the development banner. Sustainable development became a tripartite structure having a focus on environmental, social and economic aspects of development. Sustainable practices become an issue not just for people in developing countries but it became a challenge to people in developed countries in regards to their lifestyles. For development to occur throughout the world would require not just an increase in the lifestyles of those in developing countries but also a decrease in the lifestyles of those in the developed world. This involves people in the developed world seeking to lessen their impact upon the world and the resources and people in it. The term 'Sustainable Lifestyles' is a banner under which many of these ideas and values fit.

The purpose of this thesis was to identify what sustainable lifestyle is and in what ways New Zealand society has taken on board sustainable lifestyles. This thesis proposed that New Zealand has a basis of sustainable lifestyle values at the basis of its political and social background. This foundation has created certain values and attitudes in the lifestyles of New Zealanders but at this stage they are not recognised as sustainable choices. Individuals and organisations are acting in sustainable ways but presently it is confined to the fringes of society.

This thesis evaluated New Zealand society in two specific ways. Firstly, five areas of society were identified that either play a central role in determining the type of society New Zealand is to be or best reflect in what ways sustainable lifestyles have impacted society. These areas are production, consumption and policy, economics, environment, values, and education. Secondly, a Sustainable Lifestyle survey was carried out on 50 people.

Different segments of society view sustainability in diverse ways and this creates confusion about what it means to live a sustainable lifestyle. Vagueness also arises because the term is ambiguous in developed countries including New Zealand. In the Sustainable Lifestyle survey a large segment of people responded to the term sustainable lifestyle by reflecting that it involved being able to provide for your own needs, whether these needs were excessive or not. Another large segment of responses could connect the idea of sustainability with living in such a way so that future generations could also have equal access to resources. When those surveyed were questioned about how they lived in a sustainable way the most common answer was that they recycled things. While this action does contribute to a sustainable lifestyle it reflected a general lack of understanding about the sustainable concept let alone what it meant to live a sustainable lifestyle.

A large aspect of a sustainable lifestyle in New Zealand needs to be about seeking to live on lower consumption levels so that as a country we are not using more than our fair share of resources. This is hard in a country like New Zealand where there is a natural pressure to produce and consume products and services. Part of how individuals see themselves is based on the amount of goods and services they accumulate. How a society uses the resources it has available helps reveal the level of sustainable lifestyle values there is. Presently New Zealand is struggling to be sustainable in five major indicators. New Zealand's track record of consumption patterns, energy consumption, energy efficiency, waste generation and waste disposal is not good. While our consumption pattern is within the provisions of our own country, it is not sustainable if carried across all other parts of the world. In the other four areas of society we compare poorly with other OECD countries in terms of the consumption levels and efficiency and the amount of waste we produce and the ways we dispose of it.

It is central and local government initiatives and policies that provide the framework for how New Zealand operates in the areas of consumption, energy consumption and efficiency and waste generation and disposal. Their policies can determine how businesses and individuals function across these five areas. Central government has committed New Zealand to many international policies that support sustainable lifestyle values. While many of these agreements are not binding they provide a picture of the level of commitment New Zealand has in these areas. The problem is that New Zealand has not carried through on many of the commitments made.

At a national level there are various policies and Acts created that support sustainable values. Many of these are in the area of the environment. New Zealand took the lead internationally with the development of the Resource Management Act 1991 (RMA). This act provided a framework for individuals, businesses and local councils to deal with issues of development in New Zealand. While this act was bold and radical in its approach to sustainable management it tended to focus on environmental issues at the expense of social and economic aspects of development. Recent evaluations of the RMA talk about complexities in getting resource consents through and a sense that the New Zealand government has relied too much on the RMA without developing sustainable policies further. One of the issues politically is that there is no policy document that commits New Zealand to sustainable lifestyle or development as an overriding goal.

It has been local government that has played the larger role in the promotion of sustainable lifestyles. As local councils represent the local interface of seeking to meet the social, safety, environmental and economic needs of people they have realised that they are the ones who must be held accountable when these aspects of society break down. Central government can be a step removed from the reality of seeking to implement policy and the results that occur. Local government has led the way in areas such as the environment, waste, energy efficiency, urban development, transport, housing and business practices. This work has occurred despite the fact that local government has not had the financial or policy support from central government to carry out sustainable practices in these areas.

The business community in New Zealand has also taken a lead in seeking to implement sustainable lifestyle values. Businesses and individuals in New Zealand function under a capitalist system and this has often hindered the ability for New Zealand to take on sustainable values. Capitalism has not been the great leveler that it was originally envisaged to be. Certain outcomes of capitalism such as waste, maximized profits, growth and unemployment can work against sustainability. However within this capitalist system businesses are starting to seek to deliver in small measure sustainable results. The purpose of being in business has widened from just being profit minded to also being socially and environmentally minded. To be socially and environmentally minded is considered a win – win situation where it can be profitable for the company while also delivering social and environmental benefits for society. Their motives for doing this may not be as socially minded as local government.

This change in business practices has been because of the increased awareness that being socially responsible is both beneficial for business and expected by society. There is also the need to adhere to demands from overseas parent companies whose levels of financial reporting are much more wider than in New Zealand. The result is that accounting procedures such as Triple Bottom Line reporting is becoming more common. To further widen this win – win situation may require that central government take steps politically to legislate companies in areas of waste, financial reporting, energy efficiency and social responsibility.

Over the five areas of society covered in this thesis the area of the environment probably shows the largest amount of energy and commitment from New Zealand to maintain it in a sustainable way. Much of the history and sense of meaning has been placed on the state of the natural environment. Being 'clean and green' provides us with a sense of pride and it helps identify us in the wider world. The environment has contributed much to New Zealand's economic and social standing. The environment is our 'goodwill' but at times we have struggled to understand our relationship with it. Environmental issues have risen in prominence in the last two decades, as New Zealand has had to understand and tackle environmental concerns and events in our own confines. Events such as the visits of nuclear warships, forestry, hydro schemes, waste dump sites and global warming have meant that New Zealand could no longer be detached from the effects of environmental damage.

Policies, finances and actions had to be put in place and New Zealand had to socially and politically decide what the values and attitudes would be regarding the environment. As a result the New Zealand public is more willing to financially support environmental groups, to put more money into preserving the environment, to be involved in 'green consumerism' and to have a better understanding of the environmental issues in New Zealand. This understanding and support is however not matched to the same degree by actions and involvement to actually help preserve and develop the natural environment.

Historically New Zealand has taken steps politically and socially to take on board sustainable lifestyle values that seek equality and fairness. This background resulted in the desire for a classless society where people were given equal opportunity to both live and participate in the country. New Zealand was at the forefront of policies recognising these things. Successive governments established the welfare system, state housing, and the vote for women. Politically in New Zealand, governments have reflected the desires of society and have sought to make the social systems in New Zealand sustainable.

This commitment to sustainable values was not evident in the 1980's and 1990's. During this time there was a growing inequality of income and lifestyle in New Zealand as the gap between the wealthiest and poorest grew and a larger part of those in the middle income struggled to make ends meet. Also at this time there were moves to change the social welfare, education and health structures. This caused much tension and backlash as government and individuals struggled with knowing the point of compromise between individual responsibility and state responsibility. This journey caused an evaluation of what the values of New Zealand are and what makes the country what it is. This has reiterated that New Zealand is a people conscious society where there is a desire that all people have equal access to the necessities of life. This view was outworked with the election of the Labour government in 1999 who quickly focused on measures that brought social cohesion.

The area of society that has the potential to equip people to understand what it means to live a sustainable lifestyle is education. New Zealand does not have a strategy for sustainability education as part of the wider education curriculum. Predominantly education structures prepare people to play their part in a global economy rather than to play their part in a sustainable society. People are taught facts without necessarily having the skills to understand the assumptions and values on which these facts are based. Sustainable education would have a focus on equipping people to contribute to building humane and sustainable communities. In New Zealand the area of sustainability most taught about is in the area of the environment. The National Environmental Education Strategy in place in the schools seeks to help students to gain the knowledge and skills regarding the environment and to translate this into action for the environment. This strategy is recognised as an important model of the type of education needed to help preserve and develop the environment.

However other aspects of sustainability have not been addressed within the education structure. There are no specific strategies in place to help people examine how social and economic structures may enhance sustainability. There is a social studies and economics framework in place at primary and secondary school levels that help people to understand the communities they are part of but there is not the provision to question those social or economic structures. The market driven approach to education at the tertiary level restricts the opportunity for people to explore and discover ways of living in a sustainable manner as the focus is predominantly on preparing people to play their part in the market economy. This prepares people to perform jobs that support the market rather than preparing them to improve the very social, economic and environmental structures of society.

There are alternative models of education being evaluated and tried in New Zealand. These models seek to challenge the very concept of the purpose of education. They focus on developing students who learn from the very social, economic and environmental structures they are part of so that the most important aspects of the community and the world are sustained and reproduced. It is this questioning of the lifestyles and structures in New Zealand that needs to happen on an increased level in order to help people to understand that there are alternative lifestyle choices.

There are many ways in which the lifestyles of people in New Zealand are being challenged and changed in order to live in a more equitable and sustainable way. Presently large parts of the lifestyle of New Zealanders are not sustainable. This is of vital importance to New Zealanders because much of the sense of who they are is based on the lifestyle they are able to maintain. The effect of the lifestyles of New Zealanders upon the rest of the world has never been considered much outside of our shores. Having a healthy environment, having plenty of natural and abundant energy, living extensively off the land and having a background of equality and fairness among us has seemed like a safeguard from the lifestyle choices or lack of it of people from other countries.

New Zealand is at a crossroads of sorts. Many of the present values and attitudes about living in New Zealand are not part of a sustainable lifestyle. They do not contribute to an ongoing development of the social, economic and environmental aspects of New Zealand or the wider world. At the same time the underlying values of equality and fairness in New Zealand keep bringing New Zealand back into seeking after actions and lifestyles that acknowledge this. New Zealand needs to find some way of acknowledging the path it is on and the way it wants to function. Sustainable lifestyles is a way to do this but for a movement like sustainable lifestyles to gain wider recognition and acceptance requires that people can understand the idea and recognise how they can contribute to living in a sustainable way. This helps normalize sustainable lifestyles thereby bringing it more centrally into the lifestyles of New Zealanders.

Sustainable Lifestyle Questionnaire

- Age: ______________
- Male / Female
- Ethnicity: _____________________________
- Income Bracket:

  Under $20,000
  $20,000 - $30,000
  $30,000 - $40,000
  $40,000 - $50,000
  Over $50,000

- Which is your highest educational qualification?

  No qualifications
  School Certificate
  Sixth Form Certificate
  University Degree
  Post Graduate qualification

- What do you understand by the term 'Sustainable Lifestyle'?

- In what ways do you think you contribute to sustainable lifestyle? (Environment / social / economic)

- What local or central government policies are you aware of that support sustainable lifestyle?

- New Zealand likes to view itself as having a 'Clean and Green' image. Do you agree that this is a true image of New Zealand?

  Agree ☐
  Disagree ☐
  Neither ☐

- Do you recycle:

  Consistently ☐
  Occasionally ☐
  Never ☐

- Have you financially supported in the last twelve months:

  An environmental cause ☐
  An environmental group ☐
  A social cause ☐
  A safety cause ☐

- In the last twelve months have you committed time to a cause / organisation that supports environmental, social or safety issues:

  Yes ☐
  No ☐

- Who do you think should take the major responsibility in promoting and effecting the concepts of sustainable lifestyle in New Zealand? From the list below rank them in order 1 to 4 with 1 being the most responsible

  National Govt ____
  Local Govt ____
  Individuals ____
  Businesses ____

- Do you think there should be Government intervention such as increased taxes, subsidies or regulations to ensure that:

1.) New Zealand becomes more dependent on renewable energy sources (ie: solar, wind, water)

Yes _____ No _____ Don't know _____

2.) There are minimal levels of pollutants (ie: sulphur) in our petrol and diesel

Yes _____ No _____ Don't know _____

3.) All New Zealanders received all necessary medical assistance immediately when needed (ie: surgery, xrays, medicines, vaccines)

Yes _____ No _____ Don't know _____

4.) New Zealand urban areas become more dependent on public transport systems therefore saving on energy consumption, clogged roads, pollution and urban decay

Yes _____ No _____ Don't know _____

5.) There is increased protection for New Zealand wildlife and natural habitat

Yes _____ No _____ Don't know _____

- What do you think should be the three most important values in New Zealand society today?

Sustainable Lifestyle Survey Results:

Age:

Under 20: 1
20 – 30: 7
30 – 40: 10
40 – 50: 15
50 plus: 17

Sex

Male: 22
Female: 28

Ethnic Background

Pakeha / European: 30
New Zealander: 18
Pacific Islander: 1
Indian: 1

Income Bracket

Under $20,000: 13
$20,000 - $30,000: 5
$30,000 - $40,000: 7
$40,000 - $50,000: 9
Over $50,000: 16

Highest Qualification

None: 12
SC: 12
6th Cert: 3
Tertiary: 6
Prof: 6
Degree: 9
Post Grad: 2

What do you understand by the term "Sustainable Lifestyle" ?

Living in a way that can be sustained long term without adverse effects: 15
Ability to pay your own way: 10
A lifestyle that preserves resources for the future: 7
Adequate food, clothing, and home to live in: 5
Efficient use of the environment: 3
Ability to recycle many of the resources we use: 3
Don't know: 12

In what ways do you think you contribute to sustainable lifestyle?

Being a good citizen: 15
Recycling: 16
Living a simple lifestyle: 10
Aware of the need to look after the environment: 7
Voluntary work: 14
I don't: 2
Don't know or no answer: 13

What central / local government policies are you aware of that support sustainable lifestyle?

Recycling programmes: 7
Waitakere City: Emphasis on natural water conditions and protection of land form: 3
GE Bill currently under review: 2
Protection of the environment: 2
Kyoto Legislation: 2
Green party: 2
Replanting of natives: 2
Programmes to keep elderly people in their homes: 1
Alternative education: 1
Review of education policies: 1
New Zealand made items: 1
User pays for water and rubbish: 1
Waitakere City: limits to city boundaries to stop spread of housing: 1
Setting aside of National parks and reserves: 1
Social welfare programmes: 1
Rubbish collection: 1
Energy conservation measures: 1
Can only cut down natives at the rate they are being renewed: 1
Providing loans for you to educate yourself: 1
Petrol tax: 1
Don't know: 30

New Zealand likes to view itself as having a "Clean and Green" image. Do you agree that this is a true image of New Zealand?

Agree: 25
Disagree: 11
Neither: 14

Do you recycle?

Consistently: 38
Occasionally: 10
Never: 2

Have you financially supported in the last twelve months:

Environmental cause: 8
Environmental group: 3
Social cause: 30
Safety cause: 12
Neither: 16

In the last twelve months have you committed time to a cause or organization that supports environmental, social, safety issues?

Yes: 22
No: 28

Who do you think should take the major responsibility for promoting and effecting the concepts of sustainable lifestyle in New Zealand? (1 = most responsible / 4 = least responsible)

National Govt: 1.) 20 2.) 9 3.) 3 4.) 8

Local Govt: 1.) 8 2.) 19 3.) 13 4.) 3

Individuals: 1.) 17 2.) 2 3.) 11 4.) 9

Businesses: 1.) 0 2.) 7 3.) 12 4.) 19

No Clear Response: 6

<u>Do you think there should be increased government intervention such as increased taxes, subsidies or regulations to ensure that:</u>

<u>New Zealand becomes more dependent on renewable energy sources?</u>

Yes: 41
No: 3
Don't know: 6

<u>There are minimal levels of pollutants in our petrol and diesel?</u>

Yes: 44
No: 2
Don't know: 4

<u>All New Zealanders receive all necessary medical assistance immediately when needed?</u>

Yes: 35
No: 10
Don't know: 5

<u>New Zealand urban areas become more dependent on public transport systems therefore saving on energy consumption, clogged roads, pollution and urban decay?</u>

Yes: 33
No: 12
Don't know: 5

<u>There is increased protection for New Zealand wildlife and natural habitat?</u>

Yes: 36
No: 6
Don't know: 8

<u>What do you think should be the three most important values in New Zealand society today?</u>

Family: 13
Caring / Kindness: 11
Respect for everyone: 11
Environment: 11
Integrity: 11
Community: 8
Education for all: 6
Morality/Ethics: 5
Placing God first: 5
Christian Morals: 4
Health: 4
Safety: 3
Equal Opportunities: 3
Freedom: 2
Respect for self: 2
Good stable government: 1
World awareness: 1
Greater liaison of church and state: 1
Financial freedom: 1
Protection for unborn child: 1

Marriage: 1
Employment for all: 1
Obeying the law: 1
Support New Zealanders before overseas needs: 1
Needy: 1
Solo Families: 1
No answers at all: 6

Ascension's Commitment to the Environment

We make our living off the land.

The grapes we grow are the product of soil, rain, sun and wind, cared for by the hand of the viticulturist. The French call this concept "terroir" and it is what makes ***Ascension's*** vineyards unique.

Our's is a fragile environment and one that must be cared for and preserved for the generations that follow.

We have made a commitment to not only one day leave the land that is ***Ascension*** the way we found it, but to leave it better!

It is necessary for us to dispose of the waste generated by food preparation, wine making, and thousands of visitors. To do this we developed and planted over 6000 native plants to form a significant wetland area in the north-eastern corner of our property. All the waste from Ascension goes through two "vermicomposters" and is broken down by millions of worms to form an organic rich fertiliser that we remove once a year for our gardens. The remaining grey water moves though a series of gravity tanks that naturally clarifies the liquid before it finally emerges in sub-surface irrigation lines that feed the Wetland. Naturally occurring soil bacteria breaks down any remaining organic matter that is not absorbed by plants, and the water is either taken up and transpired by the plants, or filtered by the soil into our pond. This system is the first of its type in New Zealand and has been touted by many as the "model" of how to dispose of large amounts of waste in an environmentally responsible manner. As of September 2001, we have processed almost 750 000 litres of waste under the auspices of the Auckland Regional Council, with no negative effects on the environment! In fact the plants are already beginning to become quite dense and birdlife is returning to a place where before there was none. At night time we can hear the croak of frogs, creatures that are exceptionally sensitive to water quality.

We recycle as much as possible at Ascension. We use almost exclusively recyclable packaging. Our glass bottles are returned to ACI glass to once again become wine bottles. Our milk and soft drink bottles are recycled for more plastic. We often use our wine cartons more than once before they are recycled along with other cardboard packaging. Our food scraps either become chicken or worm feed, or compost.
We even recycle carbon dioxide. The wine industry is a "net user" of CO2 as grapevines consume more CO2 than is given off during fermentation.

Finally, in the vineyard we do our best to use only organic compounds such as copper and sulphur where we can. There are inevitably times when we need to use other alternatives, but these we try to keep to an absolute minimum. We reduce disease and therefore the need to spray by such things as burning our winter prunings and leaf plucking by hand around the bunches of grapes in summer.

Our environment looks after us, and we are determined to look after it. We urge you to do the same.

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