

# **Report by New Zealand under Article 16 of the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (CCD).**

## **Introduction**

New Zealand acceded to the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (CCD) on 7 September 2000.

The aim of the Convention is to “combat desertification and mitigate the effects of drought”. While the Convention gives priority to Africa, where the problem is most pressing, land degradation is an issue of global concern. It is estimated that over 15% of the world’s population and 25% of total land area is affected by land degradation and desertification processes. The ratification or accession of a number of Pacific Island countries clearly signals the relevance and significance of the Convention to the Pacific region. In particular, land degradation and drought, issues dealt with under the CCD, are of growing relevance.

As a developed country Party to the CCD, this report is the first report from New Zealand under Article 26 of the Convention. The report includes discussion of:

1. measures taken to implement the convention in New Zealand;
2. measures taken to assist developing countries to implement the convention.

# 1 Implementation of the Convention in New Zealand

## Is New Zealand an “affected country Party”?

To be an “affected country Party”, New Zealand must have areas affected or threatened by desertification. “Desertification” is defined broadly in the Convention as “land degradation in arid, semi-arid and dry sub-humid areas resulting from climate variation and human activities”.

There are a small number of areas in New Zealand which could potentially be considered as “semi-arid” or “dry sub-humid”, which is defined in Article 1 as “areas ... in which the ratio of annual precipitation to potential evapotranspiration falls within the range from 0.05 to 0.65”. In some eastern areas of the South Island, rainfall is less than 700mm. In these areas dry north westerly winds frequently blow, particularly in spring. These meteorological conditions mean that potential evapotranspiration rates (water loss from the soil and plants to the atmosphere) throughout many of these regions can be 1000mm or more. When such conditions prevail, the ratio of annual precipitation to potential evapotranspiration falls within the range 0.05 to 0.65, and could therefore be considered as semi-arid and dry sub-humid.

The potentially semi-arid and dry sub-humid grasslands occupy significant areas of Marlborough, Canterbury and Otago. In Marlborough these include the eastern areas of the lower Wairau Valley, the Awatere Valley and the lower Clarence valleys. Canterbury drylands include the Culveden area in northern Canterbury, the eastern Canterbury Plains (but not including Banks Peninsula), the Mackenzie Basin and the Hakataramea Valley. Otago drylands include the Central Otago hills surrounding the Clutha Valley from Cromwell east, including extensive areas in the Manuherikia and Maniototo Valleys.

Desertification occurs when there is land degradation in arid, semi-arid or dry sub-humid areas. Although New Zealand has potential semi-arid and dry sub-humid areas, it is less clear whether these areas suffer degradation. “Land degradation” is defined in Article 1 as:

*reduction or loss, in arid, semi-arid and dry sub-humid areas, of the biological or economic productivity and complexity of rainfed cropland, irrigated cropland, or range, pasture, forest and woodlands resulting from land uses or from a process or combination of processes, including processes arising from human activities and habitation patterns, such as:*

- *soil erosion caused by wind and/or water;*
- *deterioration of the physical, chemical and biological or economic properties of soil; and*
- *long-term loss of natural vegetation*

The areas in New Zealand which could potentially be considered semi-arid and dry sub-humid are extensively grazed. They are characterised by substantial climate variability, including droughts, relatively low and often patchy productivity and are based on the relatively natural tussock grassland ecosystems. Degradation can occur. A combination of inappropriate management, burning, heavy grazing, drought periods and rabbit and weed infestation could lead to soil erosion, deterioration in soil properties and loss of natural vegetation. Instances where such degradation occurs could be considered desertification.

Given the potential for land degradation in New Zealand's dry tussock grasslands, it is necessary to keep the question of whether New Zealand suffers desertification under review. At this stage, however, it is not considered that New Zealand falls under the definition of an "affected country Party" under the CCD.

### **Combating desertification and mitigating the effects of drought**

Priority is given in Article 5 to "combating desertification and mitigating the effects of drought". Even though New Zealand is not an affected country Party, a number of policies being implemented domestically are relevant to this aim, in particular the need to mitigate drought. Under Article 1 of the Convention:

*"Drought" means the naturally occurring phenomenon that exists when precipitation has been significantly below normal recorded levels, causing serious hydrological imbalances that adversely affect land resource production systems.*

*"Mitigating the effects of drought" means activities related to the prediction of drought and intended to reduce the vulnerability of society and natural ecosystems to drought as it relates to combating desertification.*

Through the Resource Management Act 1991 (RMA), New Zealand committed itself to managing natural and physical resources sustainably. Sustainable management is defined in section 5 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 well-being and for their health and safety while:*

- (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations;*
- (b) safeguarding the life-supporting capacity of air, water, soil and ecosystems;*
- and*
- (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

The RMA thus provides the necessary legal regime for national and regional government to combat desertification and mitigate the effects of drought when/if required. Further to the RMA, a key Government goal is to protect and enhance the environment, more specifically to:

*Treasure and nurture our environment with protection for ecosystems so that New Zealand maintains a clean, green environment and rebuilds our reputation as a world leader in environmental issues.*

As well as its people, the environment is New Zealand's greatest strategic asset. A clean healthy environment is vital for our health and our quality of life. Most of our economy depends to a greater or lesser extent on the natural world – on soil, water, air, and ecosystems. New Zealand in the past has relied heavily on this asset and we can expect to in the future – if we use it in a way that is sustainable.

### **Long term environmental outcomes**

New Zealand is seeking a variety of long term environmental outcomes, including a number that are pertinent to desertification:

- Our land, air, and water are safe, healthy, life supporting, and productive.
- The atmosphere is safe and life supporting.
- Our indigenous biodiversity is healthy, flourishing and resilient.
- Natural resources of significance to Maori are sustained or enhanced.
- Environmental law and policy is coordinated, coherent and administered effectively and efficiently.
- Information about the state of the environment is comprehensive, reliable, and readily available.
- Businesses, communities and individuals act in environmentally responsible ways.
- Institutional arrangements enable central government decision makers to consider the social, economic and environmental consequences of their actions.
- Partnerships with other departments, local government, businesses, communities, and iwi and hapu are effective in maintaining and improving the state of New Zealand's environment.

### **Priority environmental issues**

The four environmental issues to which the New Zealand Ministry for the Environment will give priority in 2001-2006 are:

- **Climate change:** actions to support the government's commitment to ratification of the Kyoto Protocol; develop environmentally sustainable transport and energy options
- **Genetic Modification:** create and implement a long term strategy for the use of gene technology
- **Hazard and waste reduction:** make the Hazardous Substances and New Organisms Act work, and tackle existing contamination; implement a new strategy to move New Zealand towards zero waste
- **Protecting biodiversity, air and water quality:** set national standards and promote their uptake; promote more efficient use of water resources through guidance and assistance; develop national policy and support for action at the local level, with a focus on private land.

The last of these encompasses desertification. While these priorities are a primary focus, work will continue on many other important areas, like land management and ozone layer protection, which also relate to desertification.

### **Land and Water**

Demand for water is putting heavy pressure on supplies in some areas, especially those that are drought-prone areas, and making sure it is shared fairly is a big challenge. Around ten percent of our land is prone to severe erosion and the further loss of soil in these areas threatens land stability and can worsen flooding.

Human settlement has had major impacts on land including accelerated erosion and chemical contamination. The effects are still severe in some cases and will take time to remedy or mitigate. Despite the inexorable shift towards a more service-based economy, New Zealand will continue to rely on agriculture and other land-based industries to underpin economic performance. The sustainable use of land is critical to the success of these industries. A priority outcome for the Ministry for the Environment is that land is used within its capability.

In addition to the Resource Management Act sustainable land management is being undertaken within the framework of a national "Sustainable Land Management Strategy", launched in 1996.

Planning and managing land resources are, for the most part, devolved to regional and local government. Most regional councils have developed policies and plans to address sustainable land use issues identified through regional policy statements. While priority

issues vary, reflecting regional concerns, accelerated soil erosion and degradation of elite soils are the two that are most frequently raised.

Several councils operate ratepayer-funded programmes to assist farm soil conservation and sustainable land management activities. All councils are considering the best means to implement resource-monitoring responsibilities including through farm or property plans. Most councils monitor their own programmes in line with legislative requirements.

The New Zealand Landcare Trust fosters sustainable land management and biodiversity by working with community groups around the country. The Trust helps groups establish, plan, develop networks, and to become effective in landcare.

### **Erosion**

About two-thirds of pastoral land is considered to be at risk of erosion. The main erosion types are, in order of prominence, surface erosion (52%), mass movement (36%) and fluvial erosion (12%). Erosion affects farm viability. Each individual slip scar requires about 20 years to return to near its original productivity.

Soil erosion is being addressed at the community level through Landcare groups. Together with the community, local and national government have initiated soil conservation schemes to reduce soil erosion in specific catchments. National research institutes are assisting regional councils and the Ministry for the Environment develop nationally consistent soil erosion monitoring methods, soil conservation guidelines and indicators. Land management practices aim to reduce soil loss and enhance the quality of waterways, groundwater, and coastal waters. There is an emphasis on protecting water from suspended sediments, nutrients, harmful micro-organisms and other contaminants. Farmers have to avoid, mitigate, and remedy land related hazards such as flooding, subsidence, and drought.

### **Drought**

On average New Zealand enjoys good rainfall, spread relatively evenly across the country. Rainfall varies from month to month, so short-term droughts are not uncommon. Individual landholders accept that they must manage climatic risks. Livestock farmers, for instance, rely on matching feed demands with seasonal grass growth, taking care to ensure continued production that does not degrade the land.

Government help is available to respond to climatic disasters. A recovery plan was established in 1993 setting down guidelines, including on financial assistance for adverse events beyond the handling capacity of regional bodies or local communities. Assistance can be used for restoration of essential infrastructure including water, stormwater, electrical, sewerage and gas facilities. No direct financial assistance is available to replace assets or lost production.

Two regions of New Zealand - the east coast of both islands and the high country to the east of the mountains in the South Island - are prone to drought and face specific problems. The dry tussock grasslands of the South Island high country have had the added pressure of feral rabbit populations, which accentuated grazing pressures in summer and led to a gradual invasion of weed species that are not palatable to livestock, particularly Hieracium sp. (Hieracium an invasive weed degrading large areas of the South Island hill and high country and central North Island. It reduces significantly productive values, biodiversity, landscape, soil stability and water retention. Rabbits eat the palatable grasses, leaving large areas for the Hieracium to invade. The Hieracium Control Trust was set up in 1993 by land users to implement a programme of biological control and the subsequent revegetation of affected land.)

Farmers on dry east coast regions respond to drought either by destocking, or by investing in irrigation and drought-tolerant pasture plants. Some 400,000 hectares are currently irrigated and this could potentially expand to 650,000 hectares. Dairy farming is expanding in the drought-prone regions and irrigation is usually required for this change of land use. Investigations by landholder groups over an area of 250,000 hectares are underway to identify viable irrigation opportunities. Government and industry grants have been made available to these groups. However, neither central nor local government give financial assistance for constructing or maintaining irrigation.

## **2 International activities**

A number of New Zealand's Official Development Assistance (NZODA) programmes are relevant to the aims of the CCD.

### **Overview of NZODA**

NZODA contributes to poverty reduction and helps to secure stability and harmony in the international community, particularly the South Pacific region. There is increasing international recognition that aid must be sharply focused on reducing poverty and promoting environmental sustainability. NZODA contributes directly to these goals, which are aimed at building a fairer world. It recognises that partnership and participation are key to cooperation between donor and partner countries. Respect for, and promotion of, internationally-recognised human rights and good and honest governance form the foundation of development.

NZODA programmes are designed to give developing countries greater choice and opportunity in a world in which globalisation is dramatically changing opportunities and options for the weaker and more vulnerable nations. They help to strengthen the links between New Zealand and the peoples of developing nations, and to foster understanding and mutually beneficial relationships.

### **Purpose**

The principal purpose of NZODA is to achieve lasting improvements in the living conditions of present and future generations of men, women and children of developing countries, especially the poor. A central goal is to help states, communities and individuals realise the economic, social, cultural, political and civil rights embodied in the Universal Declaration of Human Rights and other international human rights conventions. NZODA is also valuable to New Zealand. It brings mutual benefits through the social and economic growth of nations and increased opportunities for cultural and economic enrichment. The way in which New Zealand assists economically weaker and less advantaged countries helps to define our values and standards as a nation.

### **Development Philosophy**

The NZODA philosophy is one of cooperation and partnership between the governments, peoples and organisations involved in aid and development. Development is seen as people-centred. It is a process of enlarging people's choices and helping provide opportunities for them to take control of their lives and realise their potential. This is why NZODA places great emphasis on human resources development. Trained people add value to their countries' efforts to promote economic and social progress.



## Scope and Focus

NZODA is delivered through bilateral, regional and multilateral programmes. Geographically, it concentrates its country and regional support on the island states of the Pacific and the developing countries of East and South East Asia. There are also small aid programmes in East and South Africa and in South America. Assistance is provided primarily through educational scholarships, state and private sector linkages, NGOs, and through contributions to the development and relief efforts of the United Nations, Commonwealth and other multilateral organisations.

## Guiding Principles

NZODA is governed by a set of key guiding principles:

- **Reducing Poverty.** Poverty reduction is the primary and over-arching objective of NZODA's longer term strategy. A primary focus is to enhance social cohesion by enlarging the economic and social choices of men and women. This includes efforts to increase the self reliance and standard of living of disadvantaged groups through improving their access to, and control over, resources.
- **Equity and Participation.** Respect for human rights is at the core of NZODA. New Zealand is committed to greater participation of all people, especially disadvantaged groups, in economic, social and political life. This is achieved through activities to strengthen good governance, security and the rule of law. It is also reflected in wide consultation with civil society, with the active involvement of men and women, communities and relevant organisations in all development assistance activities.
- **Partner Responsibility.** New Zealand recognises that development will be achieved primarily through the policies and efforts of the governments and peoples of partner countries themselves. New Zealand aims to be responsive and flexible in its responses to their priorities and needs, provided that these are consistent with the principles underlying NZODA and that it has, or can draw on, the expertise and capacity to do so.
- **Building Capacity.** NZODA enhances the capacity of countries with limited resources to participate in the global community and take advantage of the opportunities of globalisation. It builds the capacity of men and women to participate fully in their societies. NZODA concentrates on human resource development and institutional strengthening.
- **Sustainability.** NZODA supports activities which contribute to lasting improvements in the economic, social and political conditions of men, women and children in developing countries. This means support for economic

strategies that are equitable, maintain the natural resource base and the quality of the environment and provide the greatest level of self reliance possible.

- **Involving the New Zealand Community.** NZODA encourages the involvement of all sectors of New Zealand society in international development cooperation. NZODA combines the efforts of government agencies, civil society (educational institutions, NGOs, ethnic communities) and the business community (consultants, and the suppliers of goods and services). Maori and Pacific Island communities in New Zealand have a special contribution to make.

### **Key Strategies**

To achieve the development goals agreed with partners, NZODA supports several key strategies:

- **Security and Governance.** Good governance strategies, public sector reform, law and justice enhancement and community safety programmes that enhance personal safety of all members of society, as well as accountability, transparency and effective use of resources for the benefit of all.
- **Civil Society.** The development of local organisations that encourage the active participation of people in their own and their society's development.
- **Social Development.** Greater attention to social development, especially basic education, health and population activities that together underpin economic development.
- **Gender Equality.** Activities that enhance gender equality and increase the equitable participation of women as well as men in development efforts.
- **Environment.** The protection of the environment and management of natural resources in an appropriate and ecologically sustainable manner.
- **Business.** Reforms that provide a sound policy and regulatory framework for expanding sustainable economic activity and promote social development goals, public policy that provides an enabling environment for private enterprise, and programmes that encourage the private sector.

### **NZODA programmes relevant to the aims of the CCD**

The Pacific is the area of New Zealand's primary NZODA emphasis. History, geography and immigration have given New Zealand close links with the region. New Zealand's relationships with most Pacific Island countries are warm and close. New Zealand is directly responsible for the Government of Tokelau, and has special constitutional links to the Cook Islands and Niue. New Zealand has extensive bilateral ODA relationships throughout the Pacific, and provides significant support for regional organisations.

The ratification or accession of a number of Pacific Island countries clearly signals the relevance and significance of the Convention to the Pacific region. As Pacific Island countries become increasingly engaged in the CCD we expect the further identification of priorities for action in the region. New Zealand has not yet provided any direct support for the preparation of National Action Programmes in Affected country Parties, but would be willing to do so if identified as a priority by partners in the region.

New Zealand is involved in a number of projects in the Pacific region relevant to the aims of the CCD, particularly sustainable land management, including:

- **South Pacific Regional Environment Programme (SPREP).** The objective of SPREP is to assist in building national capacity to protect and improve the environment and to ensure sustainable development in the Pacific. SPREP, located in Apia, is charged with promoting cooperation and supporting protection and improvement of the Pacific environment and ensuring sustainable development. Core activities are in the areas of conservation of natural resources (eg. support for biodiversity conservation, and marine coastal protection activities); environmental education; information and coordination; and certain finance and administration activities. New Zealand provides an annual grant to support SPREP activities through strengthening its secretariat, underwriting its work programme and encouraging links with New Zealand environmental agencies.
- **Pacific Initiative for the Environment (PIE).** The objective of PIE is to promote environmentally sustainable development that is consistent with the economic and social needs and priorities of Pacific Island countries. New Zealand provides funding for projects under the PIE, and supports the involvement of Pacific Island countries in multilateral activities such as those related to the Commission on Sustainable Development (CSD), implementation of the Barbados Programme of Action for Small Island Developing States (SIDS); and in international environment conventions negotiations.
- **The Island Climate Update (ICU).** The ICU is a multinational project first launched in October 2000 and partly funded by NZODA. ICU provides Pacific Islands with highlights of climate anomalies that have been occurring throughout the South West Pacific in the previous month, and a climate outlook for the next three months. The climate outlook includes a summary of the most important factors likely to affect Pacific climates in the next season, be they the state of ENSO (El Nino-Southern Oscillation), sea surface temperatures or anomalous atmospheric circulation. The ICU includes diagrammatic rainfall outlook for the region, a table of climate outlooks for each country and an assessment of the confidence in the three-month outlook. It also provides background information on the global climate setting, and provides links to useful websites. The ultimate objectives of the ICU are:

- **Scientific:** vast improvement in the region's understanding of the factors driving changes in the climate of the region and worldwide. Improve climate outlooks. Enhancement of the development of reconstruction of past climate periods in the Pacific region and an increase in climate research capabilities within Pacific Island States, an area where expertise in the region is still at its infancy and much needed at present.
- **Social-Economic:** improve standards of living in the participating countries. Reduced number of deaths and damage to property associated with climate related extreme weather events. Assist with the provision of timely response and recovery plans for each of the participating Pacific Island States and an increase awareness, resilience and understanding of vulnerabilities of each individual countries to extreme climate events.
- **Environmental:** build better tools and human capacity within these countries to manage their own environment. Fulfilment of commitments of Pacific Island Countries who have signed and ratified the United Nations Framework Convention on Climate Change (UNFCCC), the United Nations Convention to Combat Desertification (CCD), the Vienna Convention and the Montreal Protocol, Biodiversity Convention and Agenda 21. The ultimate outcome is achieving sustainable development.
- **Regional Capacity Building in Climate Predictions.**

While the Pacific is the area of New Zealand's primary NZODA emphasis, NZODA also contributes to a small number of programmes in Africa where the problems of desertification are recognised by the CCD as being most pressing. New Zealand's development assistance to Africa is concentrated in the south and east of the continent and focuses on education and non-formal training, rural development and technical assistance. Programmes relevant to the aims of the Convention include:

- **Rural Development: Small Projects Fund.** This fund is used to assist small scale development projects in rural areas, focussing on projects that enhance rural living standards, apply appropriate technology and involve local people in grass-roots development.
- **Short Term Technical Assistance.** This fund provides for short-term, often one-off projects in areas identified as priorities by the partner government.
- **New Zealand-Africa NGO Facility : (NZANGOF).** This programme allocates funding on a contestable basis to NGOs for projects with partner agencies in any African country.
- **VSA Programme.** NZODA supports VSA volunteers with capacity building programmes in the Eastern Cape Province of South Africa. These programmes help the region with its development process, mainly in the areas of local

government reform, policy and planning, town planning and water supply development.