

REPUBLIC OF NAMIBIA

NATIONAL DROUGHT POLICY & STRATEGY

National Drought Task Force

Windhoek, November 1997

FOREWORD

When introducing a package of short-term drought relief measures in May 1995, the Cabinet simultaneously established a Task Force to draw up a national emergency and long term drought management policy and strategy. This was done in recognition of the fact that Namibia is an arid country where dry years are the norm. Declaring drought too frequently is expensive for the Government, can create dependency amongst aid recipients, and can promote resource degradation through inappropriate assistance.

The Task Force, known as the National Drought Task Force, originally consisted of representatives from the Ministry of Agriculture, Water and Rural Development, the Ministry of Environment and Tourism, the Ministry of Lands, Resettlement and Rehabilitation, and from the country's two farmers' unions, the Namibia National Farmers' Union, and the Namibia Agricultural Union. At a later stage the Ministry of Finance, the National Planning Commission, the Ministry of Health and Social Services, and Office of the Prime Minister in the form of the Emergency Management Unit, joined

the Task Force.

The Task Force convened an introductory, two day seminar in June 1996. Thereafter, working groups were established by the Task Force, comprising numerous individuals from both Government and non-government organisations, to produce a background report providing the context for this policy and strategy. This report, along with the findings of a consultancy commissioned by the Task Force to investigate international best practice in drought management, as well as reports from three study tours, undertaken by the Task Force and additional Government officials, to (1) Botswana and Zimbabwe, (2) Burkina Faso and Niger, and (3) Australia, formed the basis of a national consultative workshop held in March 1997. This workshop aimed to identify key lessons learned from Namibian and international experience of drought management and to make recommendations for incorporation into Namibia's drought policy and strategy. It was attended by 63 representatives from a wide range of public and private sector agencies concerned with drought management from all over Namibia.

Based on the discussions held at the workshop, the Task Force prepared a draft document elaborating a drought policy and strategy for Namibia. This was drawn up with the assistance of several line Ministries whose responsibilities include aspects of drought management. Having received Cabinet approval, a process of broad national consultations on this draft was undertaken. The Task Force circulated the draft widely for comments, and held meetings to discuss it with interested parties in key centres throughout the country. A final national workshop was convened near Windhoek which was attended by representatives from most regions in the country. More than 250 people representing a wide range of interests attended these consultations. Through this process of consultation and redrafting, a fully endorsed drought policy for Namibia has now been developed.

The Government would like to acknowledge with gratitude the generous support it has received from the United States Agency for International Development (USAID) towards the preparation of this drought policy and strategy.

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ACRONYMS

CEMU	Community Emergency Management Unit
EMU	Emergency Management Unit
FSNP	Food Security and Nutrition Policy
GDP	Gross Domestic Product

NAP	National Agricultural Policy
NDP1	First National Development Programme
NEMC	National Emergency Management Committee
NEWFIS	Namibia Early Warning and Food Information System
NGO	Non Governmental Organisation
NMS	Namibia Meteorological Service
REMU	Regional Emergency Management Unit
VEMU	Village Emergency Management Unit

EXECUTIVE SUMMARY

Introduction

Namibia is an arid country. 22 per cent of Namibia can be classified as desert, having a mean annual rainfall of less than 100 mm, 33 per cent classified as arid, with a mean annual rainfall of between 100 and 300 mm, 37 per cent classified as semi-arid, with a mean annual rainfall of between 301 and 500 mm, and 8 per cent as sub-humid, with a mean annual rainfall of between 501 and 700 mm. Associated with these low rainfall figures are high evapotranspiration rates and a high degree of variation from year to year, including a few years of exceptionally high and low rainfall, as well as variable rainfall distribution patterns within a year. Human endeavour must adapt to this reality. Drought, on the other hand, is a relative phenomenon which refers to exceptionally low rainfall conditions. It is something to be expected and managed. The rare occasions when conditions are so severe or protracted that they are beyond what can reasonably be dealt with in terms of normal risk management practices, and when State intervention is considered justified, are to be known as **disaster droughts**.

However, in Namibia a general perception has developed over the past few decades that droughts, warranting Government funded relief assistance, are frequent events. Furthermore, although the Government allocates substantial sums of money to drought relief, the country had no drought policy. In years of extremely low rainfall, relief programmes are hastily put together sometimes against a background of intensive lobbying by various interest groups.

Shortcomings of previous drought programmes

In the past, drought relief programmes have suffered from four major shortcomings which are addressed by the policy. **First**, there has been no adequate definition of drought so that drought declaration has sometimes been determined by ad hoc rather than by more scientific processes. **Second**, government has borne the responsibility for risk management and has financed and delivered substantial relief programmes during drought. This has discouraged farmers from adopting risk minimizing farming practices. **Third**, a number of drought programmes, like the fodder subsidy, have led to unsustainable farming practices. **Fourth**, vulnerable group food distribution programmes during drought have been inefficient, poorly targeted, and of limited impact in ensuring household food security.

Drought policy objectives

The eight objectives of the new drought policy are to:

- i. ensure that household food security is not compromised by drought;
- ii. encourage and support farmers to adopt self-reliant approaches to drought risk;
- iii. preserve adequate reproductive capacity in livestock herds in affected areas during drought periods;

- iv. ensure the continuous supply of potable water to communities, and particularly to their livestock, their schools and their clinics;
- v. minimise the degradation of the natural resource base during droughts;
- vi. enable rural inhabitants and the agricultural sector to recover quickly following drought;
- vii. ensure that the health status of all Namibians is not threatened by the effects of drought;
- viii. finance drought relief programmes efficiently and effectively by establishing an independent and permanent National Drought Fund

A new approach

Namibia's drought policy is concerned with developing an **efficient, equitable and sustainable** approach to drought management. In line with Namibia's National Agricultural Policy, it is recognised that aridity and highly variable rainfall are normal phenomena. As such, like all business managers, farmers must take into account the risks associated with variable input and output prices, exchange and interest rates, and weather conditions.

The policy aims to shift responsibility for managing drought risk from **government** to the **farmer**, with financial assistance and food security interventions only being considered in the event of an extreme or 'disaster' drought being declared. The thrust of the policy is a **move away from regular financial assistance to large numbers of private-tenure and communal-tenure farmers** to measures that support the **on-farm management of risk**. The Government's involvement with drought will move beyond an exclusive focus on emergency drought programmes to a broader, longer term perspective.

An objective definition of drought

In the past drought was defined according to the situation of agricultural or water resources, and tended to include what will, from now on, be considered conditions of normal aridity. Scientific criteria for estimating the extent and severity of drought, and for defining what constitutes an extreme rainfall event, or 'disaster drought', in the Namibian context have been developed. A disaster drought refers to drought conditions so intense or protracted that they are beyond what can reasonably be dealt with in terms of normal risk management practices, and which justify State intervention. A workable definition is presented which will see a disaster drought occurring in a particular area in one year in fourteen on average. It is a far stricter definition of drought, based on the extremity of the event and the history of resource management in an particular area, than has hitherto been applied.

Future role of drought relief

Short-term financial assistance and programmes to protect household food security and support crop and livestock farmers will be **limited to exceptional years of 'disaster drought'**. The Government's strategy, is to be based on the following distinct programmes, and related plans of action, which together comprehensively address the major problems caused by drought.

- Food security programmes, including vulnerable group food distribution, food-for-work, school feeding, and health programmes will be reformed in the interests of more efficient delivery or and more effective targeting of the needy, and will continue to be funded by the Government. Where efficient markets exist vouchers or cash will replace food as the means of ensuring food security.
- Health programmes to control diarrhoeal diseases, including cholera, meningitis and measles,

pulmonary tuberculosis, and vitamin deficiency diseases including night blindness, susceptibility of which increases in time of food and water shortages, will continue to be implemented.

- Livestock programmes will encourage sustainable farm and range management. They will be funded by a combination of contributions from the Government, farmers, and livestock-related industry.
- Crop programmes for subsistence communal-tenure farmers will involve the upgrading in times of drought of a new, voucher-based transfer scheme to enable those in need to acquire agricultural inputs and services. Crop programmes for commercial communal-tenure and private-tenure farmers will be funded by a combination of contributions from the Government, farmers, and crop-related industry.
- Water supply programmes will only be undertaken as part of drought relief measures if they aim to meet identified emergency needs, and can be completed in time to meet those needs. Emergency programmes will always complement long terms water supply development goals and strategies.

Future financing of drought relief

The Government's obligations to drought relief programmes will in future be funded through the agency of a National Drought Fund. This fund would be legislated for, be a permanent institution, and be managed by an independent Board. It could receive funds from the Government annually, as well as from farmers in normal years, and through agriculture related industry levies. Donors may also contribute. Funds would be invested until such time as they were required.

The National Drought Fund will also finance the Government's various obligations with respect to agriculture, food security, health and water programmes in disaster drought years. In the case of agriculture programmes, the principle of financial counter-performance, whereby the Fund will contribute part payment for a particular form of assistance, while the remainder is paid by the farmer, will be applied in some instances.

New focus on reducing vulnerability to drought in the long-term

Under the policy, instead of financing regular large-scale drought relief programmes, the Government will examine ways to support farmers in the reduction of vulnerability to drought in the longer term. Measures to be looked at are grouped around the following headings:

- Promoting drought mitigating technologies and practices
 - On-farm risk minimization*
 - Diversifying income sources*
 - Sustainable rangeland management*
 - Water supply and demand management*
- Creating an enabling policy environment
 - Decentralisation*
 - Land user rights*
 - Poverty reduction*
 - Water pricing*
 - Tax provisions*
 - Agricultural research, extension and training, and veterinary services*
 - Agricultural finance*
 - Agricultural marketing*
 - Improved information gathering, analysis and dissemination*

Implementation

Drought management policies and strategies require the development of significant new capacity in terms of information systems, institutional mechanisms and financial arrangements related to drought management.

CHAPTER 1: INTRODUCTION

- 1 Namibia is an arid country. Of its total areas, 22 per cent of Namibia can be classified as desert, having a mean annual rainfall of less than 100 mm, 33 per cent can be classified as arid, with a mean annual rainfall of between 100 and 300 mm, 37 per cent can be classified as semi-arid, with a mean annual rainfall of between 301 and 500 mm, and 8 per cent can be classified as sub-humid, with a mean annual rainfall of between 501 and 700 mm. Associated with these low rainfall figures are high evapotranspiration rates and a high degree of variation from year to year, including a few years of exceptionally high and low rainfall, as well as variable rainfall distribution patterns within a year. Human endeavour must adapt to this reality. Drought, on the other hand, is a relative phenomenon which refers to times of exceptionally low total rainfall or bad distribution of rainfall in a growing season. It is something to be expected and managed by individuals and communities. Those rare years when low rainfall conditions and poor distribution are so severe or protracted that they are beyond what can reasonably be dealt with in terms of normal risk management practices, and when State intervention is considered justified, are said to be subject to disaster drought.
- 2 However, in Namibia a general perception has developed over the past few decades that droughts, warranting Government funded relief assistance, are frequent events. Furthermore, although the Government allocated substantial sums of money to drought relief, there is currently no policy with respect to drought management. There are two reasons why an effective drought policy is a priority. First, drought can cause significant shocks at both household and national level. Second, there is some evidence that southern Africa will become more prone to extremely low rainfall in the future, and that such episodes will become more intense. Recent research suggests that the regional climate is likely to become drier and warmer in the next century.
- 3 The lack of both a drought policy and an operational definition of drought has meant that public drought interventions have largely been determined by ad hoc and sometimes political processes. In years of lower than average rainfall, relief programmes have been mounted against a background of intense lobbying by various interest groups. In an effort to respond, a large number of different approaches have been tried. Political pressure has also resulted in the entire country being declared drought stricken when only parts have been affected, and not all similarly. This approach has raised questions with respect to the equity and efficiency of current responses, and regarding the long-term management of the natural resource base.
- 4 With respect to equity considerations, it is of concern that substantial sums of public money have been allocated to private-tenure farmers, one of the more prosperous groups in Namibian society, in the form of drought-related subsidies. Even when drought relief has reached communal-tenure farmers, significant sums have gone to farmers with large livestock holdings, whose food security has not been directly threatened by drought. Furthermore, it has sometimes been allocated over and above requirements for the maintenance of the core breeding herd. At the same time, the coverage of vulnerable group food distribution programmes has, at best, been patchy. While emergency water supply programmes have generally reached needy communities, who have also been routinely involved in needs assessments and water development planning, in terms of equity, livestock owners have managed to secure a greater share of the benefits than those not owning livestock.
- 5 With respect to efficiency, past practice has, in part, served to reward inefficient farmers and

to keep non-viable farming enterprises from moving out of agriculture. Lastly, there has been much concern that drought programmes have led to practices that damage the natural resource base. For example, the fodder subsidy (discussed below), encouraged farmers to keep excessive numbers of cattle on the land through prolonged periods of drought when they should have been destocking. In sum, past programmes have encouraged farmers to adopt risky and unsustainable farming practices in the knowledge that the Government, in the form of drought relief, would come to their rescue if crops failed or grazing became depleted. It has also been recognised that food distribution has been an inefficient means of transferring resources to the poor, with considerable amounts being spent on overheads that could otherwise have gone in direct relief assistance. Finally, the implementation of hurriedly planned water supply systems has sometimes resulted in the wasting of resources on substandard infrastructure and led to people and livestock becoming dependent on these supplies in unsustainable situations.

6 In addition to the issues raised above, there have also been concerns about the practical efficiency of the delivery of drought relief in Namibia. For example, there is evidence that the 1995 fodder subsidy was widely abused. The targeting and delivery of vulnerable group food distribution programmes as well as emergency water supply systems have also been criticised.

7 Following the introduction of drought relief programmes in May 1995, concern was raised that the Government was forced, once again, to react hastily to the severe drought conditions that prevailed in most (but not all) of the country. In response to this situation, the Cabinet established a Task Force to:

- draw up a long-term drought management policy (including a re-assessment of the role of emergency programmes); and,
- make recommendations to ensure the sustainable use of renewable natural resources.

The following policy statement draws heavily on the background papers prepared by the Task Force, a review of international best practice with respect to drought management and the output from a national drought workshop held in March, 1997. The policy does not address other forms of disaster which can befall agriculture, be it pests, predators, theft, floods or price fluctuations. These disasters are often localised and on a smaller scale than drought, and they should be addressed as such.

8 In the following chapter, a conceptual framework for a new drought policy is presented. Chapter 3 looks at the wider policy context. In Chapter 4, a new approach to drought policy in Namibia is outlined. This chapter constitutes the heart of the policy, and indicates the respective roles of the Government and farmers with respect to drought. In the following two chapters, aspects of the new drought policy are expanded upon including the future role of drought assistance, and measures to reduce vulnerability to drought in the longer term. Chapter 7 looks at issues related to the implementation of the new drought policy. These last three chapters outline the key strategies, programmes and plans of action required to implement the drought policy.

CHAPTER 2: CONCEPTUAL FRAMEWORK

The impact of drought

9 Drought can impact at both the national and household level. With respect to the national level, drought can have major impacts on the national economy through agriculture and other

strategic sectors. Agriculture has linkages to the wider economy and a drought induced shock may result in a fall in GDP and a weakening of the balance of payments position (exports may fall and imports rise). In addition, the sector is a supplier of raw materials to industries, like meat processing for example, and a fall in agricultural output may have knock-on effects. Those industries servicing the sector, like input providers, may also suffer if drought leads to a fall in demand for their goods and services. Lastly, drought may directly impact on sectors other than agriculture. For example, if dependence on hydro-electricity is high, then drought may lead to a fall in power generation. Industries that use large amounts of water may also be affected, as well as other sectors like health, education, tourism and wildlife.

- 10 In Namibia, however, the impact of drought is largely restricted to the agriculture and water supply sectors and the impact on GDP is not as severe as in other African countries. Namibia has a dualistic economy with a large extractive, mineral sector which is only weakly linked to the rest of the economy. In the past, the extractive sector in Namibia was not adversely affected by drought and has proved fairly insulated from its effects. However, electricity generation is affected and, in times of drought, Namibia is required to import more electricity than normal. In general, however, the macro aggregates and trade account effects of drought are relatively modest.
- 11 There are a number of ways in which drought can adversely affect household food security. First, lower than normal rainfall can lead to a fall in agricultural production which in turn lowers both the availability of food and household incomes from crop and livestock sales. In addition, a decline in employment opportunities in the sector may also reduce incomes, especially for the poorest who often depend on the labour market. Second, falls in locally produced food sometimes lead to rises in food prices if commodities become scarce. The poor, who are usually net purchasers of food, may be particularly vulnerable to price rises. Third, in order to cope with losses in income and higher food prices caused by drought, households may be forced to sell assets, like ploughs or oxen, which jeopardise their food security in the longer term. Fourth, households may lose livestock, often a major asset, if grazing conditions deteriorate, or they may have to sell at very low prices. These losses may be so serious that the reproductive capacity of herds may be threatened. Crop farmers may lose locally adapted crop landraces which are often important in mitigating the effects of drought. Lastly, drought can affect water supplies as ground water levels drop significantly and surface water sources dry up. This, especially when combined with food shortages, can facilitate the spread of communicable diseases, thus further limiting people's capacity to cope.
- 12 The degree to which Namibia's rural population is directly dependent on agriculture in part determines the extent to which public interventions may be required to support food security during drought. Compared to many other African countries, Namibia's rural population is less dependent on the sector, although the data on sources of household income do not provide a clear picture. Some studies suggest that as little as 20 per cent of household income in the north is derived from agriculture, with a much smaller per centage coming from crop production. In contrast, several studies suggest that the dependence on agriculture may be significantly higher, and that it varies between regions. The Namibia Income and Expenditure Survey of 1993 indicates that for 35 per cent of all rural households, subsistence farming is the main source of income. An important indicator, not yet addressed by analysts, is the degree to which the rural poor specifically are dependent on agriculture. Available figures on the incomes of the poor, when compared to the assumed value of their agricultural produce, would suggest that in many areas this group is highly dependent on the sector.
- 13 In sum, drought impacts largely on the agriculture and water sectors in Namibia. Although rural households are probably less dependent on agriculture as a source of income, through their own production or employment, and as a determinant of food prices than in many other countries in sub-Saharan Africa, many of the rural poor will be adversely affected by drought. There is therefore a need for targeted interventions to support food security in times of severe

drought. In addition, losses of livestock and of seed stocks can constrain post-drought recovery for all farmers.

Who manages and pays for drought risk?

- 14 In the past, the Government mounted substantial drought relief programmes, using public funds, when drought was declared. These programmes have included transfers to crop and livestock farmers, water supply programmes (for human consumption and to enable farmers to gain access to new grazing areas), and food transfers for households whose livelihoods have been threatened. There have also been interventions in the health and education sectors to target specific needy groups.
- 15 In effect, with respect to farmers, the Government has funded free drought insurance. If the rains fail, the expectation has been that the Government will subsidise crop or livestock losses. As with any form of insurance, there is always the problem of *moral hazard*. In other words, farmers adopt risky farming practices, like overstocking or farming on marginal land, because they know if they run into difficulties, the Government will come to their aid. This is particularly true of Namibia where drought has been frequently declared. There is therefore little incentive to minimise risk and so adapt to Namibia's arid climatic conditions.
- 16 The question of whether public money should be used to provide free drought insurance to farmers is central to the development of a drought policy. With respect to private-tenure agriculture, there are strong equity and efficiency arguments for farmers bearing a significant proportion of these costs in the future. Assistance in years of >disaster drought= could be financed from a number of sources. These include farmers= own contributions, industry contributions (financed through levies), the taxpayer (ie the Government), and private insurance. It should not be automatically assumed that the taxpayer will always be the sole source of drought financing.
- 17 For communal-tenure farmers, the arguments are stronger for using public money, particularly when food security and livelihoods are threatened in times of a disaster drought. One argument is that communal-tenure farmers are unable to manage risk effectively due to lack of secure land tenure, and open access to land. Nevertheless, it is important to recognise that many of the large-scale livestock farmers in communal-tenure areas are, in reality, part of the commercial sector and should be treated in a similar way to farmers operating on private tenure land.
- 18 It can be argued, in general, that public money would be better spent on interventions that help farmers manage risk and reduce vulnerability to drought in the long run, rather than on short-term drought relief programmes that aim to compensate farmers for drought induced income losses. These issues are taken up further in the following chapters.

CHAPTER 3: POLICY CONTEXT

- 19 Before moving on to look at a drought policy for Namibia, this Chapter summarises some of the Government's key existing Government policy statements from related areas. Although drought management effectively cuts across a very wide range of issues, the policies noted here are restricted to: (i) the reduction of poverty and food insecurity; and, (ii) improved natural resource management, both of which are crucial for mitigating the effects of drought.
- 20 The reduction of poverty and food insecurity are given prominence in a number of statements.
- The State shall actively promote and maintain the welfare of the people by adopting,

inter alia, policies aimed at raising and maintaining an acceptable level of nutrition and the standard of living of the Namibian people. (Article 95(1) of the Constitution of the Republic of Namibia)

- The national development objectives are economic growth, employment creation, poverty alleviation, and a reduction in inequality in incomes. (First National Development Plan of 1995 (NDP1))
- The overall objective of the Food Security and Nutrition Policy is to improve the food security and nutritional status. (Food Security and Nutrition Policy for Namibia of 1995 (FSNP)).
- An objective of the National Agricultural Policy is ensuring food security and improved nutritional status. (National Agricultural Policy of 1995 (NAP))
- The Government recognises that poverty and population growth are interlinked with the processes of desertification, and will support and develop programmes addressing these issues. (Namibia's Policy to Combat Desertification of 1994)
- Population Policy aims to harmonise the dynamics of Namibia's population with resource potential in order to achieve development objectives, recognising that unless the population growth rate is reduced, the well-being of future generations is unlikely to improve, and the environmental support system will be further degraded. (Namibia's Population Policy of 1996)
- Government policy will at all times seek to secure and promote the interests of the poor, ensuring that they are in practice able to enjoy the rights of which they are assured in principle. Special programmes to help the poor to acquire and develop land will be considered. (Land Policy Green Paper of 1997)
- The main objectives of the Government's resettlement programme include the redress of past imbalances in the economic resources, particularly land, by helping Namibians have access to land and secure tenure. (National Resettlement Policy of 1996)
- The objective of the proposed Labour-Based Works Policy is to improve living standards in a sustainable way, through increasing income generation and employment opportunities for the poor and marginalised sectors of Namibian society. (Draft Green Paper on Labour-Based Works of 1996)
- The Government is committed to implementing labour intensive public works aimed at the chronically food insecure and those vulnerable to food insecurity in times of drought. (NAP)
- Subsidies provided during natural disasters should: be short-term; not dependency creating; and, promote self-reliance. (NAP)
- The Government will consolidate and strengthen food commodity surveillance and reporting systems, and the national drought management capacity. (NAP)
- The Government recognises that drought is a normal phenomenon within arid ecosystems and there is a need to develop mechanisms to reduce vulnerability to drought. (NAP)
- The Government will provide adequate budgetary allocations to deal with the occurrence of drought. (NAP)
- The Government will provide effective social security and nutrition safety nets (FSNP).

21 Sustainable natural resource use is emphasised in a number of statements:

- The State shall actively promote and maintain the welfare of the people by adopting, inter alia, policies aimed at maintaining ecosystems, essential ecological processes and biological diversity and utilising living natural resources on a sustainable basis for the benefit of Namibians. (Article 95(1) of the Constitution of the Republic of Namibia)
- Policy will promote the sustainable and equitable use of land and renewable natural resources in keeping with Namibia's variable climatic conditions. (Namibia's Policy to Combat Desertification of 1994)

- Essential water supply and sanitation services should be made available to all Namibians on an environmentally sustainable basis. (Water Supply and Sanitation Policy of 1993)
- Agricultural growth should not be at the expense of the environment. Land use options must be compatible with the country's fragile eco-system. (NAP)
- Namibia's land policy will at all times promote environmentally sustainable land use. (Land Policy Green Paper of 1997)
- The Government will address the serious problems of desertification and environmental degradation. (NAP)

CHAPTER 4: A NEW APPROACH TO DROUGHT POLICY

Introduction

- 22 In the past, drought relief programmes have suffered from four major shortcomings which are addressed by this policy. First, there has been no adequate definition of drought so that drought declaration has been determined by practical experience and observation rather than a scientific process. This has resulted in frequent national drought declarations, and extensive relief programmes, when only part of the country has been affected. Second, the Government has borne the responsibility for risk management and has financed and delivered substantial relief programmes during drought. This has discouraged farmers from adopting risk minimizing farming practices. Third, a number of drought programmes, like the fodder subsidy, have led to unsustainable farming practices. Finally, vulnerable group food distribution programmes during drought have been inefficient, poorly targeted, and of limited impact in ensuring household food security.

Drought policy objectives

- 23 The eight objectives of the drought policy are to:
- i. ensure that household food security is not threatened by drought;
 - ii. encourage and support farmers to adopt self-reliant approaches to drought risk;
 - iii. preserve adequate reproductive capacity in livestock herds in affected areas during drought periods;
 - iv. ensure the continuous supply of potable water to communities, and particularly to their livestock, their schools and their clinics;
 - v. minimise the degradation of the natural resource base during droughts;
 - vi. enable rural inhabitants and the agriculture sector to recover quickly following drought;
 - vii. ensure that the health status of all Namibians is not threatened by the effects of drought;
 - viii. finance drought relief programmes efficiently and effectively by establishing an independent and permanent National Drought Fund.

A new approach

- 24 Namibia's new drought policy is concerned with developing an *efficient, equitable and sustainable* approach to drought management. In line with Namibia's National Agricultural Policy, it is recognised that variable and low rainfall is normal. As such, like all businesses, farmers must take into account the risks associated with variable input and output prices, exchange and interest rates, and weather conditions. Given that years of low rainfall frequently occur, the development of farm management practices that take into account the country's known rainfall patterns need to be adopted. Although this may prove more difficult for communal-tenure than private-tenure farmers, it is no less important or desirable.
- 25 The policy is concerned with shifting responsibility for managing drought risk from the Government to the farmer, with financial assistance only being considered in the event of an extreme or >disaster= drought being declared. The thrust of the policy is a move away from regular financial assistance to large numbers of farmers to measures that support the on-farm management of risk. The Government's involvement with drought will move beyond an exclusive focus on emergency drought programmes to a broader, longer term perspective.
- 26 The policy draws a clear distinction between food security interventions to meet needs resulting from drought and poverty-related food security intervention. In future, vulnerable group food distribution programmes, food or cash for work and school feeding programmes will continue in normal years to meet the needs of those identified as extremely poor and totally dependent on the Government for their survival. In times of declared disaster drought these food security interventions will be extended according to determined needs.
- 27 A disaster drought refers to drought conditions so intense and protracted that they are considered beyond the bounds of what may reasonably be countered by normal risk management practices. Farm management will be considered, within the context of the prevailing farming system, recognising, for instance, that open grazing systems severely constrain the ability of farmers to manage their natural resources, as one criteria for determining eligibility for relief assistance. Adopting this approach, along with extension advice and possibly specific incentive programmes, will serve to promote improved farm management practices, including the taking of initiatives to mitigate the effect of drought, such as developing perennial grass cover and stockpiling of fodder. In addition, the funding of drought relief programmes will in future be provided by contributions to a National Drought Fund made by farmers themselves, and agriculture-related industry, together with the contribution of the Government.
- 28 The principal elements of the policy are:

i. An objective definition of drought

In the past, drought was defined according to the situation of agricultural or water resources, and tended to include what will, from now on, be considered low rainfall occurrences which should be acceptable given proper normal risk management practices. Scientific criteria for estimating the extent and severity of drought, and for defining what constitutes an extreme rainfall event, or >disaster drought=, in the Namibian context have been developed. As noted above, disaster drought refers to drought conditions so intense or protracted that they are beyond what can reasonably be dealt with in terms of normal risk management practices, and which justify State intervention. A workable definition is presented in Annexure 1 of this document which will see a disaster drought occurring in a particular area in one year in fourteen on average. It is a far stricter definition of drought, based on the extremity of the rainfall event and the history of resource management in an particular area, than has hitherto been applied. Cabinet will be advised to declare drought only when this event occurs. In addition, in a move away from the declaration of national drought emergencies, Cabinet will

be advised on the precise geographic area to which the >disaster drought= declaration, and the accompanying assistance measures, are to be applied.

ii. A shift in the role of the Government

In support of the eight objectives outlined in paragraph 23, the role of the Government under the policy will be to:

- finance and manage targeted income transfer programmes to support household food security in times of disaster drought;
- reorient long term development programmes in favour of poverty reduction as a means of mitigating the effects of drought;
- help farmers manage drought-induced income variability and reduce vulnerability to drought in the longer term through promoting the adoption of drought mitigating farming practices and the diversification of income generating activities;
- provide limited financial assistance to farmers in disaster drought years through the National Drought Fund;
- ensure that short term relief programmes in times of disaster droughts, and long term strategies support sustainable natural resource use under conditions of climatic variability; and,
- draw up and implement appropriate post-disaster drought recovery and preparedness programmes.

iii. Farmers assuming the main responsibility for drought management

The role of the farmer will be to:

- manage agricultural activities in an economically and ecologically responsible manner and in a way that takes low rainfall, crop and grazing production, and consequent income variation into account;
- develop ways of reducing vulnerability to drought in the longer term; and,
- contribute in normal rainfall years towards the cost of financial assistance during times of disaster drought.

iv. A clear role for assistance in times of disaster drought

Drought assistance will only be provided in an extreme drought. Farmers, and the farming-related industries will be expected to contribute to a drought fund in favourable years so that they do not become dependent on the Government hand-outs. However, public funds will need to be mobilised for targeted programmes to prevent drought induced declines in food security. Food insecurity resulting from chronic poverty rather than drought induced income shocks, will be addressed through long-term poverty reduction and targeted safety net programmes.

- 29 In the following three chapters, key elements of the policy are elaborated: programme options for disaster droughts; measures to enable farmers to smooth farm income in the face of drought; and longer term measures to reduce vulnerability to drought and preserve the natural resource base.

CHAPTER 5: FUTURE DROUGHT ASSISTANCE

Introduction

30 As outlined in the previous chapter, drought assistance will only be provided when a disaster drought is declared. In this section, the Government's strategy, including a range of programmes and related plans of action, is presented. Programmes are divided into those that support food security, livestock farmers, crop farmers, and water supply services. Because of the different needs and opportunities of the communal-tenure and private-tenure farming sectors, programmes are presented separately for these two groups. The adoption of new land tenure legislation in communal-tenure areas may require that this approach is amended.

Food security

31 The two main types of programme used by the Government to support household food security during past droughts have been vulnerable group food distribution and food-for-work. In future, these two programmes will continue to be the basis of support to food insecure households but with several important revisions.

i. Vulnerable group food distribution programme

32 Under the vulnerable group food distribution programmes in the past, free food was distributed to specific groups during drought periods. These groups included individuals living in households with no source of income, including children aged five years and under, pregnant and lactating mothers, people over 60 years of age, mentally and physically handicapped persons, and persons certified as malnourished by hospital or clinic staff. In practice, there has sometimes been reluctance at the local level to distinguish between households with and without income, as required. Although programmes were financed from the Government and donors, delivery has been contracted out to NGOs.

33. Evaluations of vulnerable group food distribution in Namibia have revealed several major problems. **First**, the administrative and logistical difficulties of purchasing and distributing large amounts of food has meant that eligible households have not received food on time or in sufficient quantities, and that considerable funds have been spent on overheads at the expense of transfers. **Second**, the appropriateness and quality of some food items provided has been questioned. **Third**, over-registration has meant that the programme has been poorly targeted. This has arisen because efforts to distinguish between the poor and the non-poor households in some drought affected areas have been inadequate. **Fourth**, there has been concern that food has gone rotten or missing in transit. **Fifth**, there is a suspicion that food aid in general has a negative influence by creating dependency amongst beneficiaries, and by damaging private sector food retailers. In short, the Government and NGOs have not been able to manage and deliver efficient food distribution programmes in time of drought. It is therefore time to change to programmes that are easier for the Government to manage efficiently and effectively.

34. Unlike many other sub-Saharan African countries, Namibia has efficient food markets. In time of drought, the private sector imports food and it is readily available in retail outlets in most areas. Surveys indicate that in many parts of the country, particularly in the south, retail stores are normally the single most important source of food for most families. In addition, food prices have not increased markedly during past droughts. It is therefore proposed that the distribution of free food to vulnerable groups be phased out as a method of supporting the food insecure during drought, except in those areas of the country where there are no food markets. It will be replaced, after pilot testing, by a system of food vouchers which vulnerable households may exchange in retail outlets for designated food items. It is important that the transition from food to food vouchers is carefully managed and that it is not hurriedly introduced in the face of the next disaster drought. Ideally, an appropriate mechanism should be identified well in advance of the next drought programme. International donors, who often prefer to provide drought assistance in the form of food items will be

sensitised as to the Government's change in approach, and will be requested to provide financial assistance either directly, or in the form of food which may be monetised by the Government on condition that this is not disruptive of private sector operations.

35. The advantages of this approach are threefold. First, because overheads involved in a food voucher scheme will be lower, it is a more efficient form of transfer. Second, because it will be administratively and logistically easier to handle than large amounts of food, it will free up emergency management staff to concentrate on the critical issue of improving the targeting of needy beneficiaries. Third, and most important, it should mean that vulnerable households receive transfers on time.
36. With respect to the targeting of vouchers, the criteria for identifying the vulnerable will be amended. Children aged up to and including six years old in households which have no income will be considered vulnerable. An additional category of beneficiaries will be orphans aged six years and below.
37. In addition, the problem of over-registration is to be addressed. Under future programmes, significant effort will go into ensuring that only the poor and vulnerable in drought declared areas will be entitled to vouchers. In other words, food vouchers will be given out to vulnerable groups in drought declared areas, but only to the poor. For example, the children of parents who have adequate income and are not food insecure will no longer be provided with assistance. The Government will make a clear statement to communities and local politicians that the wholesale distribution of food to individuals, irrespective of whether they are food insecure, is a waste of scarce public money. When transfers are not properly targeted, as currently, they are in effect being denied to those in real need.
38. Once the Emergency Management Unit (EMU) and NGOs are freed from the task of procuring and distributing food, attention can be turned to pilot testing new and improved ways of targeting those in most need. This could involve contracting NGOs to work together with communities to develop simple and effective ways of screening out the large number of individuals who should not qualify for vulnerable group food distribution. One way of doing this would be to provide NGOs and communities with sufficient vouchers for only a certain percentage of the population who would be defined as needy. This could be determined on a Regional or Constituency basis according to a vulnerability map for the country (see paragraph 85). It would then be up to the community, with support from NGOs, to work out an acceptable method of identifying and registering the poorest.
39. It is also intended to establish whether there is a link between food aid (including free food, food-for-work programmes and school feeding programmes) and disincentives to surplus farm production and marketing over the long term. It is also necessary to develop concrete plans to ensure that vulnerable population groups do not become dependent on food aid.
40. In sum, the policy with respect to vulnerable group food distribution in drought periods includes:
 - the phasing out of food transfers;
 - the pilot testing and introduction of food vouchers;
 - the pilot testing of new NGO/community methods of targeting the poor and vulnerable;
 - and

Plan of Action

1. The Emergency Management Unit will contract local non-governmental organisations to implement pilot voucher-based food distribution systems in various strategically identified

areas. These pilots would explore logistical and institutional arrangements to see whether a voucher system would be feasible, more cost-effective, and would serve all of the target group. Specific issues to be considered include: how food vouchers will be issued to beneficiaries, where they can be redeemed (all shops or only authorised shops), whether target groups have access to shops, the value of the voucher, the extent to which local monopolies might distort the value of vouchers, a monitoring system to ensure that vouchers are being exchanged for food, how to guard against fraud and theft, and how to effect speedy payment of retailers. The possibility of issuing vouchers to an intermediary institution such as a CEMU or VEMU or a non-governmental organisation, who would be responsible for acquiring food from local retailers and distributing it, will also be considered. This may reduce fraud, and provide for people who do not have access to local food markets. Lessons learned from planned pilot tests of voucher-based food distribution systems in the Hardap and Omusati Regions, which are being coordinated by the Division of Rural Development Planning of the Ministry of Agriculture, Water and Rural Development, as well as international experience in undertaking such schemes, will be considered in designing the systems to be piloted. A project description for the above mentioned activities being undertaken by the Division of Rural Development Planning is to be found in the National Food Security and Nutrition Action Plan (Action Profile D2).

2. The Emergency Management Unit will contract a local non-governmental organisation with established research credentials to conduct a nationwide survey to identify, in conjunction with established REMUs, CEMUs and VEMUs, those rural areas where retail outlets would be unable to respond to the demands of a voucher based food distribution system.
3. The National Planning Commission will inform the international donor community of its new approach to assisting vulnerable groups during drought emergencies, and seek their support for it.
4. A national programme will be drawn up, based on successful experience of the pilot schemes. This will include details on issues such as targeting of beneficiaries, the use of national household food security vulnerability maps, the role of the REMUs, CEMUs, VEMU, and non-governmental organisations in implementation of the scheme, and the role of the EMU in providing public information, and in coordinating, training, and monitoring the scheme.

ii. Food- and cash-for-work

41. In past droughts, food-for-work projects have been set up to provide employment opportunities for the able-bodied. The able-bodied are ineligible for vulnerable group food distribution and are therefore dependent on employment schemes for assistance. In theory, employment programmes are an effective form of transfer in that, if wage rates are set at sufficiently low levels, then only the poor will want to participate. At the same time, useful community infrastructure may be created that can, if carefully designed, reduce communities' vulnerability to drought in the longer term.
42. Like vulnerable group food distribution, evaluations have shown that implementation of food-for-work has been hampered by a number of problems. First, it has only reached a fraction of the able-bodied population because it has been difficult to rapidly scale them up to the necessary level when drought is declared. Second, food has frequently not been available to pay workers on time. Third, targeting was not effective - for instance free equipment given out on projects resulted in the wealthy participating.
43. Although Namibia has an unsatisfactory record in implementing emergency employment projects in the past, they can still form an important part of a drought relief programme if a number of changes are made. First, food will be replaced by cash wages or vouchers which will make programmes easier to administer. Second, the Government's capacity to direct the programme will be strengthened through increasing the levels of decentralised responsibility

for projects, and through contracting a broader range of institutions, including the private sector to manage and deliver projects on behalf of the Government. Third, remuneration rates will be set carefully so that only the poor will have an incentive to participate, while at the same time ensuring that their needs are met. Fourth, cash-for-work will be continued in non-drought periods as part of the country's social safety net for the poorest. In time, sufficient local capacity to manage cash-for-work will be built up. In addition, the institutions undertaking these projects will be contracted to identify in advance a range of projects that can be rapidly implemented in time of drought.

44. In sum, the policy with respect to drought employment programmes includes:

- a change from food to cash as payment;
- the contracting of a wider range of institutions to manage programmes;
- the maintenance of cash-for-work in non-drought years; and,
- the scaling-up of the programmes in time of drought.

Plan of Action

Institutional and financial arrangements.

1. Establish institutional capacity at the national level to develop a permanent cash-for-work programme. Ultimately this should reside in an agency charged with an overall poverty reduction programme. For the time being it should remain in the Division of Rural Development Planning of the Ministry of Agriculture, Water and Rural Development. As such, special funding should be allocated to the Division in recognition that the programme, being a cross-sectoral one, does not fall squarely within the Ministry's core mandate. Additional staff to direct the programme at both the national and regional levels will be budgeted for and recruited.
2. Ultimately, responsibility for implementing cash-for-work or voucher programmes should be transferred to Regional Development Committees.

Programme design

3. Review experience of the cash-for-work project planned in the Otjozondjupa Region, and for cash or coupons for work being piloted in Hardap Region in 1997. In 1998, implement further pilot projects in different areas of the country to test various implementation details (including guidelines for targeting the needy, wage rates, payment systems, systems of individual project design, the involvement of line Ministry staff, involvement of non-government organisations, financial management systems, and materials supply systems).
4. Design a long-term, national cash-for-work programme in such a way that it can be scaled up in times of drought.
5. Prepare, on a Regional basis, an inventory of labour-intensive projects that could be added to an on-going public works programme in times of a drought emergency. Preference should be given to projects which contribute towards long term drought mitigation including, for example, agro-forestry and forestry projects, the construction and maintenance of rural feeder roads, and water supply infrastructure for human and livestock use and for small scale irrigation.

iii. School feeding programmes

The Namibian School Feeding Programme is currently operating in over 600 schools nationwide and is funded by the Ministry of Basic Education and Culture. In 1997 it aims to provide 33% of a child's daily energy requirement to approximately 100,000 primary school children. It also supports community-based pre-primary schools on request. Beneficiaries are selected by school boards and teachers according to suggested criteria. The Programme is believed to have contributed significantly to improving the nutritional status of beneficiaries, to have encouraged attendance at schools, and to have promoted community participation in educational affairs through parents= committees which operate the Programme. The Namibian School Feeding Programme is considered an effective and efficient mechanism for targeting the needy, and, in future, the Programme will be used to provide additional nutrition to those children in drought affected areas. During these drought periods, the number of children who are receiving school meals, as well as the ration itself, will be increased according to requirements to be determined under the auspices of the Regional educational authorities. The Ministry of Basic Education and Culture will be supported in budgetary terms by the National Drought Fund for the additional drought-related expenditures that are incurred.

Plan of Action

The Division: Inspectorate and Hostels Management of Hostels of the Ministry of Basic Education and Culture will draw up contingency plans for the expansion of the school feeding programme on the declaration of drought in specific areas. Such plans will include mechanisms for determining the degree to which the programme should be expanded in particular areas.

iv. Health programmes

Drought results in food and clean water shortages which can significantly decrease people's immunity to infections, and increase the risk of outbreaks of communicable diseases including meningitis, measles, pulmonary tuberculosis, and diarrhoeal diseases including dysentery and cholera, as well as vitamin deficiency diseases such as night blindness. To combat this threat, the Ministry of Health and Social Services will continue its efforts towards expanding the capacity needed to deal with health issues at both the institutional and community levels. This will involve continuous training of health personnel, the provision of health education to communities, drought-related disease prevention, and the procurement and distribution of drugs to respond to the threat of communicable disease in specific areas, especially in drought affected areas. The provision of food from the vulnerable group food distribution programme to needy discharged patients, as currently occurs, will be replaced with the provision of vouchers in areas where food markets are deemed adequate. The mechanism of identifying the needy will in future be better synchronised with the responsible local authorities.

Plan of Action

The Ministry of Health and Social Services will coordinate with Emergency Management Unit at the national level and jointly establish a protocol detailing procedures for the identification of those patients seen at or discharged from health institutions who require assistance.

Livestock programmes

45. During past drought relief programmes, a central component has been support to livestock owners through a range of programmes. These have included fodder and lick subsidies, a marketing incentive scheme, and support to transport cattle and lease grazing. The question of

the opening up of new grazing areas by providing water supplies is noted in paragraphs 57 and 58.

46. Under the policy, fodder and lick subsidies will be terminated because they run counter to two of the objectives of the drought strategy. Firstly, the expectation that the Government will provide a fodder subsidy discourages farmers from building up forage reserves and thus undermines the objective of encouraging farmers to take on responsibility for managing risk. Second, it encourages farmers to retain excessive stock numbers rather than market them as a precautionary risk management measure, causing rangeland degradation through overgrazing.
47. In principle, the livestock marketing incentive scheme will continue to be applied during disaster droughts. Under this scheme, farmers are paid an incentive for every livestock unit that they sell up to certain limits. The scheme has a major advantage over the fodder subsidy in that it encourages farmers to reduce the number of livestock on the range. However, this scheme, which operated in previous droughts, has never been the subject of an independent evaluation. Before adopting the scheme as a permanent feature of Namibia's drought policy a careful evaluation should be undertaken of its impact. The same applies to the support for farmers to transport livestock and the lease of emergency grazing. An evaluation needs to establish the impact of these programmes before they can be fully endorsed. After further study, the Government will also consider subsidising transport to abattoirs and quarantine camps. In addition, the Government may consider support to commercial dairy producers, and to game producers in the form of a marketing incentive. The Fund could also be used to finance loans to farmers at subsidised rates to help them get through drought. Assistance will be provided to zero-grazing livestock production enterprises when fodder prices rise significantly due to drought, according a formula and mechanisms to be established by the National Drought Fund.
48. In future drought assistance will only be provided to those farmers implementing sustainable farm management practices. Farmers whose poor pasture is the result of poor management practices, such as overstocking, may not be provided with drought relief assistance. In assessing management practices full cognisance will be given to the constraints to good land management which result from non-exclusive, insecure communal tenurial arrangements.
49. In support of livestock marketing the Government will actively explore the establishment of savings facilities in the rural areas to enable farmers to deposit the money they earn from selling their livestock, and to earn real rates of interest on it. During times of emergency stock sales caused by drought, consideration will be given to linking the provision of marketing incentives with some form of guarantee of post-drought restocking. An agency could be appointed to carry out this function, retaining revenue earned from the sales and organising the re-purchase of animals at the value of the sales revenue, plus interest, once the drought has broken.

Plan of Action

The Directorate of Planning of the Ministry of Agriculture, Water and Rural Development will conduct a number of studies to evaluate the effectiveness of the targeting of, and to assess the environmental impact of the 1996/97 Livestock Marketing Incentive Scheme, and support for transport to and the lease of emergency grazing, and make specific recommendations as to how these schemes can be improved. These studies will be undertaken initially within the constraints imposed by a lack of base line data. At the same time, preparations will be made to undertake comprehensive evaluations of future relief activities.

In addition, it will carry out feasibility and appraisal studies of subsidising transport to markets and quarantine camps in times of drought, and of establishing a special savings and investment facility for income earned from the emergency sale of stock, which could ultimately be used for

restocking.

It should also be noted that the Ministry of Agriculture, Water and Rural Development is, on the instructions of the Cabinet, currently studying the feasibility of implementing a voucher-based transfer scheme to support poor livestock farmers. Such a scheme may also provide a mechanism for providing assistance in times of drought.

On the basis of the above studies, the Ministry of Agriculture, Water and Rural Development will draw up contingency plans for support to livestock farmers in the event of future disaster droughts. In addition, a National Programme on Drought Awareness will be implemented to provide public information on the Government's drought policy, and its planned drought relief and mitigation measures.

50. In sum, the policy with respect to livestock assistance will include:

- the discontinuation of fodder subsidies;
- the continuation of the marketing incentive scheme in times of declared disaster drought; and,
- the consideration of various new assistance provisions including support of transport to abattoirs and quarantine camps, to dairy and game producers, to zero-grazing livestock production enterprises, and the use of subsidised loans.

Crop programmes

i. Communal-tenure farmers

51. In the past, in addition to the household food security programmes outlined above, communal-tenure crop farmers have been provided with free seed for the new planting season. There are two drawbacks with the scheme in its present form. First, there is always the danger with the direct distribution of agricultural inputs that local markets will be disrupted or undermined by the programme. Second, there was little attempt to target the scheme to poor and vulnerable households.

52. It is therefore proposed that the direct distribution of seeds be discontinued and replaced by a drought recovery input voucher scheme. The Government will ensure that a workable targeted input voucher scheme is introduced as a matter of priority. With respect to post-drought recovery, the most efficient measure that the Government could take would be to increase the value of the voucher for the cropping season following the declaration of drought. At the same time, the Government will encourage and support the development of private sector seed production and distribution capacity, and will be responsible for ensuring the maintenance of an adequate reserve of seed to meet emergency needs nationally. The development of an efficient supply system to ensure availability and accessibility of seeds, and of a voucher scheme to ensure affordability is considered preferable to free seed hand-outs. In addition, communal-tenure farmers who have proven expenses related to commercial level crop production, and who experience crop damage during disaster drought, may be assisted either by paying out crop damage subsidies, by providing subsidised loans, or by deferring loan repayments.

ii. Private-tenure farmers

53. In the past, private-tenure farmers have benefited from fully Government funded crop insurance in the form of a sliding-scale crop damage subsidy on maize. The main drawback from this type of programme is that it inevitably encourages the large-scale cultivation of

maize in areas which may be more suitable to other crops or to livestock farming. Farmers will continue to grow maize if they know that the Government will pay out subsidies for crop losses. Although the extension of the scheme to other crops may discourage the production of maize in marginal areas, it may also have the effect of encouraging the cultivation of other crops which are not drought resistant.

54. Under the new drought policy the Government will support private-tenure crop farmers who experience crop damage during disaster drought by paying out crop damage subsidies, by providing subsidised loans, or by deferring loan repayments. Mechanisms will be investigated for extending the scheme to a number of crops deemed suited to particular growing areas.

Plan of Action

The Ministry of Agriculture, Water and Rural Development was mandated by the Cabinet in 1995 to establish an input voucher scheme to support poor farmers in acquiring agricultural inputs and services. The feasibility of this scheme is currently being assessed by consultants. Following this assessment the Ministry will ensure that a workable scheme is planned and introduced, supported by adequate implementing capacity, as a matter of priority. The scheme will be designed in such a way that it can be upgraded in terms of the value of the grant provided in the cropping season following the declaration of a disaster drought.

The Ministry of Agriculture, Water and Rural Development, through its Agro-ecological Zoning Project, will determine the crops suited to particular agro-ecological zones. This will take into account the definition of what constitutes a disaster drought, as given in Annexure 1. In other words, crops will only be recommended for a particular area if their production is considered commercially viable, without drought relief assistance, in years not subject to disaster droughts as defined. At the same time, mechanisms for assessing the areas of non-controlled crops that are planted and lost due to drought will be established.

In addition, the Ministry will implement a National Programme on Drought Awareness to provide public information on the Government's drought policy, and its planned drought relief and mitigation measures.

55. In sum, with respect to crop farmers, the policy includes:
- the replacement of free seed distribution with targeted input vouchers for small-scale communal-tenure crop farmers, as and when the capacity of private sector retailers is adequate in a particular area;
 - the provision of support to private-tenure crop farmers, as well as communal-tenure crop farmers who proven expenses related to commercial level production, for drought induced losses to crops deemed suited to particular growing regions.

Water supply schemes

56. In the past, water supply schemes initiated in response to drought have proved inefficient means of meeting emergency needs in a number of respects. The provision of emergency funding after the declaration of drought in the following dry season made it difficult to complete the implementation of emergency schemes in time to alleviate hardship when needed before the onset of the next rainy season. This problem was exacerbated by the diversion of scarce resources to implement water supply schemes, also initiated under drought relief programmes, which were not aimed at contributing to immediate drought relief needs. In such instances, drought was used as an opportunity to initiate long term rural water supply

development programmes.

57. Overstretching the capacity of both the Directorate of Rural Water Supply, charged with drought programme water scheme management and supervision, and the private contractors and suppliers, charge with implementation, also resulted in the wastage of scarce resources and the development of water infrastructure of substandard quality. The rushed implementation of emergency water supply schemes and the practice of carrying out long term water development programmes using drought relief provisions, tended to cause normal planning and implementing procedures to be partly dispensed with. Poor planning and coordination of water supply development also encouraged unplanned permanent settlement and grazing in some areas previously used seasonally. While such schemes were usually planned as temporary measures, in practice it has proved impossible to cut off supplies when droughts were over. Bad planning was also partly responsible for enabling the fencing-off of boreholes established under drought relief schemes in communal-tenure areas by wealthy individuals.
58. In future, emergency water supply schemes financed by using drought relief provisions will be based on identified needs and prioritisation using established procedures involving Water Point and Regional Water Committees. Powerful individuals should not be allowed to interfere with these procedures. Emergency water supply schemes should be designed by technicians to complement long term water development goals and strategies. For instance, boreholes should not be repeatedly drilled in areas where it is known that ground water will not contribute to solving the area's water needs. At the same time, to ensure the widest possible response to emergency needs in the shortest time, only the minimum requirement for water supply should be provided. The development of emergency water supplies to open up new grazing areas, either on a temporary or permanent basis, should only take place in close cooperation with range and environmental management specialists, as well as the beneficiaries themselves.
59. Long term water supply development projects, which do not also meet emergency needs in the required time frame, will not be undertaken under the guise of drought relief measures. In other words, only when identified and already prioritised long term development projects also meet emergency needs will they be undertaken as drought relief measures. Those already planned and designed or partly designed projects included in the first National Development Programme reckoned to meet emergency needs will form the core of these activities. Also, where an existing water supply has dried up, or yields declined, a replacement water supply scheme, which might be considered work of a long term nature, may be undertaken as a drought relief measure.
60. The speedy release of finance for emergency water development programmes from the National Drought Fund, and early declaration of drought in specific areas, will in future improve the timeliness of water supply scheme implementation. Equally, resources will be provided to the Department of Water Affairs on its normal budget to enable it to design emergency water supply schemes pro-actively. Such emergency schemes may then be immediately activated in the event of a drought in a particular area.
61. Emergency water supply using water tankers has been estimated to be about 5,000 per cent more expensive than pipeline or borehole supplies in Namibia. It is essential that in future water tankers be used only as a last resort, and for human consumption only. Furthermore, communities should be made aware that, in future, the use of water tankers is a strictly temporary measure which will be discontinued as soon as the drought has been declared over.
62. Several measures provided for in the National Water and Sanitation Policy will also serve to improve Namibia's ability to cope with drought. For instance, in future significantly greater resources will be allocated to water supply maintenance services. Proper infrastructure

maintenance will limit breakdowns which can become emergencies during drought periods when alternative supplies are not available. It is also important to stress that, as is the case with normal water supply schemes, the construction of emergency schemes will make use of community labour, which in the case of community owned infrastructure will be provided free of charge. Such participation enhances empowerment and results in a sense of ownership of and caring for the infrastructure in question. Only when bulk water supply schemes are constructed will community labour be paid for.

63. In sum, the policy with respect to emergency drought relief water supply programmes includes:
- basing emergency water supply programmes on the identification of needs by Water Point and Regional Water Committees through established procedures;
 - planning and designing emergency schemes pro-actively so as to enable immediate implementation when needed;
 - ensuring emergency schemes are designed to complement long term development goals and strategies;
 - financing emergency schemes from the National Drought Fund to ensure timely implementation;
 - terminating the practice of initiating rural water supply development schemes as part of drought relief measures which do not contribute to meeting immediate drought relief needs.

Plan of Action

The Directorate of Rural Water Supply of the Ministry of Agriculture, Water and Rural Development will prepare guidelines for Water Point Committees and Regional Water Committees to identify pro-actively water supply schemes which may be implemented in the event of drought related emergencies. Various potential drought related emergency scenarios, including possible infrastructure breakdowns, will be considered, and prioritised in terms of likelihood of occurrence, by each of the above mentioned committees.

Having received information on identified potential emergency response schemes, the Directorate of Rural Water Supply will plan and design an inventory of projects to meet potential emergency needs. Resources for planning activities will be provided for under the normal Departmental budget. Planning will be carried out in cooperation with the potential beneficiaries themselves, and, in the case of water supply schemes designed to open up emergency grazing, with range management specialists of the Ministry of Agriculture, Water and Rural Development, and environmental specialists of the Ministry of Environment and Tourism. These project plans will be updated as needs be.

In the event of a drought related emergency in a particular area, the Directorate of Water Affairs will seek funding for these projects from the National Drought Fund, and commence implementation as soon as possible. It may be necessary for the Directorate to divert human resources from on-going development schemes to manage and supervise emergency schemes.

CHAPTER 6: REDUCING LONG TERM VULNERABILITY TO DROUGHT

Introduction

64. The Government recognises that drought is a recurring phenomenon, and hence that there is a

need to develop mechanisms for reducing vulnerability to drought. Under the policy, instead of financing regular large-scale drought relief programmes, the Government will examine ways to support individuals and communities in long term efforts aimed at the reduction of vulnerability to drought, the management of drought, and recovery from drought. The strategy components noted below should therefore be regarded as development initiatives aimed at promoting sustainable rural livelihoods and reducing and ultimately removing reliance on external assistance which constitutes a significant drain on the Government's resources.

65. Whilst it is not possible to spell out specific programmes at this stage, possible activities can be grouped around the two headings: promoting drought mitigating technologies and practices, and creating an enabling policy and service environment. While the strategy outlined below is designed with the object of drought mitigation in mind, it will also contribute towards the attainment of several other objectives, notably ensuring the sustainable use of natural resources, poverty alleviation, and ensuring food security.

Promoting drought mitigating technologies and practices

On-farm risk minimization

66. There are a number of ways that the Government will support on-farm risk minimisation. Crop diversification is one of the most important, and needs to be backed up by increased attention to early maturing and high value crops, particularly for smallholders. Likewise, attention will be given to indigenous and other livestock breeds adapted to aridity, and the development of animal feeds from local products. The options for water-conserving farming and agro-forestry methods, which have been neglected to date, will also be examined, along with other means of improving soil fertility and moisture retention capacity. Other issues which the Government has so far not given attention to, and to which it will do from now on in terms of drought mitigation efforts, include small-scale irrigation, rainwater harvesting, and improved post-harvest technologies. The promotion of appropriate small holder cultivation practices such as the use of animal traction, cultivators and dry seeding is important for making maximum use of available soil moisture and will continue to receive sustained Government support.
67. Closely related to a reduction in vulnerability to drought is the development of sustainable rangeland management practices. With respect to the communal-tenure areas, several major issues need to be addressed. Firstly, the improved distribution and management of the existing livestock populations needs to be supported. This can be approached through securing exclusive grazing rights, strategic water development, the application of appropriate range management systems, improving animal husbandry practices, and the development of crop-livestock linkages. Secondly, the unsustainable increase in the livestock population, the control of which depends on Government policies on land tenure and cost sharing to provide the necessary incentives. In both communal and private tenure areas, the Government can also promote the accumulation of fodder reserves for utilisation during drought years, and it can demarcate and fence reserves for emergency grazing purposes. Support for tackling bush encroachment also needs to be considered.

Diversifying income sources

68. For both communal-tenure and private-tenure farmers, diversifying income so as to reduce dependence on rain-fed agriculture is an important goal. In the long run, this requires the successful implementation of a labour demanding growth strategy at the national level. At the farm level, the Government will look into ways that it can support farmers to move into new activities like wildlife management, tourism, charcoal production and small secondary industries. Such support may take the form of soft loans and specific investment incentives. In addition, measures which currently inhibit farmers from becoming involved in these

enterprises, including legislation restricting farm-based tourism, will be considered. In addition, Government policies with respect to rural employment will be implemented vigorously, particularly regarding micro credit, and small and medium enterprise development.

Improved food and nutrition practices

69. Increasing the resources available to poor households, in order to improve their access to food during drought periods, can only be achieved in the medium term. Assistance is also required to enable families to make the best use of the resources available to them. Through information campaigns, the use of formal and informal education systems, and extension activities, the Government will promote improved food storage and preservation methods, good nutritional practices, particularly for children and pregnant and lactating women, and improved health and sanitation practices. The implementation of strategic food reserves should start at the household level. At the national level the private sector will be encouraged to keep enough food in stock to act as a reserve, and to maintain efficient arrangements with food importers. The Government will only intervene during periods of food shortages and in remote areas where the private sector is unable to meet needs.

Water supply and demand management

70. The sustainable use of water supply can be enhanced by a number of management practices, the application of which will in future be expanded. For instance, the conjunctive use of different water sources (such as ground water, ephemeral surface water recycled water and perennial rivers) to form a supply network, can be designed so that the yield of the system is more sustainable than is the sum of its component parts. Aquifer management, recognising that ground water in arid environments cannot yield more water than that which is replaced by rainfall, and based on conservative estimates of long term sustainable yield, must be strictly applied. The use of non-conventional water sources including the reclamation of sewage water and the desalination of brackish ground water or sea water, as well as techniques such as rainwater harvesting, weather modification and fog harvesting, have all been successfully investigated and their implementation will be supported.
71. Water demand management strategies such as water conservation measures, water awareness campaigns, and punitive water tariffs for heavy water consumers, are important means of increasing the consumption efficiency, and hence limiting demand from primary sources. In addition, specific regulations can be used to promote the responsible use of water resources by farmers.

Creating an enabling policy environment

Decentralisation

72. Decentralisation of decision making authority over land management and other development issues is recognised as an essential element in support of sustainable resource management. The Government intends to pursue its Decentralisation Policy as a matter of urgency. This will, in turn, facilitate the development of the institutions of civil society in general in the rural areas, and thus promote greater self-reliance in economic and natural resource management issues generally. For example, successful drought mitigation programmes will rely heavily on farmers' initiatives and involvement through farmers organisations, cooperatives, and other non-governmental organisations.

Land user rights

73. Linked to the issue of decentralisation is that of the administration of State owned,

communally managed land and associated resources. The establishment of land user rights, including the right to inherit land, to be administered by Regional and sub-ordinate local Land Boards, will give land-users control over their natural resources and enable the development of strategies to enable them better to withstand drought. In particular, the role of conservancies needs to be investigated further in this regard.

Poverty reduction

74. In the long run, the alleviation of poverty is the most effective way of ensuring that food insecurity does not result from drought. Countries like Australia are regularly threatened by drought but no sections of their populations are faced with hunger and famine.
75. At present, although the Government has undertaken many poverty-related activities since independence, it lacks a comprehensive poverty reduction strategy. As such, the status of several non-drought related programmes remains uncertain. A number of important outstanding questions need to be addressed if short-term programmes in drought years are to be effective. For example, what role will food- or cash-for-work play in non-drought years? Can such labour-based employment projects be effectively scaled-up in drought years? How will food or voucher transfers to the very poor in non-drought years be implemented? Closely linked to the issue of poverty reduction is that of family planning and population policy. The Government will vigorously pursue its population strategy with, in future, particular focus of the rural poor who find it particularly difficult to access family planning programmes.

Water consumption management

76. Water providers can respond to rising demand for water either by increasing sustainable supply or through a combination of demand management techniques. Policies are in place to ensure that the price of water and community management responsibility limits its consumption to sustainable levels. Implementation efforts will be strengthened in order to achieve the implementation of cost recovery targets.

Tax provisions

77. During good seasons, farmers increase stock numbers and cultivate more land. When rain fails, stocking rates should be reduced and less land cultivated. It is therefore critical for the Government to ensure that the country's tax system is neutral with respect to the responses that farmers make to changing rainfall. For example, the tax system should not deter farmers from destocking in times of drought, or from maximising their crop production profits in good rainfall years.
78. At present discussions are underway with respect to reform of the tax system in the context of improved drought management. Proposals include the deferment of tax on the proceeds of emergency livestock sales which are invested in the Agribank, and the return to the system of averaging of income from farming for tax purposes. It is proposed that a technical team examine carefully proposals to reform the agricultural taxation system in the interests of promoting the most efficient and sustainable use of agricultural resources in the context of Namibia's variable weather.

Agricultural research, extension and training, and veterinary services

79. Agricultural research, extension and training needs to improve not only the range of both drought resistant and high value crops and livestock breeds being made available to smallholders, but also the range of drought mitigating technologies and practices. The Ministry of Agriculture, Water and Rural Development will draw up a practical strategy which will give clear priority to drought mitigation amongst its other objectives. Internal

mechanisms are needed which will ensure that the Ministry's services give priority to the task of drought mitigation. For example, all existing Ministry agricultural development and research, extension and training projects will be reviewed and if necessary reformulated to incorporate this new focus on drought mitigation. It is particularly important that research, extension and training activities focus on drought mitigation, and special funding and human resources will be made available with this in mind.

Improved weather information gathering, analysis and dissemination

80. Information will be gathered and disseminated to enable farmers and farming communities to adjust their operations and lifestyles to better anticipate low rainfall events. The collection and dissemination of improved weather and market information has the potential to improve on-farm decision making. The Government will examine the costs and benefits of additional investment in this area.

Agricultural finance

81. The National Agricultural Credit Programme, implemented by the Agribank, aimed at the communal-tenure areas will continue to receive the support of the Government in order to consolidate its activities. Over time, its borrowers will increase in numbers, and will include a greater number of less wealthy farmers. Poorer farmers will be supported through with grants in the form of vouchers which will enable them to acquire essential agricultural inputs, services and assets. One of the keys to encouraging sustainable farming systems is likely to be the strengthening of livestock and crop marketing systems and linking them to improved savings and investment opportunities. To this end, the Government will promote the establishment of savings facilities which have an important role to play in this process by enabling farmers to deposit the money they earn from selling their livestock, and to earn positive rates of interest on it.

Agricultural marketing

82. Formal crop marketing channels in the communal-tenure areas are very limited. They will be actively promoted by the Government through specific support for commercial trading enterprises and the processing and retailing industries. Promoting increased crop production which is surplus to subsistence needs, and lowering production costs will be a continued priority focus of the Government's agricultural support services. Improved livestock marketing mechanisms are of great importance for facilitating timely stock marketing at the start of droughts, as well as for the general development of the livestock sector. Livestock marketing will be promoted in the communal-tenure areas by reducing the costs associated with marketing. This will involve the provision of more marketing points, improving feeder roads between production areas and marketing points, by reducing quarantining costs, for example through the establishment by the private sector of feedlot-cum-quarantine camps, and the removal of the Veterinary Cordon Fence through gradually improving the animal health status of the northern communal areas. The Government will also introduce disincentives to excessive livestock holdings in the communal-tenure areas, such as taxation. This will level the playing field with formal savings alternatives to livestock and also serve as an incentive for big communal-tenure farmers to move to private-tenure farms, thus leaving more land for farmers with smaller livestock holdings.

CHAPTER 7: IMPLEMENTATION ISSUES

Introduction

83. The Government's drought management policies, programmes and plans of action, as described in Chapter 5, will require the development of significant implementing capacity in three main areas: information systems, institutional arrangements and financial arrangements.

Information systems

84. One of the cornerstones of any long-term drought management strategy is an efficient and well managed information system. To prepare for and manage drought, the Government requires reliable and timely information in an accessible form on a number of indicators in order to be able to take informed decisions. Information is needed in order to provide early warning of impending droughts, and to monitor the progress of the drought and its effects. Key activities to be undertaken include the following.

Household Food Security Vulnerability Mapping

85. Regular surveillance of household food security is a complex task beyond the capacity of existing agencies. However, a National Vulnerability Map will be developed to indicate degrees of vulnerability to household food insecurity at the local level. This map will be updated periodically. This task will be the responsibility of the Food Security and Nutrition Technical Committee.

Nutrition Status Monitoring

86. Current efforts to monitor nutrition status through the health information system will be strengthened by, for instance, continuous training of health workers, and improving health information systems and community-based research. In addition, other institutions such as schools and non-governmental organisations will also be trained in nutrition monitoring and data recording. Ultimately, it is intended that nutrition monitoring should be largely community-based, rather than institution-based as currently. This will require considerable capacity building at the local level.

Rainfall recording

87. There is currently an imbalance in the capacity of different Regions and Constituencies to record rainfall and communicate information to the Namibia Meteorological Services. The network of effective rainfall recording stations will be systematically expanded in order to provide national coverage of an equivalent standard.

Weather forecasting

88. The science of weather forecasting in the southern African region is gaining ground rapidly. Forecasts from a range of sources will be monitored by the Namibia Meteorological Service and information, which is well packaged in accessible form, will be widely distributed to farmers and to the early warning system.

Vegetative growth monitoring

89. Efforts to monitor available grazing and expected and real crop yields will be continuously improved through regular training of Ministry of Agriculture, Water and Rural Development officials and through the involvement of local farmers associations. The use of selected farms or areas, whose management regimes are known, which will act as controls in the monitoring of the effects of low rainfall will be a focus of the strategy for monitoring grazing and crop production.

Agro-ecological zoning

90. Ideally, the precise definition of a drought should take a range of agro-ecological features in the area, including soil and vegetation types, relief, climatic zone and so forth, into account. Agro-ecological zone mapping will be undertaken to contribute to a better understanding of the effects of rainfall on crop and pasture growth in different areas.

Water supply services

91. Existing systems used to monitor water supply sources in dams, pipelines, boreholes and shallow wells will be maintained, expanded and augmented by information provided by Water Point Committees which have been established throughout the country to manage rural water supply infrastructure.

Drought programme monitoring and evaluation

92. The Government, in adopting clear policies and practical strategies to deal with drought as a recurring event, aims to bring its drought-related interventions into the mainstream of its activities. As such, it will subject both its emergency and long term drought programmes to public expenditure reviews which will ensure the efficient and effective use of its resources, and help determine future allocations. Its activities will also be subject to environmental impact assessment.

Declaring a disaster drought

93. The existing Namibia Early Warning and Food Information System (NEWFIS) will continue to be the focal point for gathering, analysing and reporting on drought-related matters. It will continue to expand its information gathering base wherever possible. Efforts to limit logistical and bureaucratic delays in gathering information will also continue. However, recognising that a centralised information system will be susceptible to such delays, efforts will be made to decentralise early warning information systems to the Regional level. This will demand considerable strengthening of implementing capacity.
94. Having gathered and analysed drought-related information, the NEWFIS will continue to report its findings, as it currently does, through a range of channels. It will report to the National Emergency Management Committee (NEMC) which will issue regular bulletins as disaster drought conditions approach, so as to enable the relevant institutions to mobilise themselves, and will also recommend to the Cabinet the declaration of drought emergencies.

Institutional arrangements

95. The existing institutional arrangements for handling drought related emergencies comprise the permanently constituted NEMC, which is chaired by the Secretary to the Cabinet, and includes representation from twenty line Ministries and several non-governmental organisations, as a national policy making and coordinating body. It is supported by the Emergency Management Unit in the Office of the Prime Minister which acts as its Secretariat, and the Namibia Early Warning and Food Information System which provides information on the status of food production and stocks in the country. Experience has been that the NEMC is very active in times of emergency and barely functions otherwise. In future, in order to enable it to fulfill the important role it must play in ensuring local, Regional and National preparedness for disasters, its activities to these ends during non-emergency periods of will be revitalised. In addition, units will be established in the Ministry of Agriculture, Water and Rural Development to ensure that the provisions of this policy with regard to agriculture and water programmes are implemented. The Emergency Management Unit will be responsible for ensuring the implementation of the policy regarding drought-related feeding programmes.

96. Coordinating functions related to drought-recovery programmes and long-term drought mitigation programmes will be the responsibility of the National Food Security and Nutrition Council, supported by the Food Security and Nutrition Technical Committee and Secretariat, as well as other national coordinating structures such as the National Land-use and Environment Board.
97. At the Regional, Constituency and Village levels, responsibility for drought emergency management currently resides with Regional Emergency Management Units (REMUs), Constituency Emergency Management Units (CEMUs), and Village Emergency Management Units (VEMUs). Existing structures were suited to a situation where Regions, Constituencies and Villages were not active in directing and coordinating development activities in their areas of jurisdiction. The Government's Decentralisation Policy calls for a strengthening of local involvement in development activities, and many Regions have already established Regional Development Committees comprising members from all line Ministries as well as non-governmental organisations. In future it may be expected that such structures will be established in all Regions, Constituencies and Villages. In order to avoid duplication of effort, REMUs, CEMUs, and VEMUs will be integrated into Regional, Constituency and Village Development Committees as and when the latter are established. As such, they will be in a position to deal with emergency management, recovery, and long term mitigation programmes in a holistic manner. During the disaster drought emergency phase, they will be directed at a national level by the NEMC, and directly supported by the EMU, while otherwise they will work in cooperation with other National bodies, including the Food Security and Nutrition Council, the National Land Use and Environment Board, and the line Ministries. During non-emergency phases, the role of the EMU at the national level will be to continue supporting local structures in terms of capacity strengthening and preparedness to deal with future drought emergencies.

Financing drought assistance

98. In order to avoid the disruptive effects of financing emergency assistance from transfers from other budget lines on the planning and implementation of its normal activities, to speed up mobilisation of funds, and to enable the accommodation of funds from different sources, including international donors, the Government will establish a National Drought Fund to finance its obligations with respect to food security, agriculture and water supply services in disaster drought years.
99. A technical committee, composed of representatives of the Government, farmers, and agriculture-related industry, will be set up to make recommendations on the details of how the National Drought Fund will operate and to oversee its establishment. The Fund will be financed by annual contributions from the Government, and by international donors, agriculture industry levies and direct contributions from farmers in normal rainfall years. The Fund would be legislated for, be a permanent institution, and be managed by an independent Board. Funds would be invested until such time as they were required.

Plan of Action

A team of officials from key line Ministries, chaired by the Ministry of Finance, has been appointed to a technical committee to consider the feasibility and operational modalities of the National Drought Fund, and to ensure its establishment as soon as possible. Representatives of other line Ministries, of the farmers= unions, and of agricultural industries will be coopted to join the committee.

Timeframe for implementation

100. It is recognised that the Government and its development partners have limited implementing capacity. However, it is important that a start is made immediately in implementing the provisions of the National Drought Policy and Strategy, and that its implementation should enjoy high priority in terms of resource allocation. As noted in paragraph 95, units will be established in the Ministry of Agriculture, Water and Rural Development to ensure that the provisions of this policy with regard to agriculture and water programmes are implemented, while the Emergency Management Unit will be responsible for ensuring the implementation of the policy regarding drought-related feeding programmes. Policy principles and objectives and plans of action need to be organised by these agencies in order to ensure efficiency in their implementation. It is expected that all aspects of the National Drought Policy and Strategy should be implemented within a five year period of its adoption by the Government, that is to say by the start of 2003.

ANNEXURE 1

THE DEFINITION OF A DISASTER DROUGHT IN NAMIBIA

Introduction

1. Drought relief assistance will only be provided to farmers in Namibia following the declaration of a **disaster drought**. Such a declaration will be made only when the severity of drought conditions prevailing exceeds those that could reasonably be expected to be factored into risk management practices by farmers operating in Namibia's normally arid and semi-arid conditions. So as to ensure objectivity, the declaration of a disaster drought is to be based on scientific criteria, which can be accurately assessed given existing capacity.
2. The definition of disaster drought is presented here, as an Annexure, in order to enable its refinement over time in the light of experience and increasing institutional capacity.

Definition of Disaster Agricultural Drought

3. Disaster drought will be declared only when severe and rare low rainfall conditions prevail. This will be judged according to a number of criteria. Assessment of these criteria will be subject to a meteorological threshold assessment. This threshold will be seasonal rainfall lower than that prevailing in the lowest 7 per cent of growing seasons in a particular area, which will trigger a disaster drought alert. This will occur, on average, once in 14 years. This means that farmers **could** be eligible to receive assistance in only 7 years out of 100 on average.
4. But, where a good rainy season precedes a below 7 per cent season, it may be that the alert will not be translated into a disaster drought declaration. In this case, farmers are expected to manage their grazing and not consume it in one farming year. Conversely, the cumulative effects of two or more years of low annual rainfall which is greater than that registered in the lowest 7 per cent of years will also be considered. Also, the rainfall distribution pattern within the season will be taken into account, recognising that rainfall distribution can be more critical than total amount, particularly in rainfed crop farming and in drier areas. After a **disaster drought alert** has been confirmed, based on seasonal rainfall, other criteria discussed below, including agricultural and hydrological conditions, will be considered as the basis of the declaration of a disaster drought in a particular area.

Procedure for declaring a disaster drought

5. Farmers or communities will need to apply to the Namibia Early Warning and Food Information System (NEWFIS), using a prescribed form, to have a particular area declared disaster drought stricken. Applicants will have to define the geographical area which they claim to be stricken by a disaster drought, and will have to provide information on the rainfall in the preceding two seasons, and on the condition of grazing, water resources, and crop production, where applicable, in that area. The minimum area that will be considered in such an application will be the greater part (more than 50% of the area, which should be contiguous) of a Region or Magisterial District. Applications may be made by any farmer, community member, recognised traditional authority or local government agency. Extension services will be prepared to assist in preparing applications.
6. Each season's rainfall will be analysed per Region and Magisterial District by the Namibia Meteorological Service (NMS). This will be done during the course of each rainfall season and at the end (noting that Magisterial Districts fall into different rainfall regimes and have different Aend of season@ dates) rainfall data will be readily available against which to evaluate applications.
7. Where it is established that seasonal rainfall is below the lowest 7 per cent of recorded annual rainfall in a particular area, the NMS will give a disaster drought alert to the Ministry of Agriculture, Water and Rural Development. This will trigger the consideration by the latter of additional meteorological information, as well as agricultural and hydrological criteria, including the following:
 1. Additional rainfall information, such as the distribution of rainfall in the season and the effect of rainfall in previous seasons, to be considered in order to gauge the effect of, and put into perspective, the present season's total rainfall.
 - a. The condition of pastures in relation to management practices will be analysed to assess whether relief assistance is required. In addition, farm management practice will be considered, within the context of the prevailing farming system, as one criteria for determining eligibility for relief assistance. Farmers whose poor pasture or crop condition is the result of poor management practices, such as overstocking, may not be provided with drought relief assistance. To this end, consideration will be given to existing pasture cover, stocking rates, carry over grazing, supplementary feed reserves, stock sales, and intended sales should the drought continue. With regard to private-tenure farms stocking rates will have to be below 60 per cent of the accepted carrying capacity before they are eligible for drought relief. The Board of the National Drought Fund in cooperation with regional authorities will have to determine to what extent communal-tenure farmers must destock and mechanisms for ensuring this.
 - b. All livestock belonging to farmers seeking drought relief assistance must be branded by the farmers themselves, and livestock owners should be registered with the Ministry of Agriculture, Water and Rural Development. Only farmers already so registered will qualify for relief assistance.
 2. Stock water information and dependence on dams and wells.
 - c. Estimates of pre- and post-harvest crop production.
8. These criteria will be assessed in particular areas using the established survey and information gathering procedures of the NEWFIS, which will be diversified and improved upon in various ways. In order to achieve unbiased assessments attempts Regional Drought Assessment Committees will be established, including regional government officials, farmer representatives, and officials from the Ministries of Agriculture, Water and Rural Development, and Environment and Tourism, to make assessments.

9. The recommendation to the Cabinet to declare a disaster drought in a specific area will be made, according to the recommendation of the Regional Drought Assessment Committees, by the Minister of Agriculture, Water and Rural Development.

Nota Bene

IT SHOULD BE NOTED THAT THAT THE PROCEDURE FOR DECLARING INDIVIDUALS OR COMMUNITIES ELIGIBLE FOR FOOD OR DRINKING WATER RELIEF ASSISTANCE WILL BE BASED ON THOSE CRITERIA NOTED ABOVE TO INDICATE ALERTS, BUT DIFFERENT AND ADDITIONAL CRITERIA MAY ALSO BE APPLIED. FOR INSTANCE, NUTRITIONAL, AND FOOD AVAILABILITY AND ACCESSIBILITY CRITERIA IN THE FIRST INSTANCE, AND HYDROLOGICAL CRITERIA IN THE SECOND, WILL BE AFFORDED GREATER PROMINENCE, IN THESE CASES RESPECTIVELY.