

# The Experience of the 1997–98 Drought in Simbu Province: Lessons Learnt

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## *Abstract*

The worst drought in PNG in recorded history occurred in 1997, and it had a major impact on the 184,000 people of Simbu Province. The problem was recognised by the government only after major environmental and social changes had commenced. These included food shortages and the associated problems of law and order and environmental changes. Field assessments were conducted to assess the need for relief supplies. Villagers responded by using cash savings to purchase food, traded possessions for cash and food, and many sought financial assistance from friends and relatives. The provincial administration coped with the major challenge fairly well, but there were some problems. These were brought about by poor communications, poor road access, inadequate preparation, insufficient trained personnel and political attempts to influence distribution of resources. There was a lack of cooperation by villagers in some localities. With the return of the rains in late 1997, fast-growing crops started to produce. By April 1998, staple foods were being eaten again in most locations and life had almost returned to normal. A number of recommendations are made that, if followed, will reduce the vulnerability of food shortage in the future.

SIMBU Province is situated in the central highlands of PNG and shares borders with five other provinces. The province has a land area of 6181 square kilometres and a population of 183,849 (1990 census) with a growth rate of 0.5%.

The 1997–98 drought affected all provinces of the highlands and PNG to an extent never felt in the history of this land. Simbu Province was one of the worst-affected provinces with much of the province being placed in the most severe food shortage classes by the mid-October 1997 assessment.

This paper describes the early signs of drought, how people responded as the drought developed, the responses and reactions of governments and problems that were confronted and successes that were achieved.

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## **Early Signs**

Early signs that things were not normal included a change in the colour of the sun, which became blood red in the afternoons, a very hazy daytime sky, greater extremes in temperatures with very cold nights and hot days, and frosts which occurred as night time temperatures fell below freezing in the high altitude parts of the province, and of course a lack of rain.

In Simbu Province, the dry weather started earlier than normal in April 1997, and continued after the normal dry period at the end of July right through to the end of 1997. There were sporadic periods of rain in October and November in the northern parts of the province but in the south, it was dry for at least ten months before the first rain in December 1997. In most parts of the province there was little further rain after this until late February 1998, when heavy rain was received all over the province. Local sources of water began to dry up, forcing people to walk further to

collect drinking water, the ground began to crack and there was an increased incidence of bush fires. Small animals began to behave differently: earthworms came out of ground in large numbers and died and small wild animals began to move away from their natural habitat towards water sources. Vegetation started to change colour, wilt, defoliate and die. As the drought proceeded, there was a noticeable increase in sickness among children, women and older people.

## The Food Situation

As early as August 1997, shortages of sweet potato became evident. By the mid-October assessment most of the province was found to either only have left a supply of food for two to four weeks in gardens or to have no edible food left at all. In the latter places, people were eating famine foods, and many children and other people were becoming sick.

People started to sell pigs for money to buy food from the stores or to exchange them for food. From about August, food sold at the markets decreased in volume and much of the sweet potato that was on sale was weevil-damaged. Bush leaves appeared in the markets to be sold as green vegetables. By October there were no sweet potato or green vegetables of any kind in the markets. An increase in demand for store-bought food occurred and a general increase in the prices of store food items was also noticed. By November, the food supply situation was critical.

In November 1997, the first relief food distribution took place (provided by the national government giving money to all politicians in the country), but the food supplied was not sufficient for families' needs. In most cases, the food distributed was enough for only two meals and people had to make do with whatever they could survive on for more than two months before the next relief food was distributed. Many families missed out totally in the first distribution. However, the *wantok* system (sharing between relatives and friends) was operating at its best throughout this time and helped many families and communities to withstand this crisis.

A sudden increase in gardening activities was observed in January 1998 at the end of the drought. By February 1998, green vegetables and cucumbers were being eaten in most villages and the immediate danger of starvation was over. By March 1998, Irish potatoes were being eaten in most of the northern part of Simbu. By April 1998, after some problems with the forma-

tion of tubers, sweet potato and most other root crops were being eaten in most parts of the province and normal life had almost resumed in most villages. Only a few localities in higher altitude areas were waiting to harvest sweet potato.

## Water

The drought brought about a serious shortage of drinking water. By October 1997, in many localities of the province most of the traditional waterholes, streams and creeks had dried up and people were drinking from main rivers and had to walk many hours, often down mountains, to collect water and then carry it back up to their homes. By mid October, more than half of all localities in Simbu were in a situation where water was in very short supply but was available at longer distances. Even the large rivers in the province shrunk to very small flows. It became possible to walk across the Waghi River in the Gumine area, where the river is usually swift, deep and very dangerous to cross.

## People's Reactions

People reacted to these impacts of the drought in a number of ways. There was an increase in stealing and a breakdown in law and order. Family disputes over land, crops and animals increased noticeably. There was a general increase in demand for store-bought food with people using savings, cash from the sale of stored coffee, or pigs and money from relatives working in towns.

Many families moved to be closer to reliable sources of water. Partly as a result, there was a sharp drop in school attendance. Other children stopped attending because they were too hungry and found it hard to concentrate on schoolwork. They spent their days looking for food. A number of schools in the province closed and a drop in academic performance occurred throughout the province, reflected in the Grade 10 examination results at the end of the year.

Village people began to place increasing demands upon those family members who were working and earning a wage. Communities also put pressure on government authorities for relief assistance. There was also a marked change in the attitude of people about their general way of life and much greater numbers sought forgiveness and repentance in the local churches.

## Reactions of Government and Aid Organisations

On 7 August 1997, the Simbu Provincial Government recognised the drought as a national disaster and established a Provincial Disaster Working Committee and a number of District Disaster Working Committees. The provincial government organised a number of field assessments in early September 1997, and were assisted by the Australian Agency for International Development (AusAID) in late September. By October, the provincial government suspended all other government activities and diverted all resources to assist in the relief efforts. A public awareness campaign was carried out throughout the province in partnership with nongovernment organisations (NGOs). The churches were the first NGOs to assist their own followers. The national government gave grants of 224,000 PNG kina (PGK)<sup>1</sup> through national Members of Parliament, followed in November by international assistance when relief food and material assistance of 2077 tonnes of rice, 188 tonnes of flour, 94,572 litres of oil, 5830 water containers, 267 water purification kits and medical supplies were provided.

Later rehabilitation started with the supply of sweet potato vines, potato seeds, corn and other seeds.

## Problems

A major problem was the difficulty of communication that occurred between local-level governments (LLGs) and district headquarters, including the Provincial Disaster Working Committee. Councillors had no means of communicating other than walking long distances, and when food became short they were reluctant to leave their homes. A second problem was the totally inadequate resources (mainly materials) and finances that were available to meet the demands of the crisis. Both these difficulties were compounded by the very poor condition of infrastructure that increased the problems of accessibility. Roads and bridges were impassable to vehicles. The only way to travel quickly to many places was by helicopter. Helicopters were not readily available and were very expensive to charter.

The water supply problems were made worse by poor rural water collection and storage facilities. The roofs, guttering and tanks of government and mission schools, health centres and churches were in a poor

state of repair and many tanks were empty when the drought began.

Within the province, at all levels of government, there was a lack of preparedness for the disaster and a lack of expertise to manage a government response to it. Within village communities there was often a reluctance to cooperate with the government, which compounded the problems in some areas.

When the demand for store-bought food rose, many stores ran out of supplies and there were no local stocks available. Food had to be brought in by truck from Lae, which made the commercial response slower than if local stocks had been available.

The same problem affected medical supplies, which quickly ran out in almost all health institutions.

Finally, attempts by leaders to use political influences to unfairly distribute relief supplies was an initial problem, which lessened as the seriousness of the situation was realised and as outside independent assessments were used as the basis for making food distribution decisions.

Among village communities, a general decline in interest in subsistence agriculture that can be attributed to people wanting to adopt a contemporary and more westernised lifestyle meant that gardens were not as large or as productive as they could have been. The fact that irrigation is not practised in Simbu Province also reduced the opportunity to grow food during the drought.

## Successes

Despite these problems, a clear spirit of community cooperation developed throughout the province as a result of the food and water problems caused by the drought. The *wantok* system proved very effective and beneficial and members of families in waged jobs contributed food and money to their less fortunate rural relatives. The coping capacity of communities were very much evident. An excellent cooperative spirit developed between government agencies, aid organisations, NGOs and the business community and between the government and the people.

Valuable lessons were learnt from the disaster and also almost forgotten traditional ties and Melanesian values were revived.

## Recommendations

The following recommendations are derived from those developed by the Provincial Disaster Working Committee in consultation with the regional and

<sup>1</sup>. In 1997, 1 PGK = approx. US\$0.70 (A\$0.94).

national disaster management services. They are directed at the three levels of government: national, provincial and local.

The national government should:

- establish a permanent provincial disaster management service, fully resourced that should report to the national disaster management services;
- establish an early warning system and communication systems at all levels of government for the reporting, recording and compilation of more accurate weather and social and economic indicators of any impending food and water supply problems;
- improve the training of people at all levels of disaster and emergency management;
- promote the processing, preservation and storage of locally produced foods so that stocks of food are available when needed; and
- trial and promote drought-resistant food crops, through the National Agricultural Research Institute.

The provincial government should:

- develop a disaster management plan which must be reviewed annually in consultation with the national disaster management office's plans;
- ensure adequate funds are set aside from annual budgets and are rolled over yearly for disaster relief operations;
- ensure that communication facilities are maintained to enable monitoring and carrying out of relief operations;
- ensure that the necessary arrangements are in place for the collection of up-to-date data on social status, health status, weather trends and other factors that will assist in planning and management of disasters;
- include other stakeholders, such as churches and the business community, in the development of plans and in meetings of the provincial disaster working committees;
- pass laws that will ban all forms of gambling, liquor sales and enforce penalties on people who cause tribal fights;

- promote the diversification of village farming to improve food security and reduce dependency on traditional staples;
- promote improved gardening techniques such as irrigation, selection of gardening sites and soil conservation methods;
- increase funding for effective extension work in health and agriculture sectors; and
- promote and strengthen economic management practices for increased savings and investments by individuals and at the village level.

LLGs should:

- establish ward and community centres in all LLG areas that will be suitable for storage and emergency accommodation in time of need and also to serve as training and meeting centres;
- conduct immediate identification and assessments of all drinking water sources;
- establish and maintain water supply systems in identified localities;
- promote agricultural practices that promote/enable soil conservation; and
- pass and enforce laws that address environmental and sanitation problems.

## Summary

The 1997–98 drought and frost in Simbu Province was the worst in the recorded history of the province. Local food supply became critical and water was in very short supply. Imported foods were mostly expensive and, in many cases, unavailable in many rural areas. There was an increase in health problems and a breakdown in traditional norms and rules and a general increase in law and order problems. Governments lacked the ability to recognise early signs of a problem and to respond. The provision of adequate relief food to large rural populations required large amounts of money that was never readily available. However, the event brought together people and organisations from all over the country and from the international aid and relief communities and good, supportive relationships were established. Traditional Melanesian values (including the *wantok* system) were revived and strengthened.