

# **CARE International in Papua New Guinea**

## **Evaluation Report of The Drought and Frost Response Programmes 1997-1998**

### **Final Report**

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## Abbreviations and Acronyms

AUSAID	Australian Agency for International Development
ADF	Australian Defense Force
CBO	Community Based Organization
CIPNG	CARE International in PNG
DDC	District Disaster Committee
DAL	Department of Agriculture and Livestock
DHQ	District Headquarters
DDWC	District Disaster Working Committee
DPI	Division of Primary Industries.
DPLGA	Department of Provincial and Local Government Affairs
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EHP	Eastern Highlands Province
FBO	Faith Based Organizations
HACDEC	Highlands Aqua Culture Development Centre
LLG	Local Level Government
LLGC	Local Level Government Council.
MP	Member of Parliament.
MCH	Maternal and Child Health
NGO	Non Government Organization
NARI	National Agricultural Research Institute
NEC	National Executive Council
NSRDP	North Simbu Rural Development Project
NDES	National Disaster and Emergency Service
NRMP	Natural Resources Management Project.
NHQ	National Headquarters
NDRC	National Drought Relief Commission
NDC (97-98)	National Disaster Committee
NDC (now)	National Disaster Centre
PA	Provincial Affairs
PDO	Provincial Disaster Office
PDC	Provincial Disaster Committee
PDRWC	Provincial Disaster Relief Working Committee
PHQ	Provincial Headquarters
PDWC	Provincial Disaster Working Committee
PMT	Provincial Management Team.
PNG	Papua New Guinea
RSL	Returned Services League of Australia
RDO	Rural Development Officer
WHP	Western Highlands Province.

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## **1. EXECUTIVE SUMMARY**

This report is the result of the evaluation of the drought response of CARE Australia during the period of September 1997 till December 1998 in the Western Highland, Simbu and Eastern Highland Provinces of Papua New Guinea. The evaluation took place done during the months October and November of 2007.

The 1997/1998 Response Program comprised: Situation assessment, assisting the local authorities with office set-up and coordination, supply of food and non-food items, training and recovery activities. The response activities were realized in difficult and uncertain circumstances with a total absence of preparedness and lack of infrastructure in a large and very remote area.

CARE’s response activities had good results at national level, with the set up of the NDRC office, the training of the local staff and the joined coordination of the relief activities. At provincial level the training activities were of lower level and focused on the practical aspects of survey and distribution. CARE’s involvement in the logistical activities, especially in transport, during the program, was crucial for a good conclusion of the program.

CARE also provided quantities of rice, jerry cans and water purification tablets, which was well received by the beneficiaries, but arrived delayed and had therefore a lesser impact. With limited capacities in the country and a poor infrastructure, supplies were slow and on a small scale, while the remoteness added to the complexity of the relief operation.

If the local Government would have been aware of the drought in an earlier stage and would have been prepared to respond to it, the situation would never have reached such enormity and such disastrous circumstances for the population. A basic early warning system, proper administrative facilities and appropriate measurements would have prevented the human disaster which happened in PNG during that period.

Although a recent responds of the national government, after hailstorms in the Highland Provinces, indicate some level of efficiency, a good functioning preparedness system is not yet in place. With improvements at all government levels and awareness in the communities, hazards don’t have to end up in disasters

Preparedness within the communities includes an ability to endure difficult situations and prevents the dependency on only those livelihoods which are crucial for survival. People should be aware of this and be assisted in reducing their vulnerabilities. Creating a network of governmental institutes, organizations, agencies and communities will result in a much larger impact on preparedness, community assistance and sustainability of a program.

In this, CARE can perform a leading role in working together with government, communities and local organizations and institutes, to build capacity and assist with community based interventions in livelihoods improvement and diversification, water supply projects and health care.

## **2. INTRODUCTION**

CARE PNG calls for periodic independent evaluations of its policies, programs and projects and operations. The results contribute to better informed decision-making, foster an environment of learning by doing and promote greater accountability for performance. In 2007, the CARE Drought Response during 1997 and 1998 was selected for evaluation to identify impacts and lessons learned.

The objective of the evaluation was to evaluate the impact and sustainability of CARE Australia’s response to the drought in Papua New Guinea’s Highlands in 1997 and 1998. Details and ToR can be found in annex 1.

The activity included the evaluation of the impact of CARE Australia direct support to communities as well as the support given to the National and Provincial Disaster Authorities. The impact examined was divided into: The quantitative impact of the assistance as well as the qualitative impact. The study addressed ‘gender equity’, ‘poverty reduction’ and ‘cost efficiency’.

As this evaluation was carried out 9 years after CARE’s Drought Response was completed, not all project documentation was available and a number of people involved in the 97/98 Program have moved on to other positions and places. As a result, information was not always complete and exact numbers were not always traceable. However, the evaluation team obtained a clear insight in the activities, performance and results of the Program, of which is still visible proof. The team was able to determine strengths and weaknesses of the Drought Response and its impact on the lives of the beneficiaries.

Value added from this evaluation was achieved through lessons learned for application in the Emergency Preparedness Planning and Disaster Risk Management Program Strategy, as well as for future disaster response and preparedness activities. Also the learning on CARE’s approach to working with government and non-government partners can be captured and applied in future programming.

The evaluation was realized by Eugene Popma and Doreen Iga, with a field visit from 21 October till 4 November 2007. The itinerary and list of interviewed people can be found in annex 2 and 3.

### 3. BACKGROUND

#### 3.1 Context

At the height of Papua New Guinea’s most severe drought since many years, combined with the effects of frost and the cyclone Justin, more than a million people faced food and water shortages. By the end of 1997 more than 40 per cent of PNG’s rural population were estimated to have little or no food left and were surviving on what they could forage in the forests or on food aid. This drought was related to the 1997-1998 El Niño<sup>1</sup> phenomenon, which started in February 1997 and affected many Pacific island countries.

In September 1997, the PNG Government asked Australia to help assess the impact of the drought and prioritise relief needs. An AUSAID funded assessment team was formed, comprising of Dr. Bryant Allen and Dr. Mike Bourke and three CARE-Australia staff members: Graham Henderson (Health care), Gerry Jacobson (Hydrogeologists) and David Hill (Logistician). For the assessment in the field 13 assessment teams were formed, to cover PNG’s 19 provinces. The teams used a 5 point scale to assess the severity of the drought related problem, which is listed in the text box.

#### The Allen/Bourke scale

Category 1 - Unusually dry, but no major food supply, drinking water or health problems.  
Category 2 - Some inconvenience. Staple food is short but other food available and/or must travel further to collect drinking water. Health satisfactory.  
Category 3 - Conditions are difficult, with food reduced and some famine food being eaten and/or water available only at a distance and/or some babies and old people unwell. No lives at risk.  
Category 4 - No food in gardens, famine food only being eaten and/or water in short supply and possibly polluted and/or increasing sickness and/or the lives of small children and old people at risk.  
Category 5 - Extreme situation. No food available at all and/or water very short and/or many people ill and/or small children and old people seriously at risk or dying.

A summary of their findings included: Approximately 540,000 people have insufficient subsistence food supply, of which 80,000 people are in a critical life threatening situation. Approximately 130,000 rural villagers are currently experiencing critical problems with drinking water, including an almost

<sup>1</sup> The El Niño episodes are usually accompanied by sustained warming of the central and eastern tropical Pacific Ocean, a decrease in the strength of the Pacific Trade Winds and a reduction in rainfall over eastern and northern Australia. The episodes are negatively indicated in the Southern Oscillation Index (SOI), which is calculated from the monthly or seasonal fluctuations in the air pressure difference between Tahiti and Darwin. Positive values of the SOI are associated with stronger Pacific trade winds and warmer sea temperatures to the north of Australia, popularly known as a La Niña episode. Waters in the central and eastern tropical Pacific Ocean become cooler during this time. (source: WMO)

complete lack of drinking water or access to only brackish water or contaminated water. Fires are widespread, devastating areas of grassland, forest, economic trees, sago palm and nipa plants. There are many reports about the increase in diarrhoea, skin infections, pneumonia and malaria. Institutions as community, primary and high schools, as well as hospitals, health centres and prisons are closing or already closed, caused by lack of water.

Their recommendations included: Provision of immediate food aid in certain locations, facilitation of access to cash income by villagers, provision of irrigation for crop production and maintenance of planting material, facilitation of access to drinking water for villagers and institutions, addressing urgent health problems in the most severely affected locations, restoration of infrastructure for aid delivery and transmission of key extension messages.

However, the country is rugged and the Highlands have some of the most remote areas in Papua New Guinea, at an altitude of more than 2000 metres above sea level, which makes delivery of the aid commodities a real challenge. High mountains and great rivers separate areas and villages, in which people often live very isolated. More than 10 % of PNG’s population live in areas only accessible by air. (see annex 11 for maps)

### **3.2 CARE International in PNG**

CARE Australia has been working in Papua New Guinea since 1989, with Agricultural Projects in the Simbu Province, Women Training Programs in fish processing in Morobe and a Women Participation Project in Education. In Bougainville two projects, the Women’s Clan Bakery Project and Women’s Resource Centre Project started, but were not finalized due to (political) problems. These early programs were financed by AIDAB, AUSAID, CARE, the PNG Government and IFAD.

In 1997, during the drought period and CARE’s response activities, CARE staff already present in the Simbu Province assisted in the assessment and the drought response activities. After the assessment, in which CARE assisted with three staff members, CARE then started a Relief Program for the most difficult accessible areas of PNG, the Highlands. The program lasted till the end of 1998.

Although there was still interest within CARE Australia to continue assisting PNG most vulnerable population, it took till 2006 before the decision was made to open a permanent office in PNG, which was realized at the end of 2006.

### **3.3 CARE’S Response Program in 1997/1998**

CARE’s Drought Response Program in PNG focused on capacity building of national and provincial disaster authorities and on direct assistance to affected communities. The drought response was funded by AUSAID, CARE Australia, RSL - Returned Services League, German Government (Federal Foreign Office), CARE Deutschland, Canada Fund and CARE USA. The total funding of these activities amounts to AUD 1,340,613 (see annex 9) over the period September 1997 till December 1998.

The program consisted of 9 individual projects<sup>2</sup>:

Project No 6809: The undertaking of a rapid assessment of the extent of the current problem, assisting to PNG National Disasters and Emergency Services (NDES) and assist with planning and monitoring to develop a standardized reporting and the capacity to analyze and evaluate information.

Project No 6810: Assist the Provincial authorities in the effective delivery of emergency drought relief to the most vulnerable people categorized as 4 and 5 in Simbu, Western Highlands and Eastern Highlands Provinces.

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<sup>2</sup> Project details and results are listed in annex 4

Project No 6812: CARE Australia will continue to undertake drought recovery assistance including support to Provincial Disaster Committees in the planning and implementation of drought recovery activities in WHP and EHP and provide support to the National Drought Committee and National Disaster and Emergency Services in Port Moresby. Output: 42 Individual Projects.

Project No 6813: To provide rice to the most seriously drought affected people in Simbu Province. Output: 210 tons of rice distributed throughout Simbu Province

Project No 6814: To prevent or at least reduce the incidence of water borne diseases by providing means to purify water and to provide a more efficient way of transporting water across greater distances.

Project No 6815: To monitor and assess the needs and requirements within EHP, Simbu and WHP, determine appropriate interventions and provide relief items as needed for the duration of the project. Output: To assist provincial authorities in assessing, planning and monitoring drought relief efforts in Eastern Highlands, Simbu and Western Highlands.

Project No 6816: Develop an action plan to address immediate requirements. Oversee development of a drilling and shallow wells program plan. Feasibility study on installing pumps and storage tanks along rivers. Identify areas with acute water needs and water contamination problems, as well as ongoing water supply activities of NGOs and aid donors.

Project No 6817: Improve the ability of the PNG population to survive in times of drought. Output: 12 x 20,000 gallon collapsible pillow containers.

Project No 6818: Provision of funds for local transportation/distribution of the emergency food aid.

#### **4. METHODOLOGY**

From the available program documentation, it was clear which activities were included in the 1997/1998 relief program. Project documents were not complete for all activities and final results were not apparent for all nine projects, which is discussed in chapter 5. (list of documentation in annex 10)

During the field visit the evaluation team visited Port Moresby, Goroka, Mt. Hagen, Kundiawa for interviews with local authorities, beneficiaries, CBO workers, Church workers, staff of other NGO's, agencies, clinic staff, etc. In Simbu some remote project locations<sup>3</sup> were visited, to meet with a number of beneficiaries of the 1997/1998 program. CARE staff, who were involved in the relief response in 1997/1998, were contacted by telephone and/or email.

However, after 10 years, memories were vague and exact occurrences or numbers were not always remembered. Within the Provincial Government, some staff had moved to other positions. Some records were still available with the Simbu PDO. At national level the Secretarial Officer of NDC<sup>4</sup>, who was present at the time, was a good source of information.

In none of the projects a Logical Framework was used with project details and indicators. Only Project 6810 had indicators listed, which were well used in the reporting. For a certain level of reference, indicators were established to extract results. These results can only be used as indications as the findings can not be compared with previous measurements. The indicators were incorporated in the questionnaires. The choice of the used indicators is based on several assumptions and facts, which is discussed in chapter 5 and 6.

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<sup>3</sup> An Officer from the Provincial Government accompanied the team to the villages Munuma (LLG Digini) and Baringigl (Gembogl District).

<sup>4</sup> NDC – National Disaster Centre. All institutes during 1997-1998, as NDES, NDRC, NDC, etc are now all merged in the present NDC.

To assess the impact on women and men the gender analysis matrix was used, to explore household activities from a gender perspective. Gender analysis includes understanding the division of labour and its implications for gender equality (or equity). The type of work that women and men do and how that work is valued is largely determined by how the community (society) organizes gender roles. Again no comparison could be made with previous studies.

To assess the cost effectiveness of the program, cost/impact relation was looked at, to determine if the objectives of the program could have been achieved at lower cost (or whether a greater impact could have been achieved for the same costs).

During the last day of the field visit a workshop was realized with the staff of the CARE office, with the purpose to explain the step by step approach of the “Drought Cycle Management” and create ideas for future possibilities in CARE PNG’s programming, using the recommendations of the 1998 workshops and the experience of CARE’s staff in PNG.

## 5. IMPLEMENTATION PERFORMANCE

The Relief Program during the period of 1997 and 1998, which started with the first assessment in September and August 1997, commenced its response activities in November and continued throughout the year 1998. Components in the response activities were: Continuous assessment (including a water supply consultancy), providing of assistance to the local authorities in situation assessment, coordination of distributions, training and realization of small individual projects and logistical support.

In the schedule below the chronology of the 9 relief projects is shown. A more detailed schedule is shown in annex 7.

Project	1997				1998												
	Sept	Oct	Nov	Dec	Jan	Feb.	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
6809 - Partic. First Assessment																	
6810 - Assistance/training																	
6812 - 42 recovery projects																	
6813 - 210 tons of rice																	
6814 - Jerry cans and water pur. tab																	
6815 - CARE staff in 3 Prov.																	
6816 - Water Consultancy																	
6817 - Pillow containers																	
6818 - Transport																	

The response was realized in very difficult and uncertain circumstances, which included lack of capacity with local authorities, transport, infrastructure, etc. Then the vastness of the area to cover and the complete remoteness and isolation of some target groups, added to the complexity of the relief activities. Also the handling of valued commodities and materials in an almost uncontrollable environment did not improve the circumstances in which these activities had to be carried out.



## 5.1 The Assessments

Chapter 3.1 already states that the first assessment was realized in September 1997 by 13 teams, covering the 19 provinces of PNG, under the leadership of Allen and Bourke, both with long standing experience in PNG. The CARE Australia staff members, comprising Henderson (Health care), Jacobson (Hydro-geologists) and Hill (Logistician), financed under the project no. 6809, were part of those teams.

The resulting report identified the areas worst affected by food shortages and became the basis of the relief plan drawn up by PNG NDES, with assistance from CARE staff. The report stated 73 deaths (reported but not confirmed); Population movements in the Highlands Provinces; Water levels falling in rivers, creeks and wells, with reports of polluted and brackish sources; Increased sickness in some areas and a general shortage of medical supplies; Gardens (the food source for subsistence farmers) drying up, bush fires in dry areas; Schools closed, usually due to water shortages, or reducing their hours to allow staff and pupils to look for food and water; Power rationing

To measure the impact of the relief efforts and further development, a second assessment was conducted by Allen and Bourke (25 Nov-12 Dec). For further monitoring, a third assessment was conducted by Wayi (DAL) from 20 - 31 March 1998. The latter covered only those areas identified as critical (cat. 4 and 5) in earlier assessments.

The results of the three assessments are listed in annex 6. For the Nov-Dec. assessment a considerable increase is visible, caused by increased water shortages and a delayed impact of the first limited aid. Also a slight change in the categories of the Allen/Bourke scale may have been debit to this. In the same annex is shown the population numbers of the census in 1980, 1990 and 2000. These numbers appear not to be very reliable<sup>5</sup>, however, the program used the population numbers of the 1990 census.

CARE’s Water Supply Consultancy (project no. 6816), executed by Jacobson from 9 Dec 1997 – 18 Jan 1998 covered several provinces, among them Simbu. The resulting report included areas with acute water problems, on-going water supply activities and rehabilitation proposals.

With the first assessment, a good knowledge was obtained about the drought situation in PNG. A continuation of assessing provided up-to-date information of the drought situation of the most effected areas. The assessment was the basis of the Relief Program, which made people survive and brought normal life back to PNG.

## 5.2 Coordination and assistance to local authorities

A CARE staff member was added to the NDRC office to assist with the coordination of relief activities in PNG and especially for the Western Highlands, Simbu and Eastern Highlands Provinces. Together with the local staff, the office was set up, CARE provided equipment and arranged computer literacy training for 6 staff members. From this office, planning, data collection, coordination, capacity building was provided for the Emergency and Recovery activities in PNG. In the Highland Provinces EHP, Simbu and WHP, CARE staff members worked together with the Provincial Government staff, in assessment, planning, coordination and an on-the-job training.

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<sup>5</sup> The 1980 census is generally considered the most reliable of the three censuses. Because of the attempted secession in 1989 in Bougainville, the population was not included in the 1990 census. For the same reason the population of the other provinces is somewhat inflated because of the return of migrant workers. The 2000 census showed a age-group related error of around 45.000 persons in comparison with 1980. This would lead to an adjusted 2000 census, but can only be confirmed with a next census. (Source Tim Curtin, Australian National University)

The training in assessing and data collection resulted in a third assessment being conducted by Wayi from the DAL - Department of Agriculture and Livestock, from 20 - 31 March 1998. During training and the workshops in Mt. Hagen and Kundiawa, Disaster Preparedness issues were well discussed and a number of recommendations were listed for follow-up. It has taken some time before it was all put into practice.

However, since 2005, with new political winds and new staff entering NDC, a more pro-active approach was adapted, which improved Disaster Preparedness activities in the Provinces. The Provinces have to take a first step in the PDO set-up and development. NDC then provides the Office with the necessary equipment, as HF radio, computer and Satellite telephone. A Disaster fund has recently been established<sup>6</sup>.

During interviews, both national and provincial authorities, present in 1997-1998, spoke highly of CARE’s performance in assistance and training. It was indicated that at provincial level an on-the-job training was realized during the survey and monitoring activities. At national level the setup of the NDC office was managed by CARE’s staff. Local staff was sent for courses and was trained in data processing and data interpretation.

CARE’s effort in training the Local Authorities in ‘assessment’ and ‘data collection and interpretation’ of the drought situation and planning, coordination of the relief activities has worked well, with general good quantity results of food distributions. The third assessment was conducted by local staff from DAL, being an indication of a good performed training program. The recommendations of the workshop showed an improved and trained approach to the drought situation, the experienced weaknesses and strengths during the operation and the ways for improvement.

### **5.3 Emergency activities**

These activities included the assistance given through coordination of surveys and distributions and logistical support. The commodities distributed were supplied by the PNG Government, AUSAID or the Australian Government and CARE. The assistance was well received and the Coordinator of the WHP PDO spoke of a “partnership”. Reports and interviews give the impression of a good cooperation between the CARE staff and the Provincial Officials. In the Provinces capacity building existed of “on the job” training, during planning, surveys and distributions.

#### **Food Commodities**

Food distributions are a necessity to solve the basic problems of the beneficiaries. Without food-aid some people may suffer hunger and severe hardship. Food-aid also deters migration and to some extent allows a quicker rehabilitation of agriculture and gardening. However these same distributions can create security problems, jealousy and some level of corruption, which complicate the operation and its control. PNG was no exemption in this and the remoteness of some areas increased this lack of control.

CARE’s assistance to the three Highland Provinces was concentrated on the most affected province Simbu. Government supplies were limited and CARE purchased 210 tons of rice from four local companies in Kundiawa. However, there are no records of the distributions, no stock cards, no end point receipts and no lists of beneficiaries. Recollections from beneficiaries and CBO workers state that the commodities were dropped at the villages and left for the Local Level Government councilors to distribute. At remote areas, where airlifting was the only way of reaching the beneficiaries, the commodities were discharged at the airstrip and left with the people present. With the uncertainty of

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<sup>6</sup> In August 2007 a PGK 7 million Disaster Fund was established till the end of the year.

population numbers, it was not known what number of mouths needed feeding and if the delivered quantity was sufficient.

During interviews it was a few times suggested that food followed the “wantok system” or was even sold. Hill mentioned in his report that “*There should be a programme of training and monitoring in the field to maximise the effectiveness and minimise the "leakage" of relief*”. He also mentioned the security problem and the danger of hold-ups of trucks loaded with food, which have occurred shortly after.

### **Non-food items**

CARE purchased 6416 water containers and 44,000 water purification tablets. Twelve pillow water containers (each 20.000 gallon) were obtained from CARE Canada.

The pillow containers (20.000 gallons each) were handed over to another aid organization on the 31 March 1998. The final destination of the containers is not known.<sup>7</sup> The numbers of distributed jerry cans, mentioned in the project’s final report and the numbers in the ‘Simbu Provincial Drought Response Report’ show a difference of 399 units, which is probably caused by delivery delays, which was also mentioned in the final report<sup>8</sup>.

It is recommended that:

CARE PNG will develop clear guidelines for procurement in emergency situations. These guidelines should include the choice of purchasing in PNG or abroad (Australia) and what implications this has for transport and delivery time, customs, clearance time, etc.

CARE PNG will use CARE International’s “Manual for the handling of food” as guidance for the correct procedures for purchase, handling and storage, transport and distributions of all commodities. Training will be provided for those staff members and field workers, who will be involved in these activities.

### **5.4 Recovery activities, training and small projects**

The recovery phase included projects to bring the affected population back to their “normal situation”, as it was before the drought period or better. Within project no. 6812, 34 small recovery projects were financed, consisting of activities in agriculture, health and water and sanitation. As soon as the first rains started in some parts of WHP, Simbu and EHP, seeds and seedlings were distributed to the villages, which enabled the population to restart their gardens. Medicines and mosquito nets were provided to clinics and health post to avoid the outbreak of epidemics and improve the general primary health care. Small scale water catchments and storage were also provided. In the EHP some dams were restocked with fish.

The main bottle neck throughout the response was the lack of funds for transport. Within the activities of project 6812, 1/3 of the investment was used for the provision of transport and to cover some handling and storage costs, while project 6818 was only to cover (air) transport costs. When the Simbu Government arranged seedling from the north of the province, to be supplied to the remote south of the province, CARE took care of transport to the areas. At that stage seedlings were also provided by the WHP and EHP and CARE paid for 22 truckloads.

<sup>7</sup> In the project documents is mentioned that the organization will use 8 pillow containers in Bougainville, but this was never confirmed.

<sup>8</sup> ‘At the closure of the project the required number of water containers were still unavailable. As a main objective of the project was to provide safe drinking water the number of purification tablets purchased was increased’ (source: Final report project 6814)

CARE’s assistance in the recovery was of great importance. With small interventions, CARE brought back livelihood activities and dignity to a population that was depended on bush food and food aid.

Where ever the Local Government succeeded in obtaining seeds/seedlings, CARE could provide transport, where the local means failed in supplying it.

## 5.5 Gender

In the 6809 project activity document, is stated: “*Estimates of numbers of people at risk will be determined, and desegregated by gender, during the assessment*”. That this appeared to be a very difficult task is obvious. The scale of the disaster and the area to cover was so enormous, that it was very difficult to make a good estimation of the number of affected people, let alone to distinguish the number of men, women and children.

However, in Henderson’s report is mentioned the deplorable state of the Primary Health Care system and the MCH care in that. Hill mentioned the special care needed for the pregnant and lactating women, and their very young children, which could be provided with a special high protein biscuit.

## 6 PROGRAM IMPACT

### 6.1 Quantitative and qualitative impact

CARE’s main support to the relief activities in the three Highland Provinces was its assistance with staff. Present agricultural staff in Kundiawa, assisted in the Relief efforts in the Simbu Province. Other CARE staff was installed in the EHP and WHP and was able to assist the Provincial Government in survey, coordination and monitoring of relief activities. From several interviews it became clear, that CARE’s involvement was indispensable for the coordination

Besides the manpower, CARE provided office facilities and logistical assistance. This included support vehicle and operating costs, driver, warehousing, labourers, utilities and communication. Projects 6818 covered many transportation costs, which made the distribution activities possible.

### Distributions

The total food aid given in the Simbu Province, during the period is 2071 tons rice, 190 tons flour and 95.000 liter cooking oil. CARE contributed to this 210 ton of rice for the most affected people in the districts Gumine, Kundiawa/Gembogl, Kerwagi and Karimui/Nomane in the Simbu Province. The rice, purchased by CARE, was bought locally and took 5 weeks to be delivered, with the last 10 tons arriving at the 8 February 1998.

CARE’s distribution of jerry cans and water purification tablets assisted 33.000 persons, out of a total of 175.759 in the Simbu province. The supply was delayed with several months, because of a lack of raw materials for the jerry cans.

Numbers of commodities purchased by CARE were small, because of limited funds. However, as was the case with the purchase of rice from local companies in Kundiawa, this was an addition to the also limited quantities of the Government. Efforts were combined, together with AUSAID and the PNG Government, to give the best results.

During interviews it became clear that the availability of medicines, in which CARE also took part with small quantities in the EHP, was sufficient for a long period, even into 1998.

The supply of seeds came in large quantities, in which CARE participated in a small scale. However the aid of potato seed from Australia started with some “hybrid” potato seed, which could only be used for one season and did not produce new seeds for another crop. This “error” was later rectified. Other supplied seeds were sweet potato seedlings, peanuts, maize, cassava, beans, cucumber, pumpkin, etc

During the first part of 1998 the affected people in cat 4/5 dropped from 175,759 (Dec.97) to 50,262 (March 98) in the Simbu Province and from 446,159 to 200,451 in the same period in the 3 Provinces, while at that time no cases of category 5 were any longer recorded.

CARE’s main impact with the program was its assistance in coordination and management. CARE’s provision of funds for transportation, together with its coordination was crucial for the relief activities in the Highlands.

The impact of CARE’s food assistance in quantities was small, however it added to the limited aid of the Government. The assistance with non-food items was small and delayed.

## 6.2 Gender

In the final reports of project 6814 and project 6818 is stated:

*“Given that the female proportion of the population in areas where food distribution and survey activities were undertaken would be at least 50% of the total population, then it can easily be accepted that a marked impact on women occurred”.*

and

*“Women are generally the water providers for the family and supplying containers facilitated their task. Not only did the containers make it easier to transport water but also by providing purification tablets meant that it was not necessary to boil water. This meant that women did not have to find wood and supervise the process of boiling. The result was a reduction in the time that women spent in providing potable water and potentially a reduction in time that women would have spent caring for sickness caused by water born diseases”.*

This is basically true, of course. However during interviews, it was clearly stated that, during the drought situation in 1997-1998, division of labour from a gender perspective had disappeared. In the established survival situation, the strongest of the family took care for the others. This also occurred in between families. Children, more agile to climb the mountains, were sent to collect edible leaves from the trees. When water collection became difficult and more distant, this was realized by women, men and/or children.



Later, in the aftermath of the severest drought, things may have drifted back to its “normal” situation, which gave then a benefit for the women during water fetching. This was later confirmed by beneficiaries in the Baringigl Village, who proudly showed the jerry cans and still use them during the dry season (see photo on this page).

At some stage, special nutritious biscuits were distributed in the Simbu Province, to assist the most vulnerable women and children. This information came from a CBO worker, who was a Provincial Patrol Official during the drought. Of these distributions, however, are no records.

In the GAM - Gender Analysis Matrix<sup>9</sup> (see annex 8) changes are captured at the moment that life is returning to normal and the emergency situation in gender related activities is again dissolving in the society established gender roles. At that stage women profited more through some of the assistance. This matrix can not be verified with any previous results and can only give an indication.

The impact on women and men was equal during the relief response. During the recovery period women may have benefited more from the distributed non-food materials.

#### 6.4 Poverty reduction

To examine the contribution to poverty reduction of CARE’s Relief Response, indicators were chosen, which could be linked to the Program and to the population’s situation, or better, the constrains which were experienced by the population at that moment. Relief came in disrupted communities, where life was focussed only on obtaining food and water. Infrastructure as school, clinics and prisons were in a deplorable state or/and had closed down. Teachers left to provide for their families and students were too weak to go to school.

Poverty reduction can monitor directly on people’s wallet or household income, it can also look at the long-lasting effects of poverty and the indirect influence on people’s life. The latter is more profound and includes sectors as housing, work, primary health care, education, children, etc. It touches the quality of life and the sense of well-being.

Although the drought had its impact on housing and shelter, through bushfires (and tribal fights over water) destroying complete villages, this indicator is not incorporated in the evaluation, as it is not attended to by the Relief Program. However other indicators as work, health, education, food, water and livelihood are influenced directly by the program activities and can give an indication of its impact on household poverty.

The first emergency distributions, supplying food aid, had the only objective to make the population survive. Food aid distributions happened in towns and villages, but supplies were also transported and airlifted to very remote areas. Besides securing life safety, a side effect was that the population remained in their home areas and migration to towns was incidental. Therefore, after the first rains and with the provision of seeds and seedlings, people could easily pick up their garden activities again.

The supply of medicines to the clinics in towns, districts and wards, in which CARE contributed, had a big impact on the primary health care activities. Also the supply of food to the clinics, to assist patients and staff was a big support. *“With that supply we were able to treat many people for pneumonia, cough, diarrhoea and other illnesses and avoid epidemics. The supply was enough for 1997 and far into 1998”*.<sup>10</sup>

The supply of jerry cans and water purification tablets had also an effect on people’s health, in the sense that it made better quality drinking water available for the population and with this avoiding water-borne disease. The continuation of assessments, including Jacobsen’s contribution in the water sector, ensured that ongoing water supply activities were realized.

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<sup>9</sup> The GAM can be used at the planning stage, to determine whether potential gender effects are desirable and consistent with program goals. The GAM also can be used in the design stage, where gender considerations may change the design of the project. For monitoring, the GAM can be used to periodically verify expected impacts and identify unexpected results so that they can be addressed. During evaluation, GAM can help to determine gender impacts in verification with former project stages (groups, time, labour, paid work, etc)

<sup>10</sup> During the interview with Anna Rob, a Community Health Worker in Rebiatul clinic in Mt Hagen.

In the recovery phase, after the first rains, seed and seedlings were distributed. This gave the first crop in February 1998 and with that providing food directly to households and communities.

CARE’s Drought Relief Response has added to poverty reduction for the program’s beneficiaries. It provided for the return of life safety, primary health care, education and livelihoods, when it was most needed. It brought back a normal life to the population, recovering from their misfortune, in a short period of time.

### 6.5 Cost efficiency

In emergency response it is seldom feasible to do these types cost-effective analysis as these are limited by questions as ‘What is the contribution of one single intervention to any combined changes’ and ‘What is the influence of programs from other donors’, etc. Additional to this is the uncertain number of beneficiaries in several projects. Records of distributions were not kept and the final destination of the 12 pillow containers and 399 jerry cans is not certain. In the final report of project 6818 is even stated: *“As I am not able to isolate exactly where amounts have been spent on this project, it is difficult to report exactly. Obviously amounts have been spent to the limit of the grant, but from the field records available, I cannot tell to the dollar how much has been spent on individual projects.”*

Cost efficiency is also to determine whether the objectives of the program could have been achieved at lower cost (or whether a greater impact could have been achieved for the same costs). From project documentation, interviews the following information was obtained:

#### Prices

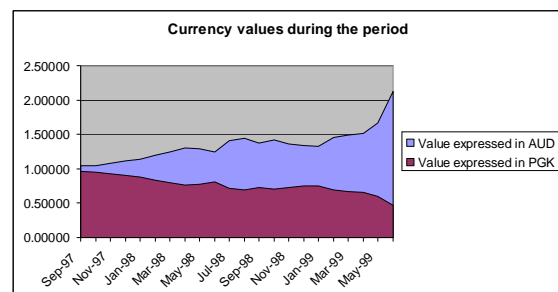
Purchase of the 210 tons of rice was done with four local companies: Highlands Traders (50 tons), Kui Valley Pty Ltd (50 tons), Collins and Leahy Pty Ltd (50 tons) and Sika Pty Ltd (60 tons).

The price was negotiated and decided upon PGK 19 per 25kg. This price was very reasonable, as transport, storage and handling was all paid for by the companies. The purchase of jerry cans and water purification tablets was realized with four quotations. However there was only one supplier of purification tablets in Port Moresby. The prices were normal for bulk purchase.

Coordination of transportation was one of CARE’s main activities in the field and consumed approximately AUD 100.000. The bigger part of this amount was used for air transport. Prices of air transport were negotiated and normal. Truck hire was at a reduced rate. Owners were willing to assist, as it also involved their own families and relatives.

#### Exchange rate

During the program period the PGK dropped in value (see textbox), which may have had some effect in PGK currency budgets. It is mentioned in the final report of project 6812 to have had some slight influence in the budget spending. The purchases within project 6814 were realized with quotations and had therefore no negative effect. Project 6818 may have seen some effects, especially concerning fuel prices. However there are no financial records available.



#### Support costs

To give an insight of available budgets and expenditures, a financial reconciliation is drafted in annex 9, indicating donors’ involvement and average exchange rates during the program. Project expenditures are separated and listed to give an indication of support costs and direct costs.

It is visible that 4 projects had no personnel costs; these were incorporated in project 6815, which also included the cost for the Port Moresby office and accommodation for the staff, which resulted in 67% support costs. The rather high support costs of project 6810 can only be explained by the purchase of computer equipment and payment of courses for the NDC staff in the Port Moresby office<sup>11</sup>. The high support cost of project 6816 consists of the travel and accommodation costs for the team. Project 6809 and 6816 were under spent.

As the response was partly managed from CARE Australia main office in Canberra, some support costs were charged to the project budgets, which was the case in project 6809 and 6810.

Looking at the total costs of the Response Program (annex 9) the Canberra overhead cost are 4%, the project direct costs are 82,5 % and the support costs are 13,5 %, which is a good differentiation, taking into account that the first interventions were conducted from the Canberra office.

In general, the cost efficiency of the Program was good, taking into account the negotiated prices and under spending of budgets. However, procurement performance was low and there are some registered inputs which can not be accounted for.

## 6.6 User satisfaction

*“The groups that received the rice were very profuse in their expressions of appreciation to the German Foreign Ministry, CARE Deutschland and CARE International in PNG for the extra rations they received”*. (source: final report project 6813)

*“The response of stakeholders at every level has been extremely positive. Thanks were often expressed using traditional notions of true friends helping out during a time of need.”*  
(source: final narrative report project 6814)

*“We would like to make mention of the following organizations who played very prominent roles in this effort, to alleviate the drought related disaster situation in the Simbu Province, .....[among them]CARE International through CARE Australia for all their contributions”*. (source: Simbu Provincial Response Report)

During interviews with beneficiaries, gratitude was still expressed for having received the aid and emphasize was put on CARE’s capacity in providing transport. However, recollections about distribution methods were not very positive. Food commodities were provided to the villages and not to the individual beneficiaries, which created tension.

## 7. SUMMARY of CONCLUSIONS and LESSONS LEARNED.

The outcome of the Drought Response is positive, but performance and results could have been better, if a certain level of preparedness would have been present at the time, not only with the Local Government and the Population, but also with the Assistance given to them, especially in a country as Papua New Guinea.

CARE’s Drought Response participated in assessment activities throughout Papua New Guinea. The Drought Response activities, with direct aid, were directed to the Highlands Provinces WHP, Simbu and EHP, of which the focus was on the Simbu Province.

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<sup>11</sup> This was explained by Ms Sabina Fuluvii, Secretarial Officer of NDC.



CARE assistance in training the local government in planning and coordination, at national level, was well performed. The staff received professional training. The set up of the office was a combined effort between CARE staff and the national staff and the good results are still visible.

The training at provincial level was an on-the-job training, more for practical purposes than one of structural (disaster) management and preparedness. A number of positions, at provincial level, have been vacated and taken by new staff. This combination causes a low level of preparedness for similar events and a general low level of DRM.

Procurement during the 1997-1998 period was difficult and needed a professional approach. CARE's performance in this was not very good and indicates a low level of preparedness for that particular situation, with small available quantities and delayed supplies.

Distributions of food commodities and non-food items and seeds made people survive and brought livelihoods back to the population. It also created misunderstanding and complains, which was a result of the methods used during the distributions. As CARE was part of the coordination, this should have been prepared in a more professional way.

The recovery activities went well, in which CARE performed a good supporting role for the Provincial Government activities. In addition CARE provided with individual livelihood activities. These activities resulted in a certain level of poverty reduction, in which the people were able to return to a normal live in a short period of time.

The impact on gender related issues of the program was low, which is not surprising during an emergency operation. The provision of non-food items to the most vulnerable population, especially in the Simbu Province, had a small positive impact on women's daily activities, with the supply of jerry cans and water purification tablets.

During the time and especially during the Drought Response activities, CARE has built a good name, with Local Authorities and the targeted population. Government staff expressed their positive ideas about working again with CARE. The NARI institute also suggested cooperation with CARE PNG. For the population in the villages and communities, CARE's presence with good interventions can improve their standard of life.

## **8. RECOMMENDATIONS and FUTURE DEVELOPMENT**

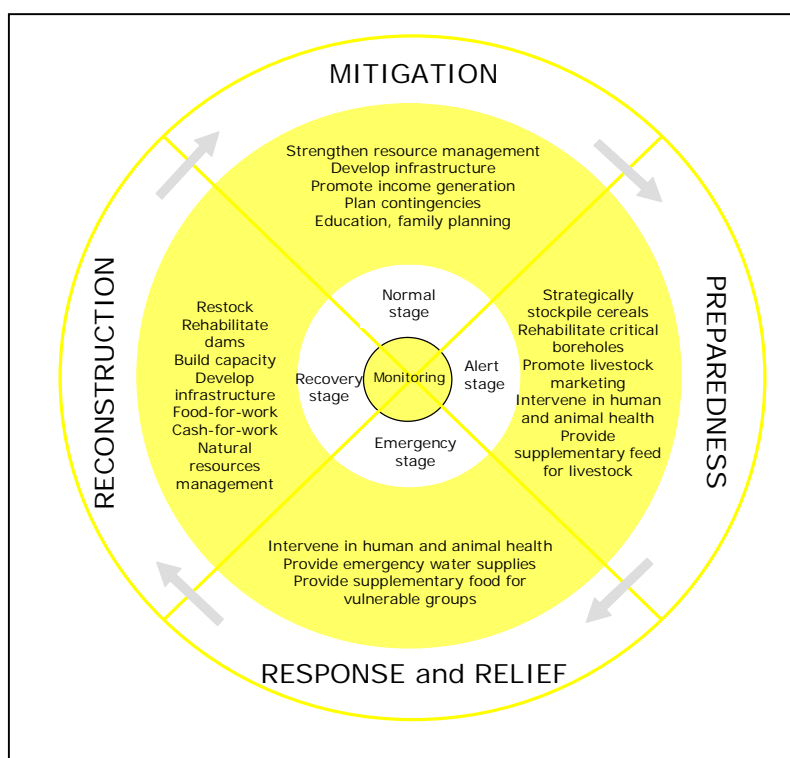
In the previous chapters, it becomes obvious that the low level of preparedness with all stakeholders in the Relief Response had its negative impact on the results, not only from an organizational point of view, but directly for the beneficiaries. During the workshops in 1998 in Kundiawa and Mt. Hagen, a great number of recommendations were listed (see annex 4) to improve the level of preparedness. At this stage, a number of these recommendations have been implemented.

However there are still many needs, to avoid a disaster, when a similar situation as in 1997 will happen. Besides a drought situation, there are other threats for PNG's population, which will need an alert and effective supervision when occurring. For the Highlands were mentioned hazards such as, floods, frost and hailstorms, mud slides, etc.

In this chapter some themes are listed, which will need attention, to make the population, government and CARE better prepared for future disasters. Preparedness is not only a matter of follows-up to conduct if anything happens; it is also about increasing the population's ability (livelihoods, storage) to endure certain difficult situations. In these themes, the ideas of the CARE PNG staff, which came forward in the workshop of 2<sup>nd</sup> November, are incorporated.

## 8.1 CARE and Disaster Risk Management

Using the Drought Cycle, discussed during the workshop, a number of activities can be identified for the 4 different stages, in which CARE can play a role:



In the Normal Stage, the time should be used to minimize the effects of future droughts.

- Strengthen traditional resource management (crop diversification, irrigation, etc.)
- Development of infrastructure (improve water sources and distribution, create water storage),
- Promote income generating activities (livelihoods activities, chapter 8.5)
- Contingency planning (disaster planning, disaster mapping, creation of network, etc.)
- Promote education and family planning (literacy education, Primary health care training, advocacy HIV/AIDS and Gender, etc)

CARE activities should result in the elimination or reduction of the risk, by upgrading capacities, by building strong livelihoods, by reducing vulnerabilities, by controlling or eliminating hazards, etc.

Assistance in drafting disaster plans on national, provincial, districts and wards level and even for villages, communities and schools, to create awareness and to prevent or reduce impacts. These plans include: Improving water management and long term programs to reduce vulnerability.

Land use planning, including agricultural practices to withstand the effects of drought, e.g. make use of more drought resistant crops, erosion control, adjust animal stocking rates to available water and pasture supplies, development of water reservoirs.

Risk mapping, including: Identification and mapping of most likely affected areas during hazards, based on food and livestock production rates, wages, nutrition indicators, access to markets, prices of food, etc. Identification of most likely affected sectors. Where and how to target the assistance.

Procurement mapping, indicating companies and places, which are likely to have the capacity and means to produce the necessary commodities in time, when needed for distributions. If supply is coming from abroad, effective links with customs and government agencies will be necessary.

In the Alert Stage, population and aid agencies prepare for the coming drought.

- Strengthen management of traditional resources
- Maintain wells and improve access
- Ensure full water storage
- Create food storage
- Control of livestock numbers
- Control of health issues (vaccinations, supplies, etc)

CARE activities should ensure the readiness and ability of a communities, society or organisation to forecast and take precautionary measures in advance of an imminent threat, and to respond to and cope with the effects of a disaster by organising and facilitating timely and effective assistance.

Community preparedness, including (community) food storage, (community) water storage, diversification and control of livestock, diversify income sources (casual work, migration of some family members to other regions for work), etc.

Early warning system, with low cost weather stations, data collection, information dissemination, relief plans, employment generation schemes (food/money for work programs by implementing disaster reduction projects)

In the Emergency stage, in which necessary relief activities will be realized. These plans should be ready and only need implementation.

- Further monitoring and data collection
- Provision of food and water (water testing, quality control)
- Health interventions and control

CARE’s activities will aim at ensuring life with dignity to people affected by a situation whereby a disaster has occurred. Food/water assistance through: Employment creation if food is available on the market. Food for work activities. Well targeted general food distribution or supplementary feeding programmes (example: school feeding program). Collection and dissemination of reliable and timely information on drought conditions and impact. Good co-ordination for operational procedures for relief.

In the Recovery Stage, in which population and agencies will work together for rehabilitation

- Support of Livelihoods activities (distribution of seeds, livestock )
- Rehabilitation of natural resources (wells and water storage)

CARE will support activities that assist people to rebuild their lives. Replacement of assets lost during the period of temporary food insecurity, e.g. re-stocking of animals, provision of seeds and tools.

## **8.2 Government**

During interviews and meetings with Local Authorities, it became obvious that there is still a necessity for training, especially on provincial level and below. The training should not only address Disaster Preparedness and Risk Management, but should include cross-cutting issues as Gender and HIV-AIDS.

With NARI only having a limited area for seed/seedling multiplication and seed bank facilities, the Provincial Government can be involved in this matter and create multiplication in the Provinces. In the WHP this was already an issue, but can need some assistance from CARE.

A network of Local NGOs, CBO’s, FBOs, international humanitarian organizations, and government ministries both in provincial and national levels should be strengthened for effective knowledge management and information dissemination. (Local) Government

involvement in CARE’s intervention is necessary, to gain support, interest and participation (road construction, financial, etc). CARE’s role in this can be one of training, steering and advocacy.

### **8.3 Local NGO’s, FBO’s and other institutions**

Within the International NGO world, the approach of working on a solitary base in countries, to deliver relief and assist the population on an incidental temporary base, have past. Relief response is now normally followed by recovery activities and development. Disaster Preparedness and Risk Reduction are part of the package to reduce the effect of natural disasters. This needs a better insight in the area, the population, traditions, etc. and requires the presence and partnership of local organizations.

Possible partnerships are the Churches, which have a long history of mission activities in PNG and have created a deep affiliation between them and the population, in villages and communities, based on mutual trust and understanding. Also working with local NGO’s can be of good benefit. The number of NGO’s in the Highlands is very limited. It is a possibility for CARE to work together with “Voice of Yongos” in the identification of a Water and Sanitation Project in the WHP. In Simbu Province “Sasamanga” is known, a NGO with a cultural background.

Working together with local partners will give CARE PNG a more steering role and one of influencing, exploring the needs of the population and adapting its program accordingly. Cooperation and collaboration with not only local NGO’s, but also with government, civil society, other (donor) agencies, CBO’s, private sector, communication companies, etc. will enlarge the impact of interventions, enlarge its scale and make them more sustainable. In the agricultural sector the collaboration of NARI is essential, which may count for HACDEC in the Aqua Culture sector.

Good partnership needs clear definitions of roles, responsibilities and accountabilities and will create interdependence and a continuous learning process. It requires commitment to common objectives, which will create a sense of ownership with the partners and communities and will make the development more lasting. CARE PNG role in it will be one of capacity building, developing and supporting advocacy and dialogue and ensuring inclusion of all vulnerable groups.

### **8.4 Community Development**

If communities are organized, they can deal better with hazards such as drought. A good organized community has strong local institutions with mutually agreed practices and rules, in which people have knowledge, experience, social cohesion and coping strategies that enable them to survive in a difficult environment. They can speak with one voice and negotiate with other communities, local government and development agencies. The capabilities make them able to respond to hazards in an effective way.

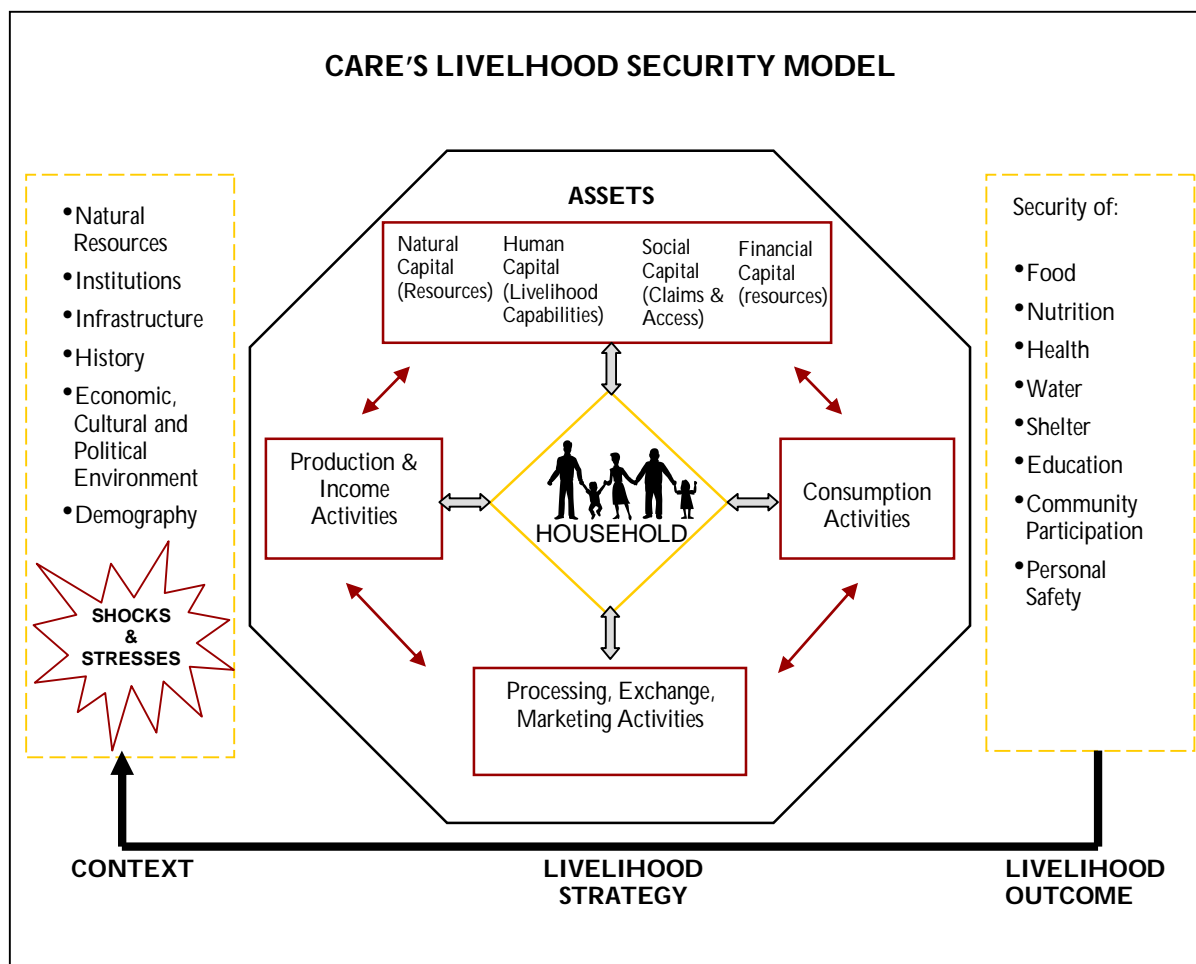
To achieve lasting results the programming approach should include: Building on traditional institutions, using indigenous knowledge. Community participation should be promoted and local people should be used as service providers (trainers, extension agents, health workers, etc). Capacity building is important, as well as networking with other organizations.

Community Development Groups with a diversity of economical activities will need literacy and basic knowledge about nutrition, marketing, administration, bookkeeping etc, in which CARE can provide with training.

As with partnership with other organizations, roles, responsibilities and accountabilities should be well defined, to avoid surprises and disappointment. To ensure community ownership and sustainability, CARE can link to this certain criteria for the communities, such as investment participation, inclusion of vulnerable groups and mainstreaming issues as Gender and HIV/AIDS.

### 8.5 Livelihood security

The Livelihood Security Framework used by CARE, explores household livelihood strategies looking at available assets in a household and the variety of activities the household is involved in, as production, consumption, processing, etc.



For the PNG’s Highland provinces the *Natural Capital* showed a difference, for instance between parts of the Simbu Province and WHP. In Simbu the space for agriculture/gardening seemed limited<sup>12</sup>, while in WHP much available land was not utilized. In the Agricultural situation in the Highlands, the *Human Capital* is a key contributor to livelihood, as it is mostly done manually. Important in this are health, skills and knowledge. The *Social Capital* is based on the household being the fundamental livelihood unit. However the mutual support between families, within the range, the “Wantok” principle, was an extensive source during the drought period, which made people survive. Also linkage to networks, institutions, etc has importance. *Economic Capital* includes the presence of savings, shelter, water system, livestock, fruit trees and objects as bicycles (transport) and tools.

<sup>12</sup> During the team’s visit to the village Baringigl, women were working on the steep slopes of the hills, at an almost unworkable angle. It was explained that available space, for agriculture, was limited, but also that the slopes did not need drainage and that the taste of the “kaukau” was better than the one produces at the lower fields.

Although crop farming appears<sup>13</sup> to be the main income generating activity, other means of securing livelihood, may include casual labour, charcoal production, manual work in towns, trading, selling materials/objects, transporting produce to market and more specialist activities like carpentry, plumbing, etc. In reality livelihoods can be a combination of different, often interconnected activities.

### **Agriculture**

Since agriculture/gardening is probably the most important livelihood, overcoming and solving the key constraints is fundamental for achieving livelihood security. This would mean:

- Training in agricultural techniques (use of manure, affordable irrigation, etc)
- Introducing affordable methods of restoring soil fertility (chemical and/or organic)<sup>14</sup>
- Improving the terms of trade for farmers. Farmers will be able to buy more agricultural necessities per unit of their production (ex: more affordable chemical fertilizer).
- Increasing returns per unit of labour. This might lead to animal traction, but better seeds, improved fertility will also improve labour returns.
- Availability of good quality seeds.
- Involvement and good cooperation with NARI during programming.

### **Livestock**

Pigs are the most common and currently most important livestock. They are primarily a source of saving and income rather than a source of food. Pigs can be sold to make money available for school fee, dowry, etc. Other livestock are: Chicken, goats, sheep, cattle, rabbits, but all in small numbers. Fish ponds are another source of income.

CARE could identify the need for livestock interventions, with small animals, as goats, chickens, etc. The provision of training will probably be necessary to improve production and health of animals.

Goats are an easy to keep livestock, with low care/attention needs and a high multiplication rate. In several countries CARE introduced for specific vulnerable groups a “goat revolving” loan scheme<sup>15</sup>.

### **Processing, service activities and marketing**

Most crops are used for consumption and marketing. Food processing to build a stock (for consumption or selling) is an activity which can provide in difficult periods.

For small villages, which are not in the vicinity of a town, normally lack a number of normal facilities. Mid-wives or birth attendants, carpenters, plumbers, house builders, transporters, traders, who buy agricultural product, etc. Other processing activities is sawing of wood in certain dimensions, production of baskets, mats, clay pots, production of charcoal and fire wood. During a community development program possibilities can be created and initiatives from the community members can be financed, to improve on income diversity.

### **New initiatives and investment**

New initiatives will probably need some investment to buy tools or materials. A villager, who would like to start a carpentry, will need some basic tools and materials to start his/her business. A goat project will need some investment, to buy the first goats.

Part of these investments can come from a project budget. However, a participation from the population is obligatory, to create a level of ownership and ensure sustainability. Participation can

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<sup>13</sup> The Consultancy team did not include an analysis of resources. A Livelihood Assessment can analyze the resources and take into account what combinations are necessary for sustainable livelihoods.

<sup>14</sup> The coffee crop in some parts of the Highlands is reduced, due to poor soil fertility conditions.

<sup>15</sup> A group of 3 - 6 (wo)men receive each one (female) goat and the group together one (male) goat. The first offspring goes into a “revolving scheme”, which organizes the next distributions to a new group.

come from direct financial participation, available resources or means, or labour. CARE can think about a financing scheme, in which the beneficiaries will pay back their debt during the first year. This (micro) finance scheme need a good and professional approach. Another way of financing is the creation of saving groups, in which each member contributes a monthly fee. After some time an investment can be done to one of its members to start an activity. Also here rules have to be well defined.

## **8.6 Gender**

From the information collected during interviews, discussions and from the visit to the village Munuma, it is obvious that the decision making role in communities and household is with the (elderly) men. A tendency of change is growing and women would like to have more influence on the development in their communities and in the decision making processes.

CARE’s programming will need a gender-inclusive design to implement projects that benefit both female and male beneficiaries. Gender analysis will lead to the development of gender sensitive project components, including differences between men and women concerning their abilities and capacities, their priorities, their security needs, their traditional division of labour, etc.

In Community Development Groups, women should have a place, to participate in decision making processes. CARE can make this a criterion to work with a community, being part of a gender mainstreaming program.

## **8.7 HIV/AIDS**

During discussions and data collection it became clear that Papua New Guinea faces a serious HIV epidemic. The first case of HIV was reported in 1987 and since then HIV occurrence has risen dramatically. After Thailand, Cambodia and Myanmar, PNG is now the fourth country in Asia-Pacific to be classified as having a HIV epidemic.

HIV/AIDS will have wide-reaching negative effects in villages and communities: the depletion of household income, increased food insecurity, weakening of household labor force, etc. It will also put an enormous burden on health systems, diverting money and resources away from maternal child health, nutrition, malaria, and other services. Analysis within communities will probably indicate a low knowledge of STD (Sexual Transmitted Diseases) and HIV/AIDS, its transmission, methods of prevention, impact on communities, etc.

CARE’s programming, working in villages and communities, will involve a broad mobilization of local groups as community groups, civil or religious groups, local NGO’s, etc. This community development approach seeks to reinforce community social structures, participation, promote community responsibility, linking community development (groups) to local administration, etc.

In this, mainstreaming HIV/AIDS is a possibility for CARE, as part of its activities, to draw attention to HIV/AIDS. In this regard, it is useful to think about a range of possible responses, and pursue the one most likely to help achieve the program’s core business while also minimizing HIV transmissions and reducing impacts of AIDS. The basic principle of mainstreaming is to adjust current program activities to adapt to the needs and capacities of individuals and families infected and/or affected by HIV.

The situation in Papua New Guinea illustrates that HIV/AIDS should be closely linked to gender inequities. Both, attention to HIV and attention the gender equity go together and should both be included in mainstreaming activities.